Harald Bugmann

List of Publications by Year
in descending order

280 papers	16,467 citations	18482 62 h-index	22832 112 g-index
289 all docs	289 docs citations	289 times ranked	15695 citing authors

#	Article	IF	Citations
1	Ecosystem Service Supply and Vulnerability to Global Change in Europe. Science, 2005, 310, 1333-1337.	12.6	1,355
2	Alien species in a warmer world: risks and opportunities. Trends in Ecology and Evolution, 2009, 24, 686-693.	8.7	1,031
3	A multi-species synthesis of physiological mechanisms in drought-induced tree mortality. Nature Ecology and Evolution, 2017, 1, 1285-1291.	7.8	739
4	A Review of Forest Gap Models. , 2001, 51, 259-305.		592
5	Drought as an Inciting Mortality Factor in Scots Pine Stands of the Valais, Switzerland. Ecosystems, 2006, 9, 330-343.	3.4	429
6	A synthesis of radial growth patterns preceding tree mortality. Global Change Biology, 2017, 23, 1675-1690.	9.5	394
7	Tree species richness promotes productivity in temperate forests through strong complementarity between species. Ecology Letters, 2011, 14, 1211-1219.	6.4	372
8	Modelling natural disturbances in forest ecosystems: a review. Ecological Modelling, 2011, 222, 903-924.	2.5	318
9	Drought response of five conifer species under contrasting water availability suggests high vulnerability of Norway spruce and European larch. Global Change Biology, 2013, 19, 3184-3199.	9.5	268
10	A Simplified Forest Model to Study Species Composition Along Climate Gradients. Ecology, 1996, 77, 2055-2074.	3.2	252
11	Comparing and evaluating process-based ecosystem model predictions of carbon and water fluxes in major European forest biomes. Global Change Biology, 2005, 11, 2211-2233.	9.5	246
12	Disentangling Biodiversity and Climatic Determinants of Wood Production. PLoS ONE, 2013, 8, e53530.	2.5	202
13	The Importance of Spatial Scale in Habitat Models: Capercaillie in the Swiss Alps. Landscape Ecology, 2005, 20, 703-717.	4.2	166
14	The relative importance of climatic effects, wildfires and management for future forest landscape dynamics in the Swiss Alps. Global Change Biology, 2006, 12, 1435-1450.	9.5	165
15	Temporal stability in forest productivity increases with tree diversity due to asynchrony in species dynamics. Ecology Letters, 2014, 17, 1526-1535.	6.4	163
16	Crossâ€scale interactions among bark beetles, climate change, and wind disturbances: a landscape modeling approach. Ecological Monographs, 2013, 83, 383-402.	5.4	156
17	Expanding forests and changing growth forms of Siberian larch at the Polar Urals treeline during the 20th century. Global Change Biology, 2008, 14, 1581-1591.	9.5	155
18	Future ecosystem services from European mountain forests under climate change. Journal of Applied Ecology, 2017, 54, 389-401.	4.0	147

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19	Growth-dependent tree mortality models based on tree rings. Canadian Journal of Forest Research, 2003, 33, 210-221.	1.7	143
20	Are forest disturbances amplifying or canceling out climate change-induced productivity changes in European forests?. Environmental Research Letters, 2017, 12, 034027.	5.2	142
21	PREDICTING THE TIME OF TREE DEATH USING DENDROCHRONOLOGICAL DATA. , 2004, 14, 902-914.		141
22	Long-term response of forest productivity to climate change is mostly driven by change in tree species composition. Scientific Reports, 2018, 8, 5627.	3.3	133
23	A 2Â°C warmer world is not safe for ecosystem services in the <scp>E</scp>uropean <scp>A</scp>lps. Global Change Biology, 2013, 19, 1827-1840.	9.5	132
24	Reduction of stand density increases drought resistance in xeric Scots pine forests. Forest Ecology and Management, 2013, 310, 827-835.	3.2	131
25	Improving the formulation of tree growth and succession in a spatially explicit landscape model. Ecological Modelling, 2004, 180, 175-194.	2.5	125
26	Early-Warning Signals of Individual Tree Mortality Based on Annual Radial Growth. Frontiers in Plant Science, 2018, 9, 1964.	3.6	117
27	Linking palaeoenvironmental data and models to understand the past and to predict the future. Trends in Ecology and Evolution, 2006, 21, 696-704.	8.7	116
28	Radial growth responses to drought of Pinus sylvestris and Quercus pubescens in an innerâ€Alpine dry valley. Journal of Vegetation Science, 2007, 18, 777-792.	2.2	111
29	Growth response of five co-occurring conifers to drought across a wide climatic gradient in Central Europe. Agricultural and Forest Meteorology, 2014, 197, 1-12.	4.8	111
30	Global change impacts on hydrological processes in Alpine catchments. Water Resources Research, 2005, 41, .	4.2	109
31	A 350 year drought reconstruction from Alpine tree ring stable isotopes. Global Biogeochemical Cycles, 2010, 24, .	4.9	108
32	Forest dynamics and ungulate herbivory: from leaf to landscape. Forest Ecology and Management, 2003, 181, 1-12.	3.2	107
33	Adaptive management for competing forest goods and services under climate change. Ecological Applications, 2012, 22, 2065-2077.	3.8	101
34	Effects of salvage logging and sanitation felling on bark beetle (Ips typographus L.) infestations. Forest Ecology and Management, 2013, 305, 273-281.	3.2	100
35	Improving the behaviour of forest gap models along drought gradients. Forest Ecology and Management, 1998, 103, 247-263.	3.2	98
36	A model-based reconstruction of Holocene treeline dynamics in the Central Swiss Alps. Journal of Ecology, 2006, 94, 206-216.	4.0	97

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37	Growth patterns as indicators of impending tree death in silver fir. Forest Ecology and Management, 2004, 199, 183-190.	3.2	95
38	Improvement of water and light availability after thinning at a xeric site: which matters more? A dual isotope approach. New Phytologist, 2016, 210, 108-121.	7.3	95
39	Will the CO2 fertilization effect in forests be offset by reduced tree longevity?. Oecologia, 2011, 165, 533-544.	2.0	93
40	Tree mortality submodels drive simulated longâ€term forest dynamics: assessing 15 models from the stand to global scale. Ecosphere, 2019, 10, e02616.	2.2	93
41	Site factors are more important than salvage logging for tree regeneration after wind disturbance in Central European forests. Forest Ecology and Management, 2014, 331, 116-128.	3.2	92
42	Reduction in browsing intensity may not compensate climate change effects on tree species composition in the Bavarian Forest National Park. Forest Ecology and Management, 2014, 328, 179-192.	3.2	90
43	Using dynamic vegetation models to simulate plant range shifts. Ecography, 2014, 37, 1184-1197.	4.5	89
44	Linking Forest Fire Regimes and Climateâ€"A Historical Analysis in a Dry Inner Alpine Valley. Ecosystems, 2009, 12, 73-86.	3.4	86
45	Pattern and process in the largest primeval beech forest of <scp>E</scp>urope (<scp>U</scp>krainian) Tj ETQq1 1 0.784314 rgBT /Ove	2.2	85
46	Weather and human impacts on forest fires: 100 years of fire history in two climatic regions of Switzerland. Forest Ecology and Management, 2011, 261, 2188-2199.	3.2	83
47	Long-term effects of drought on tree-ring growth and carbon isotope variability in Scots pine in a dry environment. Tree Physiology, 2017, 37, 1028-1041.	3.1	83
48	Modeling the Impact of Climate and Vegetation on Fire Regimes in Mountain Landscapes. Landscape Ecology, 2006, 21, 539-554.	4.2	82
49	Beta diversity of plants, birds and butterflies is closely associated with climate and habitat structure. Global Ecology and Biogeography, 2017, 26, 898-906.	5.8	82
50	Did soil development limit spruce (Picea abies) expansion in the Central Alps during the Holocene? Testing a palaeobotanical hypothesis with a dynamic landscape model. Journal of Biogeography, 2011, 38, 933-949.	3.0	81
51	Using a retrospective dynamic competition index to reconstruct forest succession. Forest Ecology and Management, 2008, 254, 96-106.	3.2	80
52	Spatial interactions between storm damage and subsequent infestations by the European spruce bark beetle. Forest Ecology and Management, 2014, 318, 167-174.	3.2	80
53	Effect of microsites, logs and ungulate browsing on Picea abies regeneration in a mountain forest. Forest Ecology and Management, 2005, 205, 251-265.	3.2	76
54	Drought and frost contribute to abrupt growth decreases before tree mortality in nine temperate tree species. Forest Ecology and Management, 2016, 382, 51-63.	3.2	76

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55	Forty years of natural dynamics in Swiss beech forests: structure, composition, and the influence of former management. Ecological Applications, 2009, 19, 1920-1934.	3.8	74
56	Climate-induced shifts in leaf unfolding and frost risk of European trees and shrubs. Scientific Reports, 2018, 8, 9865.	3.3	74
57	Drought response and changing mean sensitivity of European beech close to the dry distribution limit. Trees - Structure and Function, 2013, 27, 171-181.	1.9	73
58	Vulnerability of uneven-aged forests to storm damage. Forestry, 2014, 87, 525-534.	2.3	72
59	Shortâ€•and longâ€term efficacy of forest thinning to mitigate drought impacts in mountain forests in the European Alps. Ecological Applications, 2015, 25, 1083-1098.	3.8	72
60	A framework for modeling adaptive forest management and decision making under climate change. Ecology and Society, 2017, 22, .	2.3	72
61	Functional types of trees in temperate and boreal forests: classification and testing. Journal of Vegetation Science, 1996, 7, 359-370.	2.2	71
62	Response of broadleaved evergreen Mediterranean forest vegetation to fire disturbance during the Holocene: insights from the periâ€Adriatic region. Journal of Biogeography, 2009, 36, 314-326.	3.0	71
63	Environmental predictors of species richness in forest landscapes: abiotic factors versus vegetation structure. Journal of Biogeography, 2016, 43, 1080-1090.	3.0	70
64	Sensitivity of a forest ecosystem model to climate parametrization schemes. Environmental Pollution, 1995, 87, 267-282.	7.5	68
65	Title is missing!. Climatic Change, 2001, 51, 307-347.	3.6	67
66	Herbaceous Understorey: An Overlooked Player in Forest Landscape Dynamics?. Ecosystems, 2016, 19, 1240-1254.	3.4	66
67	Impacts of changing climate and land use on vegetation dynamics in a Mediterranean ecosystem: insights from paleoecology and dynamic modeling. Landscape Ecology, 2013, 28, 819-833.	4.2	65
68	Growth resistance and resilience of mixed silver fir and Norway spruce forests in central Europe: Contrasting responses to mild and severe droughts. Global Change Biology, 2021, 27, 4403-4419.	9.5	64
69	Environmental determinants of lightning- v. human-induced forest fire ignitions differ in a temperate mountain region of Switzerland. International Journal of Wildland Fire, 2010, 19, 541.	2.4	63
70	Long-term effects of ungulate browsing on forest composition and structure. Forest Ecology and Management, 2009, 258, S44-S55.	3.2	61
71	A predictive framework to assess spatioâ€temporal variability of infestations by the European spruce bark beetle. Ecography, 2013, 36, 1208-1217.	4.5	61
72	Human impacts on fire occurrence: a case study of hundred years of forest fires in a dry alpine valley in Switzerland. Regional Environmental Change, 2012, 12, 935-949.	2.9	60

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73	Growth-Mortality Relationships in PiÃ±on Pine (Pinus edulis) during Severe Droughts of the Past Century: Shifting Processes in Space and Time. PLoS ONE, 2014, 9, e92770.	2.5	60
74	Sensitivity of forests in the European Alps to future climatic change. Climate Research, 1997, 8, 35-44.	1.1	59
75	Regional impacts of climatic change on forests in the state of Brandenburg, Germany. Agricultural and Forest Meteorology, 1997, 84, 123-135.	4.8	57
76	Gap pattern of the largest primeval beech forest of Europe revealed by remote sensing. Ecosphere, 2015, 6, 1-15.	2.2	57
77	Pathways and dynamics of 15NO3â^' and 15NH4+ applied in a mountain Picea abies forest and in a nearby meadow in central Switzerland. Soil Biology and Biochemistry, 2006, 38, 1645-1657.	8.8	56
78	Disentangling the effects of climate, topography, soil and vegetation on stand-scale species richness in temperate forests. Forest Ecology and Management, 2015, 349, 36-44.	3.2	56
79	How to kill a tree: empirical mortality models for 18 species and their performance in a dynamic forest model. Ecological Applications, 2018, 28, 522-540.	3.8	56
80	Assessing the response of forest productivity to climate extremes in Switzerland using modelâ€“data fusion. Global Change Biology, 2020, 26, 2463-2476.	9.5	54
81	Impacts of interannual climate variability on past and future forest composition. Regional Environmental Change, 2000, 1, 112-125.	2.9	53
82	Fifty years of natural succession in Swiss forest reserves: changes in stand structure and mortality rates of oak and beech. Journal of Vegetation Science, 2012, 23, 892-905.	2.2	53
83	Summer temperature dependency of larch budmoth outbreaks revealed by Alpine tree-ring isotope chronologies. Oecologia, 2009, 160, 353-365.	2.0	52
84	Competition for water in a xeric forest ecosystem â€“ Effects of understory removal on soil micro-climate, growth and physiology of dominant Scots pine trees. Forest Ecology and Management, 2018, 409, 241-249.	3.2	52
85	The influence of changes in climate and land-use on regeneration dynamics of Norway spruce at the treeline in the Swiss Alps. Silva Fennica, 2007, 41, .	1.3	50
86	Wind disturbance in mountain forests: Simulating the impact of management strategies, seed supply, and ungulate browsing on forest succession. Forest Ecology and Management, 2007, 242, 142-154.	3.2	48
87	Forward modeling of tree-ring width improves simulation of forest growth responses to drought. Agricultural and Forest Meteorology, 2016, 221, 13-33.	4.8	48
88	Scaling Issues in Forest Succession Modelling. Climatic Change, 2000, 44, 265-289.	3.6	47
89	Comparing models for tree distributions: concept, structures, and behavior. Ecological Modelling, 2000, 134, 89-102.	2.5	46
90	Simulating structural forest patterns with a forest gap model: a model evaluation. Ecological Modelling, 2005, 181, 161-172.	2.5	46

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91	Ungulate herbivory modifies the effects of climate change on mountain forests. Climatic Change, 2011, 109, 647-669.	3.6	46
92	Comparing the Performance of Forest gap Models in North America. Climatic Change, 2001, 51, 349-388.	3.6	45
93	On the generality of habitat distribution models: a case study of capercaillie in three Swiss regions. Ecography, 2006, 29, 319-328.	4.5	45
94	Water and carbon fluxes of European ecosystems: an evaluation of the ecohydrological model RHESSys. Hydrological Processes, 2007, 21, 3328-3339.	2.6	45
95	Growthâ€"mortality relationships as indicators of lifeâ€history strategies: a comparison of nine tree species in unmanaged European forests. Oikos, 2008, 117, 815-828.	2.7	45
96	A sinkâ€limited growth model improves biomass estimation along boreal and alpine tree lines. Global Ecology and Biogeography, 2013, 22, 924-932.	5.8	45
97	Quantifying the effects of drought on abrupt growth decreases of major tree species in Switzerland. Ecology and Evolution, 2016, 6, 3555-3570.	1.9	45
98	Global vegetation models: incorporating transient changes to structure and composition. Journal of Vegetation Science, 1996, 7, 321-328.	2.2	44
99	Effect of forest management on future carbon pools and fluxes: A model comparison. Forest Ecology and Management, 2006, 237, 65-82.	3.2	44
100	Understanding the low-temperature limitations to forest growth through calibration of a forest dynamics model with tree-ring data. Forest Ecology and Management, 2007, 246, 251-263.	3.2	44
101	From monocultures to mixed-species forests: is tree diversity key for providing ecosystem services at the landscape scale?. Landscape Ecology, 2017, 32, 1499-1516.	4.2	44
102	Model convergence and state variable update in forest gap models. Ecological Modelling, 1996, 89, 197-208.	2.5	43
103	Models for supporting forest management in a changing environment. Forest Systems, 2011, 3, 8.	0.3	43
104	Sustainable Land Use in Mountain Regions Under Global Change: Synthesis Across Scales and Disciplines. Ecology and Society, 2013, 18, .	2.3	42
105	Predicting tree death for Fagus sylvatica and Abies alba using permanent plot data. Journal of Vegetation Science, 2007, 18, 525-534.	2.2	41
106	Enhancing gap model accuracy by modeling dynamic height growth and dynamic maximum tree height. Ecological Modelling, 2012, 232, 133-143.	2.5	41
107	The agony of choice: different empirical mortality models lead to sharply different future forest dynamics. Ecological Applications, 2015, 25, 1303-1318.	3.8	41
108	Tree mortality in dynamic vegetation models â€" A key feature for accurately simulating forest properties. Ecological Modelling, 2012, 243, 101-111.	2.5	40

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109	Assessing the performance of theoretical and empirical tree mortality models using tree-ring series of Norway spruce. Ecological Modelling, 2004, 174, 225-239.	2.5	39
110	Flow of Deposited Inorganic N in Two Gleysol-dominated Mountain Catchments Traced with 15NO3â ˆ’ and 15NH4+. Biogeochemistry, 2005, 76, 453-475.	3.5	39
111	Forest regeneration after disturbance: A modelling study for the Swiss Alps. Forest Ecology and Management, 2006, 222, 123-136.	3.2	38
112	Impacts of salvage-logging on the status of deadwood after windthrow in Swiss forests. European Journal of Forest Research, 2013, 132, 231-240.	2.5	38
113	Evaluation of the growth function of an empirical forest scenario model. Forest Ecology and Management, 2005, 204, 53-68.	3.2	37
114	Getting a virtual forester fit for the challenge of climatic change. Journal of Applied Ecology, 2011, 48, 1174-1186.	4.0	37
115	Tackling unresolved questions in forest ecology: The past and future role of simulation models. Ecology and Evolution, 2021, 11, 3746-3770.	1.9	37
116	Towards a common methodology for developing logistic tree mortality models based on ringâ€width data. Ecological Applications, 2016, 26, 1827-1841.	3.8	36
117	Tree growth responses to changing temperatures across space and time: a fine-scale analysis at the treeline in the Swiss Alps. Trees - Structure and Function, 2018, 32, 645-660.	1.9	36
118	Gaining local accuracy while not losing generalityÂâ€" extending the range of gap model applications. Canadian Journal of Forest Research, 2009, 39, 1092-1107.	1.7	34
119	Accurate modeling of harvesting is key for projecting future forest dynamics: a case study in the Slovenian mountains. Regional Environmental Change, 2017, 17, 49-64.	2.9	34
120	Global sensitivity analysis of a dynamic vegetation model: Model sensitivity depends on successional time, climate and competitive interactions. Ecological Modelling, 2018, 368, 377-390.	2.5	34
121	Pervasive effects of drought on tree growth across a wide climatic gradient in the temperate forests of the Caucasus. Global Ecology and Biogeography, 2018, 27, 1314-1325.	5.8	34
122	How robust are future projections of forest landscape dynamics? Insights from a systematic comparison of four forest landscape models. Environmental Modelling and Software, 2020, 134, 104844.	4.5	34
123	Title is missing!. Climatic Change, 2001, 51, 389-413.	3.6	33
124	Incidence and distribution of Heterobasidion and Armillaria and their influence on canopy gap formation in unmanaged mountain pine forests in the Swiss Alps. European Journal of Plant Pathology, 2006, 116, 85-93.	1.7	33
125	Quantification of plant dispersal ability within and beyond a calcareous grassland. Journal of Vegetation Science, 2013, 24, 1010-1019.	2.2	33
126	Using a forest patch model to predict the dynamics of stand structure in Swiss mountain forests. Forest Ecology and Management, 2005, 205, 149-167.	3.2	32

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127	Using a dynamic forest model to predict tree species distributions. Global Ecology and Biogeography, 2016, 25, 347-358.	5.8	32
128	Title is missing!. Climatic Change, 2001, 51, 541-557.	3.6	31
129	Do small-grain processes matter for landscape scale questions? Sensitivity of a forest landscape model to the formulation of tree growth rate. Landscape Ecology, 2012, 27, 697-711.	4.2	31
130	Updating beliefs and combining evidence in adaptive forest management under climate change: A case study of Norway spruce (Picea abies L. Karst) in the Black Forest, Germany. Journal of Environmental Management, 2013, 122, 56-64.	7.8	31
131	Modeling the interacting effects of browsing and shading on mountain forest tree regeneration (Picea abies). Ecological Modelling, 2005, 185, 213-230.	2.5	30
132	Impact of root-rot pathogens on forest succession in unmanaged Pinus mugo stands in the Central Alps. Canadian Journal of Forest Research, 2006, 36, 2666-2674.	1.7	30
133	Swiss tree rings reveal warm and wet summers during medieval times. Geophysical Research Letters, 2014, 41, 1732-1737.	4.0	30
134	How physics and biology matter in forest gap models. Climatic Change, 1995, 29, 251-257.	3.6	29
135	Decay of Picea abies snag stands on steep mountain slopes. Forestry Chronicle, 2003, 79, 247-252.	0.6	29
136	Growth of Norway spruce (Picea abies L.) saplings in subalpine forests in Switzerland: Does spring climate matter?. Forest Ecology and Management, 2006, 228, 19-32.	3.2	28
137	Analyzing the carbon dynamics of central European forests: comparison of Biome-BGC simulations with measurements. Regional Environmental Change, 2006, 6, 167-180.	2.9	28
138	Potentials and limitations of using large-scale forest inventory data for evaluating forest succession models. Ecological Modelling, 2009, 220, 133-147.	2.5	28
139	Growth enhancement of Picea abies trees under long-term, low-dose N addition is due to morphological more than to physiological changes. Tree Physiology, 2012, 32, 1471-1481.	3.1	28
140	Browsing regime and growth response of naturally regenerated Abies alba saplings along light gradients. Forest Ecology and Management, 2013, 310, 393-404.	3.2	28
141	How to predict tree death from inventory data â€" lessons from a systematic assessment of European tree mortality models. Canadian Journal of Forest Research, 2017, 47, 890-900.	1.7	28
142	Forest and Landscape Structure as Predictors of Capercaillie Occurrence. Journal of Wildlife Management, 2007, 71, 356-365.	1.8	27
143	Light availability and ungulate browsing determine growth, height and mortality of Abies alba saplings. Forest Ecology and Management, 2014, 318, 359-369.	3.2	27
144	The prospects of silver fir (Abies alba Mill.) and Norway spruce (Picea abies (L.) Karst) in mixed mountain forests under various management strategies, climate change and high browsing pressure. European Journal of Forest Research, 2017, 136, 1071-1090.	2.5	27

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145	Overstoreyâ€"Understorey Interactions Intensify After Drought-Induced Forest Die-Off: Long-Term Effects for Forest Structure and Composition. Ecosystems, 2018, 21, 723-739.	3.4	27
146	A comparative analysis of forest dynamics in the Swiss Alps and the Colorado Front Range. Forest Ecology and Management, 2001, 145, 43-55.	3.2	25
147	Evaluation of the forest growth model SILVA along an elevational gradient in Switzerland. European Journal of Forest Research, 2006, 125, 43-55.	2.5	25
148	Klimawandel als waldbauliche Herausforderung | Climate change as a challenge for silviculture. Schweizerische Zeitschrift Fur Forstwesen, 2008, 159, 362-373.	0.1	25
149	Growth response of Norway spruce saplings in two forest gaps in the Swiss Alps to artificial browsing, infection with black snow mold, and competition by ground vegetation. Canadian Journal of Forest Research, 2006, 36, 2782-2793.	1.7	24
150	Quantifying disturbance effects on vegetation carbon pools in mountain forests based on historical data. Regional Environmental Change, 2009, 9, 121-130.	2.9	24
151	Improving the establishment submodel of a forest patch model to assess the long-term protective effect of mountain forests. European Journal of Forest Research, 2006, 126, 131-145.	2.5	23
152	Sensitivity of stand dynamics to grazing in mixed Pinus sylvestris and Quercus pubescens forests: A modelling study. Ecological Modelling, 2008, 210, 301-311.	2.5	23
153	Impacts of business-as-usual management on ecosystem services in European mountain ranges under climate change. Regional Environmental Change, 2017, 17, 3-16.	2.9	23
154	Amongâ€tree variability and feedback effects result in different growth responses to climate change at the upper treeline in the Swiss Alps. Ecology and Evolution, 2017, 7, 7937-7953.	1.9	23
155	Climate changeâ€driven extinctions of tree species affect forest functioning more than random extinctions. Diversity and Distributions, 2018, 24, 906-918.	4.1	23
156	COMPARING THE BEHAVIOUR OF MOUNTAINOUS FOREST SUCCESSION MODELS IN A CHANGING CLIMATE. , 0, , 204-219.		23
157	Sensitivity of ecosystem goods and services projections of a forest landscape model to initialization data. Landscape Ecology, 2013, 28, 1337-1352.	4.2	22
158	Climate change impacts across a large forest enterprise in the Northern Pre-Alps: dynamic forest modelling as a tool for decision support. European Journal of Forest Research, 2020, 139, 483-498.	2.5	22
159	Phenological shifts induced by climate change amplify drought for broad-leaved trees at low elevations in Switzerland. Agricultural and Forest Meteorology, 2021, 307, 108485.	4.8	22
160	The relative importance of land use and climatic change in Alpine catchments. Climatic Change, 2012, 111, 279-300.	3.6	21
161	Herbaceous competition and browsing may induce arrested succession in central European forests. Journal of Ecology, 2018, 106, 1120-1132.	4.0	21
162	Determining sectoral and regional sensitivity to climate and socio-economic change in Europe using impact response surfaces. Regional Environmental Change, 2019, 19, 679-693.	2.9	21

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163	Simulating forest dynamics in a complex topography using gridded climatic data. Climatic Change, 1996, 34, 201.	3.6	20
164	Detecting successional changes in long-term empirical data from subalpine conifer forests. Plant Ecology, 2004, 172, 95-105.	1.6	20
165	Adapting a growth equation to model tree regeneration in mountain forests. European Journal of Forest Research, 2006, 126, 49-57.	2.5	20
166	Ungulate browsing in winter reduces the growth of Fraxinus and Acer saplings in subsequent unbrowsed years. Plant Ecology, 2008, 198, 121-134.	1.6	20
167	Key factors affecting the future provision of tree-based forest ecosystem goods and services. Climatic Change, 2013, 118, 579-593.	3.6	20
168	Models for adaptive forest management. Regional Environmental Change, 2015, 15, 1483-1487.	2.9	20
169	Early emergence increases survival of tree seedlings in Central European temperate forests despite severe late frost. Ecology and Evolution, 2019, 9, 8238-8252.	1.9	20
170	Temperature response functions introduce high uncertainty in modelled carbon stocks in cold temperature regimes. Biogeosciences, 2010, 7, 3669-3684.	3.3	19
171	Does increment coring enhance tree decay? New insights from tomography assessments. Canadian Journal of Forest Research, 2013, 43, 711-718.	1.7	19
172	Browsing regime and growth response of Abies alba saplings planted along light gradients. European Journal of Forest Research, 2015, 134, 75-87.	2.5	19
173	Beyond forest succession: A gap model to study ecosystem functioning and tree community composition under climate change. Functional Ecology, 2021, 35, 955-975.	3.6	19
174	Standâ€scale climate change impacts on forests over large areas: transient responses and projection uncertainties. Ecological Applications, 2021, 31, e02313.	3.8	19
175	An efficient method for estimating the steady-state species composition of forest gap models. Canadian Journal of Forest Research, 1997, 27, 551-556.	1.7	18
176	Optimisation of tree mortality models based on growth patterns. Ecological Modelling, 2006, 197, 196-206.	2.5	18
177	Sensitivity of carbon cycling in the European Alps to changes of climate and land cover. Climatic Change, 2007, 85, 195-212.	3.6	18
178	Debris-flow activity along a torrent in the Swiss Alps: Minimum frequency of events and implications for forest dynamics. Dendrochronologia, 2010, 28, 215-223.	2.2	18
179	Timing, light availability and vigour determine the response of Abies alba saplings to leader shoot browsing. European Journal of Forest Research, 2013, 132, 47-60.	2.5	18
180	Estimating the ageâ€“diameter relationship of oak species in Switzerland using nonlinear mixed-effects models. European Journal of Forest Research, 2013, 132, 751-764.	2.5	18

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181	Age-class disequilibrium as an opportunity for adaptive forest management in the Carpathian Mountains, Romania. Regional Environmental Change, 2015, 15, 1557-1568.	2.9	18
182	Capturing ecological processes in dynamic forest models: why there is no silver bullet to cope with complexity. Ecosphere, 2020, 11, e03109.	2.2	18
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