

# Eric J Gustafson

## List of Publications by Year in descending order

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Version: 2024-02-01

64  
papers

4,960  
citations

136885

32  
h-index

123376

61  
g-index

70  
all docs

70  
docs citations

70  
times ranked

4346  
citing authors

#	ARTICLE	IF	CITATIONS
1	Minireview: Quantifying Landscape Spatial Pattern: What Is the State of the Art?. <i>Ecosystems</i> , 1998, 1, 143-156.	1.6	1,260
2	Relationships between landcover proportion and indices of landscape spatial pattern. <i>Landscape Ecology</i> , 1992, 7, 101-110.	1.9	438
3	Design, development, and application of LANDIS-II, a spatial landscape simulation model with flexible temporal and spatial resolution. <i>Ecological Modelling</i> , 2007, 201, 409-419.	1.2	399
4	The Effect of Landscape Heterogeneity on the Probability of Patch Colonization. <i>Ecology</i> , 1996, 77, 94-107.	1.5	376
5	Spatial simulation of forest succession and timber harvesting using LANDIS. <i>Canadian Journal of Forest Research</i> , 2000, 30, 32-43.	0.8	247
6	When relationships estimated in the past cannot be used to predict the future: using mechanistic models to predict landscape ecological dynamics in a changing world. <i>Landscape Ecology</i> , 2013, 28, 1429-1437.	1.9	119
7	Predicting global change effects on forest biomass and composition in south-central Siberia. <i>Ecological Applications</i> , 2010, 20, 700-715.	1.8	110
8	Modeling biological disturbances in LANDIS: a module description and demonstration using spruce budworm. <i>Ecological Modelling</i> , 2004, 180, 153-174.	1.2	105
9	How disturbance, competition, and dispersal interact to prevent tree range boundaries from keeping pace with climate change. <i>Global Change Biology</i> , 2018, 24, e335-e351.	4.2	97
10	The past and future of modeling forest dynamics: from growth and yield curves to forest landscape models. <i>Landscape Ecology</i> , 2017, 32, 1307-1325.	1.9	96
11	Modeling Forest Mortality Caused by Drought Stress: Implications for Climate Change. <i>Ecosystems</i> , 2013, 16, 60-74.	1.6	88
12	Simulating dispersal of reintroduced species within heterogeneous landscapes. <i>Ecological Modelling</i> , 2004, 171, 339-358.	1.2	81
13	Simulating the Effects of Alternative Forest Management Strategies on Landscape Structure. <i>Journal of Environmental Management</i> , 1996, 46, 77-94.	3.8	77
14	Toward more robust projections of forest landscape dynamics under novel environmental conditions: Embedding PnET within LANDIS-II. <i>Ecological Modelling</i> , 2014, 287, 44-57.	1.2	74
15	Study of landscape change under forest harvesting and climate warming-induced fire disturbance. <i>Forest Ecology and Management</i> , 2002, 155, 257-270.	1.4	68
16	Simulating forest fuel and fire risk dynamics across landscapes—LANDIS fuel module design. <i>Ecological Modelling</i> , 2004, 180, 135-151.	1.2	67
17	Modeling the effects of forest harvesting on landscape structure and the spatial distribution of cowbird brood parasitism. <i>Landscape Ecology</i> , 1994, 9, 237-248.	1.9	65
18	How has the state-of-the-art for quantification of landscape pattern advanced in the twenty-first century?. <i>Landscape Ecology</i> , 2019, 34, 2065-2072.	1.9	63

#	ARTICLE	IF	CITATIONS
19	A hierarchical fire frequency model to simulate temporal patterns of fire regimes in LANDIS. <i>Ecological Modelling</i> , 2004, 180, 119-133.	1.2	57
20	Influence of forest management alternatives and land type on susceptibility to fire in northern Wisconsin, USA. <i>Landscape Ecology</i> , 2004, 19, 327-341.	1.9	57
21	Studying Fire Mitigation Strategies in Multi-Ownership Landscapes: Balancing the Management of Fire-Dependent Ecosystems and Fire Risk. <i>Ecosystems</i> , 2009, 12, 445-461.	1.6	53
22	Expanding the scale of forest management: allocating timber harvests in time and space. <i>Forest Ecology and Management</i> , 1996, 87, 27-39.	1.4	49
23	The Relationship between Environmental Amenities and Changing Human Settlement Patterns between 1980 and 2000 in the Midwestern USA. <i>Landscape Ecology</i> , 2005, 20, 773-789.	1.9	49
24	Spatial resilience of forested landscapes under climate change and management. <i>Landscape Ecology</i> , 2017, 32, 953-969.	1.9	47
25	More than the sum of its parts: how disturbance interactions shape forest dynamics under climate change. <i>Ecosphere</i> , 2018, 9, e02293.	1.0	46
26	Do rising temperatures always increase forest productivity? Interacting effects of temperature, precipitation, cloudiness and soil texture on tree species growth and competition. <i>Environmental Modelling and Software</i> , 2017, 97, 171-183.	1.9	45
27	Simulating the cumulative effects of multiple forest management strategies on landscape measures of forest sustainability. <i>Landscape Ecology</i> , 2007, 22, 141-156.	1.9	43
28	Integrating ecophysiology and forest landscape models to improve projections of drought effects under climate change. <i>Global Change Biology</i> , 2015, 21, 843-856.	4.2	43
29	Recovery dynamics and climate change effects to future New England forests. <i>Landscape Ecology</i> , 2017, 32, 1385-1397.	1.9	42
30	Modeling forest harvesting effects on landscape pattern in the Northwest Wisconsin Pine Barrens. <i>Forest Ecology and Management</i> , 2006, 236, 113-126.	1.4	36
31	Increasing the reliability of ecological models using modern software engineering techniques. <i>Frontiers in Ecology and the Environment</i> , 2010, 8, 253-260.	1.9	34
32	Using a GIS model to assess terrestrial salamander response to alternative forest management plans. <i>Journal of Environmental Management</i> , 2001, 63, 281-292.	3.8	33
33	EVALUATION OF SPATIAL MODELS TO PREDICT VULNERABILITY OF FOREST BIRDS TO BROOD PARASITISM BY COWBIRDS. , 2002, 12, 412-426.		30
34	Comparing modern and presettlement forest dynamics of a subboreal wilderness: Does spruce budworm enhance fire risk?. , 2012, 22, 1278-1296.		30
35	Linking linear programming and spatial simulation models to predict landscape effects of forest management alternatives. <i>Journal of Environmental Management</i> , 2006, 81, 339-350.	3.8	27
36	Effectiveness of forest management strategies to mitigate effects of global change in south-central Siberia. <i>Canadian Journal of Forest Research</i> , 2011, 41, 1405-1421.	0.8	27

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37	Simulating ungulate herbivory across forest landscapes: A browsing extension for LANDIS-II. <i>Ecological Modelling</i> , 2017, 350, 11-29.	1.2	26
38	Influence of forest planning alternatives on landscape pattern and ecosystem processes in northern Wisconsin, USA. <i>Forest Ecology and Management</i> , 2008, 254, 429-444.	1.4	25
39	Terrestrial Ecosystems and Their Change. Springer Environmental Science and Engineering, 2013, , 171-249.	0.1	22
40	Implications of mechanistic modeling of drought effects on growth and competition in forest landscape models. <i>Ecosphere</i> , 2016, 7, e01253.	1.0	22
41	Effects of parcelization and land divestiture on forest sustainability in simulated forest landscapes. <i>Forest Ecology and Management</i> , 2006, 236, 305-314.	1.4	21
42	Assessing the spatial implications of interactions among strategic forest management options using a Windows-based harvest simulator. <i>Computers and Electronics in Agriculture</i> , 2002, 33, 179-196.	3.7	20
43	Modeling the Influence of Dynamic Zoning of Forest Harvesting on Ecological Succession in a Northern Hardwoods Landscape. <i>Environmental Management</i> , 2005, 35, 410-425.	1.2	20
44	Comparing effects of fire modeling methods on simulated fire patterns and succession: a case study in the Missouri Ozarks. <i>Canadian Journal of Forest Research</i> , 2008, 38, 1290-1302.	0.8	19
45	The implications of American chestnut reintroduction on landscape dynamics and carbon storage. <i>Ecosphere</i> , 2017, 8, e01773.	1.0	19
46	Climate adaptive silviculture strategies: How do they impact growth, yield, diversity and value in forested landscapes?. <i>Forest Ecology and Management</i> , 2020, 470-471, 118208.	1.4	19
47	SEARCH: Spatially Explicit Animal Response to Composition of Habitat. <i>PLoS ONE</i> , 2013, 8, e64656.	1.1	19
48	Modeling forest landscapes in a changing climate: theory and application. <i>Landscape Ecology</i> , 2017, 32, 1299-1305.	1.9	17
49	Forecasting effects of tree species reintroduction strategies on carbon stocks in a future without historical analog. <i>Global Change Biology</i> , 2018, 24, 5500-5517.	4.2	13
50	Can Future CO2 Concentrations Mitigate the Negative Effects of High Temperature and Longer Droughts on Forest Growth?. <i>Forests</i> , 2018, 9, 664.	0.9	11
51	Beyond blight: Phytophthora root rot under climate change limits populations of reintroduced American chestnut. <i>Ecosphere</i> , 2022, 13, .	1.0	10
52	Scaling Aspen-FACE experimental results to century and landscape scales. <i>Landscape Ecology</i> , 2013, 28, 1785-1800.	1.9	8
53	Decomposition rates of American chestnut ( <i>Castanea dentata</i> ) wood and implications for coarse woody debris pools. <i>Canadian Journal of Forest Research</i> , 2014, 44, 1575-1585.	0.8	7
54	A Collaborative, Iterative Approach to Transferring Modeling Technology to Land Managers. , 2006, , 43-64.		7

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55	Applicability of Predictive Models of Drought-Induced Tree Mortality between the Midwest and Northeast United States. <i>Forest Science</i> , 2014, 60, 327-334.	0.5	6
56	Extrapolating plot-scale CO <sub>2</sub> and ozone enrichment experimental results to novel conditions and scales using mechanistic modeling. <i>Ecological Processes</i> , 2018, 7, .	1.6	6
57	Simulating Growth and Competition on Wet and Waterlogged Soils in a Forest Landscape Model. <i>Frontiers in Ecology and Evolution</i> , 2020, 8, .	1.1	6
58	How do forest landscapes respond to elevated CO <sub>2</sub> and ozone? Scaling Aspen FACE plot-scale experimental results. <i>Ecosphere</i> , 2020, 11, e03162.	1.0	6
59	Publishing landscape ecology research in the 21st century. <i>Landscape Ecology</i> , 2011, 26, 1351-1354.	1.9	5
60	Understanding Landscapes Through Spatial Modeling. <i>World Forests</i> , 2012, , 111-128.	0.1	3
61	Harvest: A Timber Harvest Allocation Model for Simulating Management Alternatives. , 1999, , 109-124.		3
62	Using Landscape Disturbance and Succession Models to Support Forest Management. , 2011, , 99-118.		3
63	Linking Temporal-Optimization and Spatial-Simulation Models for Forest Planning. <i>Managing Forest Ecosystems</i> , 2003, , 165-173.	0.4	2
64	Simulating Management Actions and Their Effects on Forest Landscape Pattern. , 2017, , 143-156.		0