Scott L Collins

List of Publications by Year
in descending order

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Version: 2024-02-01

297 papers	27,188 citations	4942 84 h-index	6979 154 g-index
306 all docs	306 docs citations	306 times ranked	21122 citing authors

#	Article	IF	Citations
1	Rainfall Variability, Carbon Cycling, and Plant Species Diversity in a Mesic Grassland. Science, 2002, 298, 2202-2205.	6.0	942
2	Functional- and abundance-based mechanisms explain diversity loss due to N fertilization. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 4387-4392.	3.3	879
3	Modulation of Diversity by Grazing and Mowing in Native Tallgrass Prairie. Science, 1998, 280, 745-747.	6.0	821
4	Ecological Forecasts: An Emerging Imperative. Science, 2001, 293, 657-660.	6.0	774
5	Species diversity enhances ecosystem functioning through interspecific facilitation. Nature, 2002, 415, 426-429.	13.7	692
6	The Keystone Role of Bison in North American Tallgrass Prairie. BioScience, 1999, 49, 39.	2.2	600
7	Models, mechanisms and pathways of succession. Botanical Review, The, 1987, 53, 335-371.	1.7	545
8	Productivity Is a Poor Predictor of Plant Species Richness. Science, 2011, 333, 1750-1753.	6.0	463
9	An integrated conceptual framework for longâ€term socialâ€“ecological research. Frontiers in Ecology and the Environment, 2011, 9, 351-357.	1.9	462
10	A framework for assessing ecosystem dynamics in response to chronic resource alterations induced by global change. Ecology, 2009, 90, 3279-3289.	1.5	458
11	ECOLOGY: Ecology for a Crowded Planet. Science, 2004, 304, 1251-1252.	6.0	440
12	Shrub encroachment in North American grasslands: shifts in growth form dominance rapidly alters control of ecosystem carbon inputs. Global Change Biology, 2008, 14, 615-623.	4.2	435
13	The Ecological Concept of Disturbance and Its Expression at Various Hierarchical Levels. Oikos, 1989, 54, 129.	1.2	413
14	Eutrophication weakens stabilizing effects of diversity in natural grasslands. Nature, 2014, 508, 521-525.	13.7	409
15	Grassland productivity limited by multiple nutrients. Nature Plants, 2015, 1, 15080.	4.7	403
16	Fertilization effects on species density and primary productivity in herbaceous plant communities. Oikos, 2000, 89, 428-439.	1.2	390
17	Productivity responses to altered rainfall patterns in a C 4 -dominated grassland. Oecologia, 2003, 137, 245-251.	0.9	383
18	Woody encroachment decreases diversity across North American grasslands and savannas. Ecology, 2012, 93, 697-703.	1.5	374

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19	Interaction of Disturbances in Tallgrass Prairie: A Field Experiment. Ecology, 1987, 68, 1243-1250.	1.5	330
20	Pulse dynamics and microbial processes in aridland ecosystems. Journal of Ecology, 2008, 96, 413-420.	1.9	330
21	Effect of precipitation variability on net primary production and soil respiration in a Chihuahuan Desert grassland. Global Change Biology, 2011, 17, 1505-1515.	4.2	319
22	Temperature response of soil respiration largely unaltered with experimental warming. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 13797-13802.	3.3	308
23	Experimental Analysis of Intermediate Disturbance and Initial Floristic Composition: Decoupling Cause and Effect. Ecology, 1995, 76, 486-492.	1.5	302
24	Environmental and plant community determinants of species loss following nitrogen enrichment. Ecology Letters, 2007, 10, 596-607.	3.0	293
25	Positive feedback between microclimate and shrub encroachment in the northern Chihuahuan desert. Ecosphere, 2010, 1, 1-11.	1.0	290
26	Conditional vulnerability of plant diversity to atmospheric nitrogen deposition across the United States. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 4086-4091.	3.3	287
27	A hierarchical consideration of causes and mechanisms of succession. Plant Ecology, 1987, 69, 109-114.	1.2	279
28	Coordinated distributed experiments: an emerging tool for testing global hypotheses in ecology and environmental science. Frontiers in Ecology and the Environment, 2013, 11, 147-155.	1.9	237
29	Differential sensitivity to regional-scale drought in six central US grasslands. Oecologia, 2015, 177, 949-957.	0.9	236
30	Altering Rainfall Timing and Quantity in a Mesic Grassland Ecosystem: Design and Performance of Rainfall Manipulation Shelters. Ecosystems, 2000, 3, 308-319.	1.6	235
31	Asymmetric responses of primary productivity to precipitation extremes: A synthesis of grassland precipitation manipulation experiments. Global Change Biology, 2017, 23, 4376-4385.	4.2	231
32	Disturbance Frequency and Community Stability in Native Tallgrass Prairie. American Naturalist, 2000, 155, 311-325.	1.0	228
33	Effects of disturbance on diversity in mixed-grass prairie. Plant Ecology, 1986, 64, 87-94.	1.2	226
34	Drought consistently alters the composition of soil fungal and bacterial communities in grasslands from two continents. Global Change Biology, 2018, 24, 2818-2827.	4.2	221
35	Fire Frequency and Community Heterogeneity in Tallgrass Prairie Vegetation. Ecology, 1992, 73, 2001-2006.	1.5	199
36	Importance of Spatial and Temporal Dynamics in Species Regional Abundance and Distribution. Ecology, 1991, 72, 654-664.	1.5	196

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37	Sensitivity of grassland plant community composition to spatial vs. temporal variation in precipitation. Ecology, 2013, 94, 1687-1696.	1.5	191
38	Aboveground net primary production dynamics in a northern Chihuahuan Desert ecosystem. Oecologia, 2008, 155, 123-132.	0.9	184
39	<scp>codyn</scp>: An <scp>r</scp> package of community dynamics metrics. Methods in Ecology and Evolution, 2016, 7, 1146-1151.	2.2	175
40	A method to determine rates and patterns of variability in ecological communities. Oikos, 2000, 91, 285-293.	1.2	174
41	SCALE-DEPENDENT INTERACTION OF FIRE AND GRAZING ON COMMUNITY HETEROGENEITY IN TALLGRASS PRAIRIE. Ecology, 2006, 87, 2058-2067.	1.5	170
42	Caterpillar Leaf Damage, and the Game of Hide-and-Seek with Birds. Ecology, 1983, 64, 592-602.	1.5	166
43	Biotic mechanisms of community stability shift along a precipitation gradient. Ecology, 2014, 95, 1693-1700.	1.5	161
44	Microbial responses to nitrogen addition in three contrasting grassland ecosystems. Oecologia, 2007, 154, 349-359.	0.9	158
45	Living in an increasingly connected world: a framework for continental-scale environmental science. Frontiers in Ecology and the Environment, 2008, 6, 229-237.	1.9	157
46	SOIL RESOURCES REGULATE PRODUCTIVITY AND DIVERSITY IN NEWLY ESTABLISHED TALLGRASS PRAIRIE. Ecology, 2003, 84, 724-735.	1.5	156
47	Plant community responses to resource availability and heterogeneity during restoration. Oecologia, 2004, 139, 617-629.	0.9	154
48	Earth Stewardship: science for action to sustain the human-earth system. Ecosphere, 2011, 2, art89.	1.0	154
49	A Multiscale, Hierarchical Model of Pulse Dynamics in Arid-Land Ecosystems. Annual Review of Ecology, Evolution, and Systematics, 2014, 45, 397-419.	3.8	153
50	Interactive effects of grazing, drought, and fire on grassland plant communities in North America and South Africa. Ecology, 2014, 95, 98-109.	1.5	145
51	Changes in plant community composition, not diversity, during a decade of nitrogen and phosphorus additions drive aboveâ€ground productivity in a tallgrass prairie. Journal of Ecology, 2014, 102, 1649-1660.	1.9	145
52	Disturbance Dynamics and Ecological Response: The Contribution of Long-Term Ecological Research. BioScience, 2003, 53, 46.	2.2	143
53	Anthropogenic nitrogen deposition predicts local grassland primary production worldwide. Ecology, 2015, 96, 1459-1465.	1.5	143
54	Vegetationâ€“microclimate feedbacks in woodlandâ€“grassland ecotones. Global Ecology and Biogeography, 2013, 22, 364-379.	2.7	142

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55	A Hierarchical Analysis of Species' Abundance Patterns in Grassland Vegetation. American Naturalist, 1990, 135, 633-648.	1.0	141
56	Shifting species interactions in terrestrial dryland ecosystems under altered water availability and climate change. Biological Reviews, 2012, 87, 563-582.	4.7	141
57	Effects of fire, grazing and topographic variation on vegetation structure in tallgrass prairie. Journal of Vegetation Science, 2012, 23, 563-575.	1.1	141
58	Global change effects on plant communities are magnified by time and the number of global change factors imposed. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17867-17873.	3.3	141
59	Change in dominance determines herbivore effects on plant biodiversity. Nature Ecology and Evolution, 2018, 2, 1925-1932.	3.4	140
60	Asynchrony among local communities stabilises ecosystem function of metacommunities. Ecology Letters, 2017, 20, 1534-1545.	3.0	136
61	Pushing precipitation to the extremes in distributed experiments: recommendations for simulating wet and dry years. Global Change Biology, 2017, 23, 1774-1782.	4.2	132
62	Ecological science and sustainability for the 21st century. Frontiers in Ecology and the Environment, 2005, 3, 4-11.	1.9	127
63	Looking deeper into the soil: biophysical controls and seasonal lags of soil CO₂ production and efflux. Ecological Applications, 2010, 20, 1569-1582.	1.8	120
64	New Eyes on the World: Advanced Sensors for Ecology. BioScience, 2009, 59, 385-397.	2.2	119
65	Past, Present, and Future Roles of Long-Term Experiments in the LTER Network. BioScience, 2012, 62, 377-389.	2.2	116
66	Effects of experimental rainfall manipulations on Chihuahuan Desert grassland and shrubland plant communities. Oecologia, 2013, 172, 1117-1127.	0.9	115
67	Altered Rainfall Patterns, Gas Exchange, and Growth in Grasses and Forbs. International Journal of Plant Sciences, 2002, 163, 549-557.	0.6	113
68	Precipitation variability and fire influence the temporal dynamics of soil <scp><scp>CO</scp></scp>₂ efflux in an arid grassland. Global Change Biology, 2012, 18, 1401-1411.	4.2	113
69	Effects of Urine Deposition on Small-Scale Patch Structure in Prairie Vegetation. Ecology, 1995, 76, 1195-1205.	1.5	110
70	Do individual plant species show predictable responses to nitrogen addition across multiple experiments?. Oikos, 2005, 110, 547-555.	1.2	110
71	Sensitivity of primary production to precipitation across the United States. Ecology Letters, 2020, 23, 527-536.	3.0	109
72	Shrub Invasion Decreases Diversity and Alters Community Stability in Northern Chihuahuan Desert Plant Communities. PLoS ONE, 2008, 3, e2332.	1.1	104

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73	Post-Fire Resource Redistribution in Desert Grasslands: A Possible Negative Feedback on Land Degradation. Ecosystems, 2009, 12, 434-444.	1.6	104
74	EFFECTS OF ORGANISMAL AND DISTANCE SCALING ON ANALYSIS OF SPECIES DISTRIBUTION AND ABUNDANCE. , 1997, 7, 543-551.		103
75	Above- and belowground responses to nitrogen addition in a Chihuahuan Desert grassland. Oecologia, 2012, 169, 177-185.	0.9	103
76	Succession in grasslands: Thirty-two years of change in a central Oklahoma tallgrass prairie. Plant Ecology, 1983, 51, 181-190.	1.2	100
77	The Seedling Regeneration Niche: Habitat Structure of Tree Seedlings in an Oak-Pine Forest. Oikos, 1987, 48, 89.	1.2	95
78	Response of an aridland ecosystem to interannual climate variability and prolonged drought. Landscape Ecology, 2007, 22, 897-910.	1.9	95
79	Gradient Models, Gradient Analysis, and Hierarchical Structure in Plant Communities. Oikos, 1997, 78, 23.	1.2	91
80	Grassland to shrubland state transitions enhance carbon sequestration in the northern Chihuahuan Desert. Global Change Biology, 2015, 21, 1226-1235.	4.2	91
81	Incorporating clonal growth form clarifies the role of plant height in response to nitrogen addition. Oecologia, 2012, 169, 1053-1062.	0.9	90
82	RANK CLOCKS AND PLANT COMMUNITY DYNAMICS. Ecology, 2008, 89, 3534-3541.	1.5	89
83	The hierarchical continuum concept. Journal of Vegetation Science, 1993, 4, 149-156.	1.1	88
84	Abundance of introduced species at home predicts abundance away in herbaceous communities. Ecology Letters, 2011, 14, 274-281.	3.0	88
85	New opportunities in ecological sensing using wireless sensor networks. Frontiers in Ecology and the Environment, 2006, 4, 402-407.	1.9	87
86	Integrating Patch and Boundary Dynamics to Understand and Predict Biotic Transitions at Multiple Scales. Landscape Ecology, 2006, 21, 19-33.	1.9	87
87	Differential effects of extreme drought on production and respiration: synthesis and modeling analysis. Biogeosciences, 2014, 11, 621-633.	1.3	87
88	Atmospheric nitrogen deposition in the northern Chihuahuan desert: Temporal trends and potential consequences. Journal of Arid Environments, 2007, 68, 640-651.	1.2	86
89	Effects of Scale and Disturbance on Rates of Immigration and Extinction of Species in Prairies. Oikos, 1992, 63, 273.	1.2	85
90	Shifts in plant functional composition following longâ€term drought in grasslands. Journal of Ecology, 2019, 107, 2133-2148.	1.9	85

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91	Complex seasonal cycle of ecohydrology in the Southwest United States. Journal of Geophysical Research, 2010, 115, .	3.3	84
92	Regional trends and local variability in monsoon precipitation in the northern Chihuahuan Desert, USA. Journal of Arid Environments, 2014, 103, 63-70.	1.2	84
93	Exposure to predicted precipitation patterns decreases population size and alters community structure of cyanobacteria in biological soil crusts from the Chihuahuan Desert. Environmental Microbiology, 2018, 20, 259-269.	1.8	83
94	Stability of tallgrass prairie during a 19â€year increase in growing season precipitation. Functional Ecology, 2012, 26, 1450-1459.	1.7	81
95	Climatic controls of aboveground net primary production in semi-arid grasslands along a latitudinal gradient portend low sensitivity to warming. Oecologia, 2015, 177, 959-969.	0.9	80
96	A comprehensive approach to analyzing community dynamics using rank abundance curves. Ecosphere, 2019, 10, e02881.	1.0	79
97	Soil Heterogeneity Effects on Tallgrass Prairie Community Heterogeneity: An Application of Ecological Theory to Restoration Ecology. Restoration Ecology, 2005, 13, 413-424.	1.4	78
98	General destabilizing effects of eutrophication on grassland productivity at multiple spatial scales. Nature Communications, 2020, 11, 5375.	5.8	75
99	Generality in ecology: testing North American grassland rules in South African savannas. Frontiers in Ecology and the Environment, 2004, 2, 483-491.	1.9	74
100	Can current moisture responses predict soil CO₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments. Biogeosciences, 2014, 11, 2991-3013.	1.3	74
101	Relationships of Vegetation and Environment in Buffalo Wallows. American Midland Naturalist, 1984, 112, 178.	0.2	73
102	Climate sensitivity functions and net primary production: A framework for incorporating climate mean and variability. Ecology, 2018, 99, 576-582.	1.5	73
103	Regional grassland productivity responses to precipitation during multiyear aboveâ€and belowâ€average rainfall periods. Global Change Biology, 2018, 24, 1935-1951.	4.2	71
104	Plant community response to loss of large herbivores differs between North American and South African savanna grasslands. Ecology, 2014, 95, 808-816.	1.5	70
105	Effect of local and regional processes on plant species richness in tallgrass prairie. Oikos, 2002, 99, 571-579.	1.2	69
106	Skills and Knowledge for Data-Intensive Environmental Research. BioScience, 2017, 67, 546-557.	2.2	68
107	Legacy effects of a regional drought on aboveground net primary production in six central US grasslands. Plant Ecology, 2018, 219, 505-515.	0.7	66
108	Fire and grazing in a mesic tallgrass prairie: impacts on plant species and functional traits. Ecology, 2010, 91, 1651-1659.	1.5	63

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109	Resolving the Dust Bowl paradox of grassland responses to extreme drought. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 22249-22255.	3.3	63
110	Species reordering, not changes in richness, drives longâ€term dynamics in grassland communities. Ecology Letters, 2017, 20, 1556-1565.	3.0	62
111	Increasing effects of chronic nutrient enrichment on plant diversity loss and ecosystem productivity over time. Ecology, 2021, 102, e03218.	1.5	62
112	Feedbacks between fires and wind erosion in heterogeneous arid lands. Journal of Geophysical Research, 2007, 112, .	3.3	61
113	Form and function of grass ring patterns in arid grasslands: the role of abiotic controls. Oecologia, 2008, 158, 545-555.	0.9	61
114	A test of two mechanisms proposed to optimize grassland aboveground primary productivity in response to grazing. Journal of Plant Ecology, 2012, 5, 357-365.	1.2	59
115	Habitat Relationships of Wood Warblers (Parulidae) in Northern Central Minnesota. Oikos, 1982, 39, 50.	1.2	58
116	Patch Structure in Tallgrass Prairies: Dynamics of Satellite Species. Oikos, 1990, 57, 229.	1.2	58
117	Influence of grazing and fire frequency on smallâ€scale plant community structure and resource variability in native tallgrass prairie. Oikos, 2008, 117, 859-866.	1.2	58
118	Ecosystem response to nutrient enrichment across an urban airshed in the Sonoran Desert. , 2011, 21, 640-660.		58
119	The interactive effects of press/pulse intensity and duration on regime shifts at multiple scales. Ecological Monographs, 2017, 87, 198-218.	2.4	58
120	Disturbances in tallgrass prairie: local and regional effects on community heterogeneity. Landscape Ecology, 1992, 7, 243-251.	1.9	57
121	Soil net nitrogen mineralisation across global grasslands. Nature Communications, 2019, 10, 4981.	5.8	57
122	A hierarchical consideration of causes and mechanisms of succession. , 1987, , 109-114.		57
123	BOTTOM-UP REGULATION OF PLANT COMMUNITY STRUCTURE IN AN ARIDLAND ECOSYSTEM. Ecology, 2006, 87, 2746-2754.	1.5	56
124	Temporal heterogeneity increases with spatial heterogeneity in ecological communities. Ecology, 2018, 99, 858-865.	1.5	56
125	Rapid recovery of ecosystem function following extreme drought in a South African savanna grassland. Ecology, 2020, 101, e02983.	1.5	55
126	Plant community response to loss of large herbivores: comparing consequences in a South African and a North American grassland. Biodiversity and Conservation, 2009, 18, 2327-2342.	1.2	54

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127	Long-Term Ecological Research in a Human-Dominated World. BioScience, 2012, 62, 342-353.	2.2	53
128	Aboveground production and species richness of annuals in Chihuahuan Desert grassland and shrubland plant communities. Journal of Arid Environments, 2010, 74, 378-385.	1.2	52
129	Potential vulnerability of 348 herbaceous species to atmospheric deposition of nitrogen and sulfur in the United States. Nature Plants, 2019, 5, 697-705.	4.7	52
130	Seed Predation, Seed Dispersal, and Disturbance in Grasslands: A Comment. American Naturalist, 1985, 125, 866-872.	1.0	51
131	Controls of Aboveground Net Primary Production in Mesic Savanna Grasslands: An Inter-Hemispheric Comparison. Ecosystems, 2009, 12, 982-995.	1.6	51
132	Relative contributions of neutral and niche-based processes to the structure of a desert grassland grasshopper community. Oecologia, 2009, 161, 791-800.	0.9	51
133	Habitat relationships and survivorship of tree seedlings in hemlock-hardwood forest. Canadian Journal of Botany, 1990, 68, 790-797.	1.2	50
134	The influence of Prosopis canopies on understorey vegetation: Effects of landscape position. Journal of Vegetation Science, 2003, 14, 743-750.	1.1	50
135	Vegetation change: a reunifying concept in plant ecology. Perspectives in Plant Ecology, Evolution and Systematics, 2005, 7, 69-76.	1.1	50
136	Pressâ€“pulse interactions: effects of warming, N deposition, altered winter precipitation, and fire on desert grassland community structure and dynamics. Global Change Biology, 2017, 23, 1095-1108.	4.2	49
137	Geographic Variation in Habitat Structure of the Black-Throated Green Warbler (Dendroica virens). Auk, 1983, 100, 382-389.	0.7	48
138	Experimental analysis of patch dynamics and community heterogeneity in tallgrass prairie. Plant Ecology, 1989, 85, 57-66.	1.2	48
139	Global environmental change and the nature of aboveground net primary productivity responses: insights from long-term experiments. Oecologia, 2015, 177, 935-947.	0.9	48
140	Altered rainfall patterns increase forb abundance and richness in native tallgrass prairie. Scientific Reports, 2016, 6, 20120.	1.6	48
141	forumThe core-satellite species hypothesis provides a theoretical basis for Grime's classification of dominant, subordinate, and transient species. Journal of Ecology, 1999, 87, 1064-1067.	1.9	47
142	Experimental analysis of patch dynamics in tallgrass prairie plant communities. Journal of Vegetation Science, 1993, 4, 157-162.	1.1	45
143	FEEDBACK LOOPS IN ECOLOGICAL HIERARCHIES FOLLOWING URINE DEPOSITION IN TALLGRASS PRAIRIE. Ecology, 2001, 82, 1319-1329.	1.5	45
144	Learning to roll with the punches: adaptive experimentation in human-dominated systems. Frontiers in Ecology and the Environment, 2004, 2, 467-474.	1.9	45

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145	Soil enzyme responses to varying rainfall regimes in Chihuahuan Desert soils. Ecosphere, 2015, 6, 1-10.	1.0	45
146	Responses to fire differ between <scp>S</scp>outh <scp>A</scp>frican and <scp>N</scp>orth <scp>A</scp>merican grassland communities. Journal of Vegetation Science, 2014, 25, 793-804.	1.1	44
147	Environmental heterogeneity has a weak effect on diversity during community assembly in tallgrass prairie. Ecological Monographs, 2016, 86, 94-106.	2.4	44
148	Long-Term Dynamics and Hotspots of Change in a Desert Grassland Plant Community. American Naturalist, 2015, 185, E30-E43.	1.0	43
149	Nutrient additions cause divergence of tallgrass prairie plant communities resulting in loss of ecosystem stability. Journal of Ecology, 2016, 104, 1478-1487.	1.9	43
150	Species asynchrony stabilises productivity under extreme drought across Northern China grasslands. Journal of Ecology, 2021, 109, 1665-1675.	1.9	42
151	Differential Response of Woody and Herbaceous Species to Summer and Winter Burning in an Oklahoma Grassland. Southwestern Naturalist, 1982, 27, 55.	0.1	41
152	The Effect of Early Spring Burning on Vegetation in Buffalo Wallows. Bulletin of the Torrey Botanical Club, 1983, 110, 474.	0.6	41
153	Changes in spatial variance during a grassland to shrubland state transition. Journal of Ecology, 2017, 105, 750-760.	1.9	41
154	Can biological invasions induce desertification?. New Phytologist, 2009, 181, 512-515.	3.5	40
155	Mechanisms of shrub encroachment into Northern Chihuahuan Desert grasslands and impacts of climate change investigated using a cellular automata model. Advances in Water Resources, 2016, 91, 46-62.	1.7	38
156	Spatial heterogeneity in species composition constrains plant community responses to herbivory and fertilisation. Ecology Letters, 2018, 21, 1364-1371.	3.0	38
157	Fire frequency, state change and hysteresis in tallgrass prairie. Ecology Letters, 2021, 24, 636-647.	3.0	38
158	Succession and fluctuation in Artemisia dominated grassland. Plant Ecology, 1988, 73, 89-99.	1.2	37
159	Small-scale patch structure in North American and South African grasslands responds differently to fire and grazing. Landscape Ecology, 2013, 28, 1293-1306.	1.9	37
160	Experimental manipulation of natural plant communities. Trends in Ecology and Evolution, 1994, 9, 94-98.	4.2	35
161	Genetic parameter estimates in a clonally replicated progeny test of teak (Tectona grandis Linn. f.). Tree Genetics and Genomes, 2008, 4, 237-245.	0.6	35
162	Interactions Between Soil Erosion Processes and Fires: Implications for the Dynamics of Fertility Islands. Rangeland Ecology and Management, 2010, 63, 267-274.	1.1	35

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163	Rapid plant community responses during the summer monsoon to nighttime warming in a northern Chihuahuan Desert grassland. Journal of Arid Environments, 2010, 74, 611-617.	1.2	35
164	Direct and indirect effects of temperature and precipitation on alpine seed banks in the Tibetan Plateau. Ecological Applications, 2020, 30, e02096.	1.8	35
165	Plant traits and soil fertility mediate productivity losses under extreme drought in C₃ grasslands. Ecology, 2021, 102, e03465.	1.5	35
166	Precipitation increases the abundance of some groups of root-associated fungal endophytes in a semiarid grassland. Ecosphere, 2011, 2, art50.	1.0	34
167	Cost Implications of Carbon Capture and Storage for the Coal Power Plants in India. Energy Procedia, 2014, 54, 431-438.	1.8	34
168	The ecological role of small rainfall events in a desert grassland. Ecohydrology, 2015, 8, 1614-1622.	1.1	34
169	Is a drought a drought in grasslands? Productivity responses to different types of drought. Oecologia, 2021, 197, 1017-1026.	0.9	34
170	Soil carbon stocks in temperate grasslands differ strongly across sites but are insensitive to decadeâ€long fertilization. Global Change Biology, 2022, 28, 1659-1677.	4.2	34
171	Ecosystem fragmentation of oak-pine forest in the New Jersey Pinelands. Forest Ecology and Management, 1988, 25, 105-122.	1.4	33
172	Resilience and recovery potential of duneland vegetation in the southern Kalahari. Ecosphere, 2014, 5, 1-14.	1.0	33
173	The sensitivity of carbon exchanges in Great Plains grasslands to precipitation variability. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 280-294.	1.3	33
174	Fire frequency drives habitat selection by a diverse herbivore guild impacting topâ€“down control of plant communities in an African savanna. Oikos, 2016, 125, 1636-1646.	1.2	32
175	Loss of a large grazer impacts savanna grassland plant communities similarly in North America and South Africa. Oecologia, 2014, 175, 293-303.	0.9	31
176	Connecting plantâ€“soil feedbacks to longâ€term stability in a desert grassland. Ecology, 2019, 100, e02756.	1.5	31
177	Soil Seed Banks, Alternative Stable State Theory, and Ecosystem Resilience. BioScience, 2021, 71, 697-707.	2.2	31
178	Divergent responses of primary production to increasing precipitation variability in global drylands. Global Change Biology, 2021, 27, 5225-5237.	4.2	31
179	Response to Comments on â€œProductivity Is a Poor Predictor of Plant Species Richnessâ€. Science, 2012, 335, 1441-1441.	6.0	30
180	Rainfall variability has minimal effects on grassland recovery from repeated grazing. Journal of Vegetation Science, 2014, 25, 36-44.	1.1	30

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181	The influence of seasonal precipitation and grass competition on 20Âyears of forb dynamics in northern Chihuahuan Desert grassland. Journal of Vegetation Science, 2017, 28, 250-259.	1.1	30
182	Variation in monsoon precipitation drives spatial and temporal patterns of Larrea tridentata growth in the Sonoran Desert. Functional Ecology, 2012, 26, 750-758.	1.7	29
183	Nitrogen addition amplifies the nonlinear drought response of grassland productivity to extended growingâ€season droughts. Ecology, 2021, 102, e03483.	1.5	28
184	Vegetation-Environment Relationships in a Rock Outcrop Community in Southern Oklahoma. American Midland Naturalist, 1989, 122, 339.	0.2	27
185	Patterns of trait convergence and divergence among native and exotic species in herbaceous plant communities are not modified by nitrogen enrichment. Journal of Ecology, 2011, 99, 1327-1338.	1.9	27
186	Herbivore size matters for productivityâ€“richness relationships in A frican savannas. Journal of Ecology, 2017, 105, 674-686.	1.9	27
187	Microbial processing of plant remains is coâ€limited by multiple nutrients in global grasslands. Global Change Biology, 2020, 26, 4572-4582.	4.2	27
188	Determinants of community compositional change are equally affected by global change. Ecology Letters, 2021, 24, 1892-1904.	3.0	27
189	Geographic variation in habitat structure for the wood warblers in Maine and Minnesota. Oecologia, 1983, 59, 246-252.	0.9	26
190	Tree dispersion in oak-dominated forests along an environmental gradient. Oecologia, 1991, 86, 471-477.	0.9	26
191	Fine-scale spatial organization of tallgrass prairie vegetation along a topographic gradient. Folia Geobotanica Et Phytotaxonomica, 1995, 30, 169-184.	0.4	26
192	Patterns of Community Structure During Succession in Tallgrass Prairie. Bulletin of the Torrey Botanical Club, 1990, 117, 397.	0.6	25
193	Multiscale monitoring of a multispecies case study: two grass species at Sevilleta. Plant Ecology, 2005, 179, 149-154.	0.7	25
194	Responses to chronic N fertilization of ectomycorrhizal piÃ±on but not arbuscular mycorrhizal juniper in a piÃ±on-juniper woodland. Journal of Arid Environments, 2010, 74, 1170-1176.	1.2	25
195	Primary Succession on Granite Outcrops in Southwestern Oklahoma. Bulletin of the Torrey Botanical Club, 1987, 114, 387.	0.6	23
196	Long-Term Research and the Dynamics of Bird Populations and Communities. Auk, 2001, 118, 583-588.	0.7	22
197	Soil heterogeneity increases plant diversity after 20 years of manipulation during grassland restoration. Ecological Applications, 2020, 30, e02014.	1.8	22
198	Ordination and Classification of Mature Bottomland Forests in North Central Oklahoma. Bulletin of the Torrey Botanical Club, 1981, 108, 152.	0.6	21

#	Article	IF	Citations
199	Pressâ€“pulse interactions and longâ€term community dynamics in a Chihuahuan Desert grassland. Journal of Vegetation Science, 2020, 31, 722-732.	1.1	21
200	The measurement of stability in grasslands. Trends in Ecology and Evolution, 1995, 10, 95-96.	4.2	20
201	SPECIES RESPONSES TO NITROGEN FERTILIZATION IN HERBACEOUS PLANT COMMUNITIES, AND ASSOCIATED SPECIES TRAITSEcological ArchivesE089-070. Ecology, 2008, 89, 1175-1175.	1.5	20
202	Effects of monsoon precipitation variability on the physiological response of two dominant C4 grasses across a semiarid ecotone. Oecologia, 2014, 176, 751-762.	0.9	20
203	Shared Drivers but Divergent Ecological Responses: Insights from Long-Term Experiments in Mesic Savanna Grasslands. BioScience, 2016, 66, 666-682.	2.2	20
204	Woody Vegetation and Microtopography in the Bog Meadow Association of Cedar Bog, a West-central Ohio Fen. American Midland Naturalist, 1982, 108, 245.	0.2	19
205	Water and nitrogen shape winter annual plant diversity and community composition in nearâ€urban Sonoran Desert preserves. Ecological Monographs, 2021, 91, 1-19.	2.4	19
206	Belowground responses to altered precipitation regimes in two semi-arid grasslands. Soil Biology and Biochemistry, 2022, 171, 108725.	4.2	18
207	Trophic Interactions and Plant Species Richness along a Productivity Gradient. Oikos, 1996, 76, 603.	1.2	17
208	Stream insect occupancy-frequency patterns and metapopulation structure. Oecologia, 2007, 151, 313-321.	0.9	17
209	Experimental drought reâ€ordered assemblages of rootâ€associated fungi across North American grasslands. Journal of Ecology, 2021, 109, 776-792.	1.9	17
210	Comment on â€œWorldwide evidence of a unimodal relationship between productivity and plant species richnessâ€. Science, 2016, 351, 457-457.	6.0	16
211	The combined effects of an extreme heatwave and wildfire on tallgrass prairie vegetation. Journal of Vegetation Science, 2019, 30, 687-697.	1.1	15
212	Experimental drought reduces genetic diversity in the grassland foundation species Bouteloua eriopoda. Oecologia, 2019, 189, 1107-1120.	0.9	15
213	Earth Stewardship: An Initiative by the Ecological Society of America to Foster Engagement to Sustain Planet Earth. Ecology and Ethics, 2015, , 173-194.	0.2	14
214	Extreme drought has limited effects on soil seed bank composition in desert grasslands. Journal of Vegetation Science, 2021, 32, e13089.	1.1	14
215	Differential responses of grassland community nonstructural carbohydrate to experimental drought along a natural aridity gradient. Science of the Total Environment, 2022, 822, 153589.	3.9	14
216	ORDINATION AND CLASSIFICATION OF WESTERN OAK FORESTS IN OKLAHOMA. American Journal of Botany, 1984, 71, 1221-1227.	0.8	13

#	Article	IF	Citations
217	The competitive advantage of a constitutive CAM species over a C₄ grass species under drought and CO₂ enrichment. Ecosphere, 2019, 10, e02721.	1.0	13
218	Foundations and Frontiers of Ecosystem Science: Legacy of a Classic Paper (Odum 1969). Ecosystems, 2019, 22, 1160-1172.	1.6	13
219	Contrasting responses of plant above and belowground biomass carbon pools to extreme drought in six grasslands spanning an aridity gradient. Plant and Soil, 2022, 473, 167-180.	1.8	13
220	How Can Science Be General, Yet Specific? The Conundrum of Rangeland Science in the 21st Century. Rangeland Ecology and Management, 2012, 65, 613-622.	1.1	12
221	Climate Change Impacts on Future Carbon Stores and Management of Warm Deserts of the United States. Rangelands, 2014, 36, 16-24.	0.9	12
222	Foraging strategies of individual silky pocket mice over a boomâ€“bust cycle in a stochastic dryland ecosystem. Oecologia, 2019, 190, 569-578.	0.9	12
223	Nutrient additions have direct and indirect effects on biocrust biomass in a long-term Chihuahuan Desert grassland experiment. Journal of Arid Environments, 2021, 184, 104317.	1.2	12
224	Why Coordinated Distributed Experiments Should Go Global. BioScience, 2021, 71, 918-927.	2.2	12
225	Heterogeneity in shortgrass prairie vegetation: the role of playa lakes. Journal of Vegetation Science, 1997, 8, 277-286.	1.1	11
226	Long-Term Ecological Research and Network-Level Science. Eos, 2014, 95, 293-294.	0.1	11
227	Top-down vs. bottom-up regulation of herbaceous primary production and composition in an arid, urbanizing ecosystem. Journal of Arid Environments, 2015, 116, 103-114.	1.2	11
228	When the economic engine stalls â˜’ A multi-scale comparison of vegetation dynamics in pre- and post-recession Phoenix, Arizona, USA. Landscape and Urban Planning, 2016, 153, 140-148.	3.4	11
229	Canopy-Ground Layer Relationships of Oak-pine Forests in the New Jersey Pine Barrens. American Midland Naturalist, 1987, 117, 280.	0.2	10
230	Mechanisms and processes in vegetation dynamics: Introduction. Journal of Vegetation Science, 1993, 4, 146-148.	1.1	10
231	Corrigendum to "Can current moisture responses predict soil CO₂ efflux under altered precipitation regimes? A synthesis of manipulation experiments". Biogeosciences, 2014, 11, 3307-3308.	1.3	10
232	The effect of nitrogen availability and water conditions on competition between a facultative <scp>CAM</scp> plant and an invasive grass. Ecology and Evolution, 2017, 7, 7739-7749.	0.8	10
233	Integrating Speciesâ€Specific Information in Models Improves Regional Projections Under Climate Change. Geophysical Research Letters, 2019, 46, 6554-6562.	1.5	10
234	Minimal mortality and rapid recovery of the dominant shrub Larrea tridentata following an extreme cold event in the northern Chihuahuan Desert. Journal of Vegetation Science, 2019, 30, 963-972.	1.1	10

#	Article	IF	Citations
235	MACIS: Minimisation of and Adaptation to Climate Change Impacts on Biodiversity. Gaia, 2008, 17, 393-395.	0.3	10
236	Soil N enrichment mediates carbon allocation through respiration in a dominant grass during drought. Functional Ecology, 2022, 36, 1204-1215.	1.7	10
237	Rainfall pulse regime drives biomass and community composition in biological soil crusts. Ecology, 2022, 103, e3744.	1.5	10
238	Temporal Effects of Monsoon Rainfall Pulses on Plant Available Nitrogen in a Chihuahuan Desert Grassland. Journal of Geophysical Research G: Biogeosciences, 2022, 127, .	1.3	10
239	NEEDED: A UNIFIED INFRASTRUCTURE TO SUPPORT LONG-TERM SCIENTIFIC RESEARCH ON PUBLIC LANDS. , 2004, 14, 18-21.		9
240	Chihuahuan Desert Grassland Responds Similarly to Fall, Spring, and Summer Fires During Prolonged Drought. Rangeland Ecology and Management, 2014, 67, 621-628.	1.1	9
241	Boomâ€"bust economics and vegetation dynamics in a desert city: How strong is the link?. Ecosphere, 2017, 8, e01826.	1.0	9
242	Ordination and Classification of Western Oak Forests in Oklahoma. American Journal of Botany, 1984, 71, 1221.	0.8	8
243	Rainfall pulses increased short-term biocrust chlorophyll but not fungal abundance or N availability in a long-term dryland rainfall manipulation experiment. Soil Biology and Biochemistry, 2020, 142, 107693.	4.2	8
244	Temporal variability in production is not consistently affected by global change drivers across herbaceous-dominated ecosystems. Oecologia, 2020, 194, 735-744.	0.9	8
245	Potential Tree Species Dynamics in the Arbor Vitae Association of Cedar Bog, a West-Central Ohio Fen. Bulletin of the Torrey Botanical Club, 1979, 106, 290.	0.6	7
246	IV.5 Boundary Dynamics in Landscapes. , 2009, , 458-463.		7
247	Biodiversity Under Global Change. Science, 2009, 326, 1353-1354.	6.0	7
248	Sensitivity of soil organic matter to climate and fire in a desert grassland. Biogeochemistry, 2021, 156, 59-74.	1.7	7
249	Nonlinear decoupling of autotrophic and heterotrophic soil respiration in response to drought duration and N addition in a meadow steppe. Biology and Fertility of Soils, 2021, 57, 281-291.	2.3	7
250	A Revision of Diarrhena (Poaceae) in the United States. Bulletin of the Torrey Botanical Club, 1991, 118, 128.	0.6	6
251	A metaâ€analysis of primary productivity and rain use efficiency in terrestrial grassland ecosystems. Land Degradation and Development, 2021, 32, 842-850.	1.8	6
252	State changes: insights from the U.S. Long Term Ecological Research Network. Ecosphere, 2021, 12, e03433.	1.0	6

#	Article	IF	Citations
253	Effects of fire on belowground biomass in Chihuahuan desert grassland. Ecosphere, 2012, 3, 1-13.	1.0	5
254	Building the BioScience Community. BioScience, 2017, 67, 3-3.	2.2	5
255	Montane valley grasslands are highly resistant to summer wildfire. Journal of Vegetation Science, 2018, 29, 1017-1028.	1.1	5
256	Improving collaborations between empiricists and modelers to advance grassland community dynamics in ecosystem models. New Phytologist, 2020, 228, 1467-1471.	3.5	5
257	Do tradeâ€offs govern plant speciesâ€™ responses to different global change treatments?. Ecology, 2022, 103, e3626.	1.5	5
258	Richness, not evenness, varies across water availability gradients in grassy biomes on five continents. Oecologia, 2022, 199, 649-659.	0.9	5
259	Soil fungal composition changes with shrub encroachment in the northern Chihuahuan Desert. Fungal Ecology, 2021, 53, 101096.	0.7	4
260	Landscape Gradients and Habitat Structure in Native Grasslands of the Central Great Plains. Ecological Studies, 1997, , 3-19.	0.4	4
261	Long-Term Research and the Dynamics of Bird Populations and Communities. Auk, 2001, 118, 583-588.	0.7	4
262	NEON Should Be Run by Ecologists for Ecologists. BioScience, 2019, 69, 319-319.	2.2	3
263	Patterns and trends of organic matter processing and transport: Insights from the US long-term ecological research network. Climate Change Ecology, 2021, 2, 100025.	0.9	3
264	EFFECTS OF ORGANISMAL AND DISTANCE SCALING ON ANALYSIS OF SPECIES DISTRIBUTION AND ABUNDANCE. , 1997, 7, 543.		3
265	Climate mediates longâ€term impacts of rodent exclusion on desert plant communities. Ecological Monographs, 2022, 92, .	2.4	3
266	Reply from S.L. Collins. Trends in Ecology and Evolution, 1995, 10, 288.	4.2	2
267	Landscape Diversity. , 2013, , 476-487.		2
268	Opening access to ESA journals. Frontiers in Ecology and the Environment, 2013, 11, 3-3.	1.9	2
269	Vegetation science in the age of big data. Journal of Vegetation Science, 2016, 27, 865-867.	1.1	2
270	Science Communication. BioScience, 2017, 67, 487-487.	2.2	2

#	Article	IF	Citations
271	The Coming Era of Open Data. BioScience, 2017, 67, 191-192.	2.2	2
272	How encroaching shrubs and nutrients affect N2-fixation in the Chihuahuan desert. Plant and Soil, 2021, 466, 545-556.	1.8	2
273	Facilitation Rules:Positive Interactions and Interdependence in Plant Communities. Ragan M. Callaway . Springer, 2007. 415 pp., illus. $249.00 (ISBN 9781402062230 cloth).. BioScience, 2009, 59, 443-444.	2.2	1
274	BioScience Signs TOP Guidelines. BioScience, 2017, 67, 871-871.	2.2	1
275	Reimagining NEON Operations: We Can Do Better. BioScience, 2019, , .	2.2	1
276	Changing Disturbance Regimes: The New Normal?. BioScience, 2020, 70, 839-839.	2.2	1
277	Looking deeper into the soil: biophysical controls and seasonal lags of soil CO₂production and efflux across multiple vegetation types. , 2010, 20, 100319061507001.		1
278	New opportunities in ecological sensing using wireless sensor networks. , 2006, 4, 402.		1
279	FEEDBACK LOOPS IN ECOLOGICAL HIERARCHIES FOLLOWING URINE DEPOSITION IN TALLGRASS PRAIRIE. , 2001, 82, 1319.		1
280	Ecological Science and Sustainability for the 21st Century. Frontiers in Ecology and the Environment, 2005, 3, 4.	1.9	1
281	Synthesis in Ecology. BioScience, 2020, 70, 1041-1041.	2.2	1
282	Searching for Diversity, Equity, and Inclusion. BioScience, 2022, 72, 319-319.	2.2	1
283	Managing for Change. BioScience, 2022, 72, 3-3.	2.2	1
284	Enhancing the Future ofBioScience. BioScience, 2016, 66, 435-435.	2.2	0
285	Making Our Planet Great Again. BioScience, 2018, 68, 51-51.	2.2	0
286	Henry Lewis Gholz, 1951â€“2017. Bulletin of the Ecological Society of America, 2018, 99, 48-51.	0.2	0
287	The Limiting Factor: Does the New NSF Policy Jeopardize Research?. BioScience, 2018, 68, 931-931.	2.2	0
288	Connectivity and Scale in Dryland Ecosystems. BioScience, 2018, 68, 649-652.	2.2	0

#	Article	IF	Citations
289	Getting Started With Sensor Networks in Experimental Ecology: Pitfalls and Pratfalls. Bulletin of the Ecological Society of America, 2018, 99, 277-283.	0.2	0
290	Editorial Boards Must Be Internationally Representative. BioScience, 2018, 68, 235-235.	2.2	0
291	Connecting Plantâ€“Soil Feedbacks to Longâ€Term Stability in a Desert Grassland. Bulletin of the Ecological Society of America, 2019, 100, e01582.	0.2	0
292	Arts and Science in BioScience. BioScience, 2020, 70, 727-727.	2.2	0
293	Network Level Science, Social-Ecological Research and the LTER Planning Process. Archimedes, 2021, , 403-421.	0.3	0
294	Will Anyone Listen This Time?. BioScience, 2021, 71, 891-891.	2.2	0
295	Diversity Survey Results. BioScience, 2021, 71, 1115-1115.	2.2	0
296	Fire Frequency and Community Heterogeneity in Tallgrass Prairie Vegetation. , 1992, , 99-105.		0
297	Quantitative Environmental Science. BioScience, 2021, 71, 1199-1199.	2.2	0