James M Vose

List of Publications by Year
in descending order

98 papers	6,773 citations	70961 41 h-index	66788 78 g-index
101 all docs	101 docs citations	101 times ranked	7358 citing authors

#	Article	IF	Citations
1	GENERALITY OF LEAF TRAIT RELATIONSHIPS: A TEST ACROSS SIX BIOMES. Ecology, 1999, 80, 1955-1969.	1.5	1,091
2	Relationships of leaf dark respiration to leaf nitrogen, specific leaf area and leaf life-span: a test across biomes and functional groups. Oecologia, 1998, 114, 471-482.	0.9	441
3	Potential water yield reduction due to forestation across China. Journal of Hydrology, 2006, 328, 548-558.	2.3	379
4	A general predictive model for estimating monthly ecosystem evapotranspiration. Ecohydrology, 2011, 4, 245-255.	1.1	195
5	A comparison of sap flux-based evapotranspiration estimates with catchment-scale water balance. Agricultural and Forest Meteorology, 2007, 145, 176-185.	1.9	160
6	Ecosystem Processes and Human Influences Regulate Streamflow Response to Climate Change at Long-Term Ecological Research Sites. BioScience, 2012, 62, 390-404.	2.2	149
7	Vegetation dynamics after a prescribed fire in the southern Appalachians. Forest Ecology and Management, 1999, 114, 199-213.	1.4	141
8	Seasonal respiration of foliage, fine roots, and woody tissues in relation to growth, tissue N, and photosynthesis. Global Change Biology, 2002, 8, 182-193.	4.2	135
9	Forest biogeochemistry in response to drought. Global Change Biology, 2016, 22, 2318-2328.	4.2	133
10	TSUGA CANADENSIS(L.) CARR. MORTALITY WILL IMPACT HYDROLOGIC PROCESSES IN SOUTHERN APPALACHIAN FOREST ECOSYSTEMS. , 2007, 17, 1156-1167.		131
11	Can forest management be used to sustain water-based ecosystem services in the face of climate change?. , 2011, 21, 2049-2067.		131
12	Topography-mediated controls on local vegetation phenology estimated from MODIS vegetation index. Landscape Ecology, 2011, 26, 541-556.	1.9	119
13	Seasonal changes of leaf area index (LAI) in a tropical deciduous forest in west Mexico. Forest Ecology and Management, 1995, 74, 171-180.	1.4	118
14	Long-term temperature and precipitation trends at the Coweeta Hydrologic Laboratory, Otto, North Carolina, USA. Hydrology Research, 2012, 43, 890-901.	1.1	115
15	Hemlock Declines Rapidly with Hemlock Woolly Adelgid Infestation: Impacts on the Carbon Cycle of Southern Appalachian Forests. Ecosystems, 2009, 12, 179-190.	1.6	112
16	Vertical leaf area distribution, light transmittance, and application of the Beerâ€“Lambert Law in four mature hardwood stands in the southern Appalachians. Canadian Journal of Forest Research, 1995, 25, 1036-1043.	0.8	110
17	Forest ecohydrological research in the 21st century: what are the critical needs?. Ecohydrology, 2011, 4, 146-158.	1.1	110
18	Forest dynamics following eastern hemlock mortality in the southern Appalachians. Oikos, 2012, 121, 523-536.	1.2	108

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19	Quantifying structural and physiological controls on variation in canopy transpiration among planted pine and hardwood species in the southern Appalachians. Ecohydrology, 2011, 4, 183-195.	1.1	106
20	Long-term nitrogen dynamics of Coweeta Forested Watersheds in the southeastern United States of America. Global Biogeochemical Cycles, 1997, 11, 657-671.	1.9	99
21	Ecosystem processes at the watershed scale: Hydrologic vegetation gradient as an indicator for lateral hydrologic connectivity of headwater catchments. Water Resources Research, 2012, 48, .	1.7	82
22	Foliar temperature-respiration response functions for broad-leaved tree species in the southern Appalachians. Tree Physiology, 1999, 19, 871-878.	1.4	80
23	Hemlock woolly adelgid in the southern Appalachians: Control strategies, ecological impacts, and potential management responses. Forest Ecology and Management, 2013, 291, 209-219.	1.4	78
24	Long-Term Patterns in Vegetation-Site Relationships in a Southern Appalachian Forest. Journal of the Torrey Botanical Society, 1999, 126, 320.	0.1	75
25	Drought limitations to leafâ€level gas exchange: results from a model linking stomatal optimization and cohesionâ€“tension theory. Plant, Cell and Environment, 2016, 39, 583-596.	2.8	74
26	The contribution of the Coweeta Hydrologic Laboratory to developing an understanding of long-term (1934â€“2008) changes in managed and unmanaged forests. Forest Ecology and Management, 2011, 261, 900-910.	1.4	73
27	Effects of elevated CO₂ and N fertilization on soil respiration from ponderosa pine (Pinusponderosa) in open-top chambers. Canadian Journal of Forest Research, 1995, 25, 1243-1251.	0.8	72
28	Divergent phenological response to hydroclimate variability in forested mountain watersheds. Global Change Biology, 2014, 20, 2580-2595.	4.2	71
29	Ecohydrological implications of drought for forests in the United States. Forest Ecology and Management, 2016, 380, 335-345.	1.4	67
30	Direct effects of temperature on forest nitrogen cycling revealed through analysis of long-term watershed records. Global Change Biology, 2011, 17, 297-308.	4.2	66
31	Future species composition will affect forest water use after loss of eastern hemlock from southern Appalachian forests. Ecological Applications, 2013, 23, 777-790.	1.8	65
32	Continental U.S. streamflow trends from 1940 to 2009 and their relationships with watershed spatial characteristics. Water Resources Research, 2015, 51, 6262-6275.	1.7	64
33	Effects of long-term drought on the hydrology and growth of a white pine plantation in the southern Appalachians. Forest Ecology and Management, 1994, 64, 25-39.	1.4	61
34	Site preparation burning to improve southern Appalachian pineâ€“hardwood stands: aboveground biomass, forest floor mass, and nitrogen and carbon pools. Canadian Journal of Forest Research, 1993, 23, 2255-2262.	0.8	58
35	Stand restoration burning in oakâ€“pine forests in the southern Appalachians: effects on aboveground biomass and carbon and nitrogen cycling. Forest Ecology and Management, 2004, 190, 311-321.	1.4	58
36	Using stand replacement fires to restore southern Appalachian pineâ€“hardwood ecosystems: effects on mass, carbon, and nutrient pools. Forest Ecology and Management, 1999, 114, 215-226.	1.4	56

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37	Urbanization and climate change jointly shift land surface phenology in the northern mid-latitude large cities. Remote Sensing of Environment, 2020, 236, 111477.	4.6	55
38	Watershed memory at the <scp>C</scp>oweeta <scp>H</scp>ydrologic <scp>L</scp>aboratory: The effect of past precipitation and storage on hydrologic response. Water Resources Research, 2016, 52, 1673-1695.	1.7	54
39	Nonstationary Hydrologic Behavior in Forested Watersheds Is Mediated by Climateâ€Induced Changes in Growing Season Length and Subsequent Vegetation Growth. Water Resources Research, 2018, 54, 5359-5375.	1.7	52
40	Watershed impacts of climate and land use changes depend on magnitude and land use context. Ecohydrology, 2017, 10, e1870.	1.1	49
41	Warmer temperatures reduce net carbon uptake, but do not affect water use, in a mature southern Appalachian forest. Agricultural and Forest Meteorology, 2018, 252, 269-282.	1.9	48
42	Fine root respiration in mature eastern white pine (Pinus strobus) in situ: the importance of CO2 in controlled environments. Tree Physiology, 1999, 19, 475-479.	1.4	44
43	Variation in Stream Water Quality in an Urban Headwater Stream in the Southern Appalachians. Water, Air, and Soil Pollution, 2006, 169, 331-353.	1.1	43
44	Functional Role of the Herbaceous Layer in Eastern Deciduous Forest Ecosystems. Ecosystems, 2015, 18, 221-236.	1.6	43
45	Contributing factors for drought in United States forest ecosystems under projected future climates and their uncertainty. Forest Ecology and Management, 2016, 380, 299-308.	1.4	43
46	Nitrogen deposition and cycling across an elevation and vegetation gradient in southern Appalachian forests. International Journal of Environmental Studies, 2008, 65, 391-410.	0.7	42
47	Assessing seasonal leaf area dynamics and vertical leaf area distribution in eastern white pine (Pinus strobusL.) with a portable light meter. Tree Physiology, 1990, 7, 125-134.	1.4	40
48	Title is missing!. Plant and Soil, 1997, 190, 19-28.	1.8	40
49	Changes to southern Appalachian water yield and stormflow after loss of a foundation species. Ecohydrology, 2015, 8, 518-528.	1.1	37
50	Simulating vegetation controls on hurricaneâ€Induced shallow landslides with a distributed ecohydrological model. Journal of Geophysical Research G: Biogeosciences, 2015, 120, 361-378.	1.3	36
51	Forest Management Challenges for Sustaining Water Resources in the Anthropocene. Forests, 2016, 7, 68.	0.9	36
52	Streamflow response to increasing precipitation extremes altered by forest management. Geophysical Research Letters, 2016, 43, 3727-3736.	1.5	36
53	Assessment of hydrologic vulnerability to urbanization and climate change in a rapidly changing watershed in the Southeast U.S.. Science of the Total Environment, 2018, 645, 806-816.	3.9	35
54	Hemlock Infestation and Mortality: Impacts on Nutrient Pools and Cycling in Appalachian Forests. Soil Science Society of America Journal, 2011, 75, 1935-1945.	1.2	34

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55	Leaf Water Relations and Sapflow in Eastern Cottonwood (Populus deltoides Bartr.) Trees Planted for Phytoremediation of a Groundwater Pollutant. International Journal of Phytoremediation, 2000, 2, 53-73.	1.7	33
56	Effects of understory prescribed burning on shortleaf pine (Pinus echinata Mill.)/mixed-hardwood forests. Journal of the Torrey Botanical Society, 2005, 132, 236-251.	0.1	33
57	Effects of prescribed fire in mixed oak forests of the southern Appalachians: forest floor, soil, and soil solution nitrogen responses. Journal of the Torrey Botanical Society, 2009, 136, 380-391.	0.1	33
58	Oak, Fire, and Global Change in the Eastern USA: What Might the Future Hold?. Fire Ecology, 2016, 12, 160-179.	1.1	33
59	Regulation of nitrogen mineralization and nitrification in Southern Appalachian ecosystems: Separating the relative importance of biotic vs. abiotic controls. Pedobiologia, 2007, 51, 89-97.	0.5	32
60	Imidacloprid Movement in Soils and Impacts on Soil Microarthropods in Southern Appalachian Eastern Hemlock Stands. Journal of Environmental Quality, 2012, 41, 469-478.	1.0	31
61	Processes of understory seedling recruitment 1 year after prescribed fire in an Arizona ponderosa pine community. Canadian Journal of Botany, 1987, 65, 2280-2290.	1.2	30
62	Age and distribution of an evergreen clonal shrub in the Coweeta Basin: Rhododendron maximum L.¹. Journal of the Torrey Botanical Society, 2012, 139, 149-166.	0.1	29
63	Water yield following forestâ€“grassâ€“forest transitions. Hydrology and Earth System Sciences, 2017, 21, 981-997.	1.9	27
64	Biotic and abiotic factors regulating forest floor CO2 flux across a range of forest age classes in the southern Appalachians. Pedobiologia, 2007, 50, 577-587.	0.5	25
65	Quantity and timing of needlefall in N and P fertilized loblolly pine stands. Forest Ecology and Management, 1991, 41, 205-219.	1.4	24
66	The influence of watershed characteristics on spatial patterns of trends in annual scale streamflow variability in the continental U.S.. Journal of Hydrology, 2016, 540, 850-860.	2.3	24
67	Biomass response mechanisms of understory species the first year after prescribed burning in an Arizona ponderosa-pine community. Forest Ecology and Management, 1991, 40, 175-187.	1.4	23
68	Estimating Forest Ecosystem Evapotranspiration at Multiple Temporal Scales With a Dimension Analysis Approach¹. Journal of the American Water Resources Association, 2008, 44, 208-221.	1.0	23
69	Can structural and functional characteristics be used to identify riparian zone width in southern Appalachian headwater catchments?. Canadian Journal of Forest Research, 2010, 40, 235-253.	0.8	23
70	Initial Effects of Prescribed Fire on Quality of Soil Solution and Streamwater in the Southern Appalachian Mountains. Southern Journal of Applied Forestry, 2005, 29, 5-15.	0.4	22
71	Total C and N Pools and Fluxes Vary with Time, Soil Temperature, and Moisture Along an Elevation, Precipitation, and Vegetation Gradient in Southern Appalachian Forests. Ecosystems, 2018, 21, 1623-1638.	1.6	21
72	Site preparation burning to improve southern Appalachian pineâ€“hardwood stands: photosynthesis, water relations, and growth of planted Pinus strobus during establishment. Canadian Journal of Forest Research, 1993, 23, 2278-2285.	0.8	20

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73	Short-term effects of prescribed fire on mixed oak forests in the southern Appalachians: vegetation response¹. Journal of the Torrey Botanical Society, 2010, 137, 49-66.	0.1	20
74	Interacting effects of wildfire severity and liming on nutrient cycling in a southern Appalachian wilderness area. Plant and Soil, 2013, 366, 165-183.	1.8	19
75	Ecosystem processes at the watershed scale: Influence of flowpath patterns of canopy ecophysiology on emergent catchment water and carbon cycling. Ecohydrology, 2019, 12, e2093.	1.1	19
76	Challenges to modelling NPP in diverse eastern deciduous forests: species-level comparisons of foliar respiration responses to temperature and nitrogen. Ecological Modelling, 1999, 122, 165-174.	1.2	18
77	Determination of the Relative Uptake of Ground vs. Surface Water byPopulus deltoidesDuring Phytoremediation. International Journal of Phytoremediation, 2004, 6, 239-252.	1.7	18
78	Growth of Eastern White Pine (Pinus strobus L.) Related to Forest Floor Consumption by Prescribed Fire in the Southern Appalachians. Southern Journal of Applied Forestry, 2002, 26, 18-25.	0.4	17
79	Herbaceous species composition and richness of mesophytic cove forests in the southern Appalachians: synthesis and knowledge gaps. Journal of the Torrey Botanical Society, 2014, 141, 39-71.	0.1	17
80	Effects of riparian zone buffer widths on vegetation diversity in southern Appalachian headwater catchments. Forest Ecology and Management, 2016, 376, 9-23.	1.4	16
81	Long-Term Effects of High Intensity Prescribed Fire on Vegetation Dynamics in the Wine Spring Creek Watershed, Western North Carolina, USA. Fire Ecology, 2009, 5, 66-85.	1.1	15
82	Effects of Liming on Soils and Streamwaters in a Deciduous Forest: Comparison of Field Results and Simulations. Journal of Environmental Quality, 1995, 24, 1104-1117.	1.0	13
83	Radiation use efficiency in adjacent hardwood and pine forests in the southern Appalachians. Forest Ecology and Management, 2009, 257, 1034-1042.	1.4	12
84	Impact of Imidacloprid for Control of Hemlock Woolly Adelgid on Nearby Aquatic Macroinvertebrate Assemblages. Southern Journal of Applied Forestry, 2011, 35, 26-32.	0.4	12
85	Restoration of shortleaf pine (Pinus echinata)-hardwood ecosystems severely impacted by the southern pine beetle (Dendroctonus frontalis). Forest Ecology and Management, 2012, 274, 181-200.	1.4	12
86	Watershedâ€scale vegetation, water quantity, and water quality responses to wildfire in the southern Appalachian mountain region, United States. Hydrological Processes, 2020, 34, 5188-5209.	1.1	12
87	Watershed-scale responses to ozone events in a Pinus strobus L. plantation. Water, Air, and Soil Pollution, 1990, 54, 119-133.	1.1	11
88	Recovery of Nitrogen Pools and Processes in Degraded Riparian Zones in the Southern Appalachians. Journal of Environmental Quality, 2009, 38, 1391-1399.	1.0	11
89	Forest ecohydrological processes in a changing environment. Ecohydrology, 2011, 4, 143-145.	1.1	11
90	Potential Implications for Expansion of Freeze-Tolerant Eucalyptus Plantations on Water Resources in the Southern United States. Forest Science, 2015, 61, 509-521.	0.5	10

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91	Climate Change May Increase the Drought Stress of Mesophytic Trees Downslope With Ongoing Forest Mesophication Under a History of Fire Suppression. Frontiers in Forests and Global Change, 2020, 3, .	1.0	10
92	High elevation watersheds in the southern Appalachians: Indicators of sensitivity to acidic deposition and the potential for restoration through liming. Forest Ecology and Management, 2016, 377, 101-117.	1.4	9
93	Fire and Forests in the 21st Century: Managing Resilience Under Changing Climates and Fire Regimes in USA Forests. Managing Forest Ecosystems, 2021, , 465-502.	0.4	8
94	Forest and Water in the 21st Century: A Global Perspective. Journal of Forestry, 2019, 117, 80-85.	0.5	5
95	Applying Climate Change Risk Management Tools to Integrate Streamflow Projections and Social Vulnerability. Ecosystems, 2020, 23, 67-83.	1.6	5
96	Introduction to drought and US forests: Impacts and potential management responses. Forest Ecology and Management, 2016, 380, 296-298.	1.4	4
97	Forest Processes. Advances in Global Change Research, 2014, , 25-54.	1.6	3
98	Early Successional Forest Habitats and Water Resources. Managing Forest Ecosystems, 2011, , 253-269.	0.4	2