David M Nelson

List of Publications by Year
in descending order

68 papers	3,740 citations	218381 26 h-index	133063 59 g-index
70 all docs	70 docs citations	70 times ranked	6305 citing authors

#	Article	IF	Citations
1	The Origins of C ₄ Grasslands: Integrating Evolutionary and Ecosystem Science. Science, 2010, 328, 587-591.	6.0	899
2	Changes in fire regimes since the Last Glacial Maximum: an assessment based on a global synthesis and analysis of charcoal data. Climate Dynamics, 2008, 30, 887-907.	1.7	590
3	Cyclic Variation and Solar Forcing of Holocene Climate in the Alaskan Subarctic. Science, 2003, 301, 1890-1893.	6.0	300
4	Ice-age endurance: DNA evidence of a white spruce refugium in Alaska. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 12447-12450.	3.3	227
5	The magnitude of error in conventional bulk-sediment radiocarbon dates from central North America. Quaternary Research, 2009, 72, 301-308.	1.0	141
6	Isotopic evidence for oligotrophication of terrestrial ecosystems. Nature Ecology and Evolution, 2018, 2, 1735-1744.	3.4	138
7	Soil properties and tree species drive ÃŸ-diversity of soil bacterial communities. Soil Biology and Biochemistry, 2014, 76, 201-209.	4.2	92
8	Isotopic evidence of C4 grasses in southwestern Europe during the Early Oligocene-Middle Miocene. Geology, 2010, 38, 1091-1094.	2.0	65
9	THE INFLUENCE OF ARIDITY AND FIRE ON HOLOCENE PRAIRIE COMMUNITIES IN THE EASTERN PRAIRIE PENINSULA. Ecology, 2006, 87, 2523-2536.	1.5	60
10	Response of C3 and C4 plants to middle-Holocene climatic variation near the prairie-forest ecotone of Minnesota. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 562-567.	3.3	57
11	Longâ€term variability and rainfall control of savanna fire regimes in equatorial East Africa. Global Change Biology, 2012, 18, 3160-3170.	4.2	56
12	Paenibacillus tundrae sp. nov. and Paenibacillus xylanexedens sp. nov., psychrotolerant, xylan-degrading bacteria from Alaskan tundra. International Journal of Systematic and Evolutionary Microbiology, 2009, 59, 1708-1714.	0.8	54
13	Centennial-scale reductions in nitrogen availability in temperate forests of the United States. Scientific Reports, 2017, 7, 7856.	1.6	53
14	Earlier springs are causing reduced nitrogen availability in North American eastern deciduous forests. Nature Plants, 2016, 2, 16133.	4.7	52
15	Bacterial Diversity and Distribution in the Holocene Sediments of a Northern Temperate Lake. Microbial Ecology, 2007, 54, 252-263.	1.4	49
16	Patterns and drivers of Holocene vegetational change near the prairieâ€“forest ecotone in Minnesota: revisiting McAndrewsâ€™ transect. New Phytologist, 2008, 179, 449-459.	3.5	48
17	Golden Eagle fatalities and the continentalâ€scale consequences of local windâ€energy generation. Conservation Biology, 2017, 31, 406-415.	2.4	46
18	Response of tundra ecosystem in southwestern Alaska to Younger-Dryas climatic oscillation. Global Change Biology, 2002, 8, 1156-1163.	4.2	44

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19	Wind energy: An ecological challenge. Science, 2019, 366, 1206-1207.	6.0	43
20	Application of isoscapes to determine geographic origin of terrestrial wildlife for conservation and management. Biological Conservation, 2018, 228, 268-280.	1.9	34
21	Unprocessed Atmospheric Nitrate in Waters of the Northern Forest Region in the U.S. and Canada. Environmental Science & Technology, 2019, 53, 3620-3633.	4.6	34
22	Possible linkages of late-Holocene drought in the North American midcontinent to Pacific Decadal Oscillation and solar activity. Geophysical Research Letters, 2006, 33, .	1.5	31
23	Carbon-isotopic analysis of individual pollen grains from C3 and C4 grasses using a spooling-wire microcombustion interface. Geochimica Et Cosmochimica Acta, 2007, 71, 4005-4014.	1.6	31
24	Using SPIRAL (Single Pollen Isotope Ratio AnaLysis) to estimate C3- and C4-grass abundance in the paleorecord. Earth and Planetary Science Letters, 2008, 269, 11-16.	1.8	29
25	Stable-carbon isotope composition of Poaceae pollen: an assessment for reconstructing C3 and C4 grass abundance. Holocene, 2006, 16, 819-825.	0.9	28
26	Geographic origins and population genetics of bats killed at windâ€energy facilities. Ecological Applications, 2016, 26, 1381-1395.	1.8	28
27	Response of Archaeal Communities in the Rhizosphere of Maize and Soybean to Elevated Atmospheric CO2 Concentrations. PLoS ONE, 2010, 5, e15897.	1.1	27
28	Abrupt climatic events during the last glacial-interglacial transition in Alaska. Geophysical Research Letters, 2006, 33, n/a-n/a.	1.5	25
29	How well do sediment indicators record past climate? An evaluation using annually laminated sediments. Journal of Paleolimnology, 2011, 45, 73-84.	0.8	23
30	Declining moisture availability on the Antarctic Peninsula during the Late Eocene. Palaeogeography, Palaeoclimatology, Palaeoecology, 2013, 383-384, 72-78.	1.0	23
31	Triple oxygen isotopes indicate urbanization affects sources of nitrate in wet and dry atmospheric deposition. Atmospheric Chemistry and Physics, 2018, 18, 6381-6392.	1.9	23
32	Frequent burning causes large losses of carbon from deep soil layers in a temperate savanna. Journal of Ecology, 2020, 108, 1426-1441.	1.9	23
33	Seasonal, sub-seasonal and diurnal variation of soil bacterial community composition in a temperate deciduous forest. FEMS Microbiology Ecology, 2019, 95, .	1.3	20
34	Holocene precipitation seasonality captured by a dual hydrogen and oxygen isotope approach at Steel Lake, Minnesota. Earth and Planetary Science Letters, 2010, 300, 205-214.	1.8	19
35	Wholeâ€exome sequencing reveals a longâ€term decline in effective population size of red spruce (Picea rubens). Evolutionary Applications, 2020, 13, 2190-2205.	1.5	19
36	Episodic, seasonal, and annual export of atmospheric and microbial nitrate from a temperate forest. Geophysical Research Letters, 2016, 43, 683-691.	1.5	18

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37	A lateâ€Quaternary perspective on atmospheric pCO₂, climate, and fire as drivers of C₄â€grass abundance. Ecology, 2015, 96, 642-653.	1.5	17
38	Stable hydrogen isotopes record the summering grounds of eastern red bats (Lasiurus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702 Td	0.9	17
39	Vulnerability of avian populations to renewable energy production. Royal Society Open Science, 2022, 9, 211558.	1.1	17
40	Watershed-scale changes in terrestrial nitrogen cycling during a period of decreased atmospheric nitrate and sulfur deposition. Atmospheric Environment, 2016, 146, 271-279.	1.9	16
41	Assessing populationâ€level consequences of anthropogenic stressors for terrestrial wildlife. Ecosphere, 2020, 11, e03046.	1.0	16
42	Phylogenetic Evidence for Lateral Gene Transfer in the Intestine of Marine Iguanas. PLoS ONE, 2010, 5, e10785.	1.1	15
43	Influence of terrestrial vegetation on leaf wax Î´D of Holocene lake sediments. Organic Geochemistry, 2013, 56, 106-110.	0.9	14
44	Stable hydrogen isotopes identify leapfrog migration, degree of connectivity, and summer distribution of Golden Eagles in eastern North America. Condor, 2015, 117, 414-429.	0.7	13
45	Advancing interpretation of stable isotope assignment maps: comparing and summarizing origins of known-provenance migratory bats. Animal Migration, 2020, 7, 27-41.	1.1	13
46	Carbon isotopic composition of Ambrosia and Artemisia pollen: assessment of a C₃â€plant paleophysiological indicator. New Phytologist, 2012, 195, 787-793.	3.5	12
47	A hierarchical Bayesian approach to the classification of C3 and C4 grass pollen based on SPIRAL Î´13C data. Geochimica Et Cosmochimica Acta, 2013, 121, 168-176.	1.6	12
48	Trophic position and dietary breadth of bats revealed by nitrogen isotopic composition of amino acids. Scientific Reports, 2017, 7, 15932.	1.6	12
49	Using trace elements to identify the geographic origin of migratory bats. PeerJ, 2020, 8, e10082.	0.9	11
50	Late-Quaternary variation in C3 and C4 grass abundance in southeastern Australia as inferred from Î´13C analysis: Assessing the roles of climate, pCO2, and fire. Quaternary Science Reviews, 2016, 139, 67-76.	1.4	10
51	Genotypic variation and plasticity in climate-adaptive traits after range expansion and fragmentation of red spruce (Picea rubensSarg.). Philosophical Transactions of the Royal Society B: Biological Sciences, 2022, 377, 20210008.	1.8	10
52	Continental scale variability of foliar nitrogen and carbon isotopes in Populus balsamifera and their relationships with climate. Scientific Reports, 2017, 7, 7759.	1.6	9
53	Drivers of spatial variability in greendown within an oak-hickory forest landscape. Remote Sensing of Environment, 2018, 210, 422-433.	4.6	9
54	Carbon isotope analyses reveal relatively high abundance of C4 grasses during earlyâ€“middle Miocene in southwestern Europe. Palaeogeography, Palaeoclimatology, Palaeoecology, 2016, 443, 10-17.	1.0	8

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55	Positive correlation between wood Î´¹⁵N and stream nitrate concentrations in two temperate deciduous forests. Environmental Research Communications, 2020, 2, 025003.	0.9	8
56	Terrestrial Nitrogen Inputs Affect the Export of Unprocessed Atmospheric Nitrate to Surface Waters: Insights from Triple Oxygen Isotopes of Nitrate. Ecosystems, 2022, 25, 1384-1399.	1.6	8
57	Light variability and mixotrophy: Responses of testate amoeba communities and shell Î´13C values to a peatland shading experiment. European Journal of Protistology, 2019, 67, 15-26.	0.5	7
58	Genomic Resources Notes accepted 1 October 2013 - 30 November 2013. Molecular Ecology Resources, 2014, 14, 435-436.	2.2	5
59	Spatiotemporal variation in the origin of C4 grasses: Î´13C analysis of grass pollen from the southeastern United States. Palaeogeography, Palaeoclimatology, Palaeoecology, 2014, 396, 227-231.	1.0	5
60	Carcass age and searcher identity affect morphological assessment of sex of bats. Journal of Wildlife Management, 2018, 82, 1582-1587.	0.7	4
61	Reply to: Data do not support large-scale oligotrophication of terrestrial ecosystems. Nature Ecology and Evolution, 2019, 3, 1287-1288.	3.4	4
62	Century-scale wood nitrogen isotope trajectories from an oak savanna with variable fire frequencies. Biogeosciences, 2020, 17, 4509-4522.	1.3	4
63	Isotopic analysis on nanogram quantities of carbon from dissolved insect cuticle: a method for paleoenvironmental inferences. Rapid Communications in Mass Spectrometry, 2017, 31, 1825-1834.	0.7	3
64	Growthâ€defense tradeâ€offs masked in unadmixed populations are revealed by hybridization. Evolution; International Journal of Organic Evolution, 2021, 75, 1450-1465.	1.1	3
65	Effect of heat and singeing on stable hydrogen isotope ratios of bird feathers and implications for their use in determining geographic origin. Rapid Communications in Mass Spectrometry, 2018, 32, 1859-1866.	0.7	2
66	Sequencing whole mitochondrial genomes to assess genetic divergence between proposed silver-haired bat (Lasionycteris noctivagans) populations. Mitochondrial DNA Part B: Resources, 2020, 5, 3838-3839.	0.2	2
67	White-Nose Syndrome Pathogen Pseudogymnoascus destructans Detected in Migratory Tree-Roosting Bats. Journal of Wildlife Diseases, 2022, 58, .	0.3	1
68	Effects of alder- and salmon-derived nutrients on aquatic bacterial community structure and microbial community metabolism in subarctic lakes. Oecologia, 0, , .	0.9	0