Simon M LandhÃ¤usser

List of Publications by Year
in descending order

84 papers	4,830 citations	126907 33 h-index	98798 67 g-index
84 all docs	84 docs citations	84 times ranked	4822 citing authors

#	Article	IF	Citations
1	A multi-species synthesis of physiological mechanisms in drought-induced tree mortality. Nature Ecology and Evolution, 2017, 1, 1285-1291.	7.8	739
2	A method for routine measurements of total sugar and starch content in woody plant tissues. Tree Physiology, 2004, 24, 1129-1136.	3.1	472
3	Forest restoration following surface mining disturbance: challenges and solutions. New Forests, 2015, 46, 703-732.	1.7	265
4	An analysis of sucker regeneration of trembling aspen. Canadian Journal of Forest Research, 2003, 33, 1169-1179.	1.7	207
5	Standardized protocols and procedures can precisely and accurately quantify non-structural carbohydrates. Tree Physiology, 2018, 38, 1764-1778.	3.1	171
6	Predicting landscape patterns of aspen dieback: mechanisms and knowledge gaps. Canadian Journal of Forest Research, 2004, 34, 1379-1390.	1.7	170
7	Non-structural carbohydrates in woody plants compared among laboratories. Tree Physiology, 2015, 35, tpv073.	3.1	163
8	A synthesis of tree functional traits related to droughtâ€induced mortality in forests across climatic zones. Journal of Applied Ecology, 2017, 54, 1669-1686.	4.0	148
9	Seasonal changes in carbohydrate reserves in mature northern Populus tremuloides clones. Trees - Structure and Function, 2003, 17, 471-476.	1.9	136
10	Restoring forests: What constitutes success in the twenty-first century?. New Forests, 2015, 46, 601-614.	1.7	135
11	Growth of<i> Populus tremuloides</i> in association with <i>Calamagrostis canadensis</i>. Canadian Journal of Forest Research, 1998, 28, 396-401.	1.7	121
12	Identifying differences in carbohydrate dynamics of seedlings and mature trees to improve carbon allocation in models for trees and forests. Environmental and Experimental Botany, 2018, 152, 7-18.	4.2	115
13	Leaf area renewal, root retention and carbohydrate reserves in a clonal tree species following above-ground disturbance. Journal of Ecology, 2002, 90, 658-665.	4.0	106
14	Disturbance facilitates rapid range expansion of aspen into higher elevations of the Rocky Mountains under a warming climate. Journal of Biogeography, 2010, 37, 68-76.	3.0	104
15	Defoliation increases risk of carbon starvation in root systems of mature aspen. Trees - Structure and Function, 2012, 26, 653-661.	1.9	104
16	Effects of leaf litter on the growth of boreal feather mosses: Implication for forest floor development. Journal of Vegetation Science, 2008, 19, 253-260.	2.2	100
17	Coarse and fine root respiration in aspen (Populus tremuloides). Tree Physiology, 2002, 22, 725-732.	3.1	88
18	Variation in carbon availability, defense chemistry and susceptibility to fungal invasion along the stems of mature trees. New Phytologist, 2013, 197, 586-594.	7.3	65

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19	A comparison of growth and physiology in <i>Picea glauca</i> and <i>Populus tremuloides</i> at different soil temperatures. Canadian Journal of Forest Research, 2001, 31, 1922-1929.	1.7	64
20	Ecosystem dynamics and management after forest dieâ€off: a global synthesis with conceptual stateâ€andâ€transition models. Ecosphere, 2017, 8, e02034.	2.2	56
21	Trembling aspen seedling establishment, growth and response to fertilization on contrasting soils used in oil sands reclamation. Canadian Journal of Soil Science, 2012, 92, 143-151.	1.2	54
22	Nonstructural carbohydrate dynamics of lodgepole pine dying from mountain pine beetle attack. New Phytologist, 2016, 209, 550-562.	7.3	50
23	Dying piece by piece: carbohydrate dynamics in aspen (Populus tremuloides) seedlings under severe carbon stress. Journal of Experimental Botany, 2017, 68, 5221-5232.	4.8	49
24	Partitioning of carbon allocation to reserves or growth determines future performance of aspen seedlings. Forest Ecology and Management, 2012, 275, 43-51.	3.2	47
25	Aspen shoots are carbon autonomous during bud break. Trees - Structure and Function, 2011, 25, 531-536.	1.9	46
26	A comparison of growth and physiology in <i>Picea glauca</i> and <i>Populus tremuloides</i> at different soil temperatures. Canadian Journal of Forest Research, 2001, 31, 1922-1929.	1.7	45
27	A global view of aspen: Conservation science for widespread keystone systems. Global Ecology and Conservation, 2020, 21, e00828.	2.1	44
28	Soil nutrition and temperature as drivers of root suckering in trembling aspen. Canadian Journal of Forest Research, 2002, 32, 1685-1691.	1.7	43
29	Response ofPopulus tremuloides,Populus balsamifera,Betula papyriferaandPicea glaucaSeedlings to Low Soil Temperature and Water-logged Soil Conditions. Scandinavian Journal of Forest Research, 2003, 18, 391-400.	1.4	42
30	Identifying the relevant carbohydrate storage pools available for remobilization in aspen roots. Tree Physiology, 2019, 39, 1109-1120.	3.1	42
31	Tamm Review: Seedling-based ecology, management, and restoration in aspen (Populus tremuloides). Forest Ecology and Management, 2019, 432, 231-245.	3.2	41
32	A Functional Framework for Improved Management of Western North American Aspen (Populus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	1.0	39
33	Effect of stock type characteristics and time of planting on field performance of aspen (Populus) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.7	36
34	The effect of ectomycorrhizae on water relations in aspen (Populus tremuloides) and white spruce (Picea glauca) at low soil temperatures. Canadian Journal of Botany, 2002, 80, 684-689.	1.1	33
35	Effects of soil temperature and time of decapitation on sucker initiation of intact <i>Populus tremuloides</i> root systems. Scandinavian Journal of Forest Research, 2006, 21, 299-305.	1.4	33
36	Nutrient loaded seedlings reduce the need for field fertilization and vegetation management on boreal forest reclamation sites. New Forests, 2016, 47, 393-410.	1.7	33

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37	Regeneration of Populus nine years after variable retention harvest in boreal mixedwood forests. Forest Ecology and Management, 2010, 259, 383-389.	3.2	32
38	Early trajectories of forest understory development on reclamation sites: influence of forest floor placement and a cover crop. Restoration Ecology, 2015, 23, 698-706.	2.9	30
39	Nutrient uptake and growth of fireweed (Chamerion angustifolium) on reclamation soils. Canadian Journal of Forest Research, 2014, 44, 1-7.	1.7	29
40	Screening for Control of a Forest Weed: Early Competition Between Three Replacement Species and Calamagrostis canadensis of Picea glauca. Journal of Applied Ecology, 1996, 33, 1517.	4.0	28
41	Wounding of aspen roots promotes suckering. Canadian Journal of Botany, 2004, 82, 310-315.	1.1	27
42	Premature shoot growth termination allows nutrient loading of seedlings with an indeterminate growth strategy. New Forests, 2013, 44, 635-647.	1.7	27
43	Differences in initial root development and soil conditions affect establishment of trembling aspen and balsam poplar seedlings. Botany, 2010, 88, 275-285.	1.0	24
44	Reserves Accumulated in Non-Photosynthetic Organs during the Previous Growing Season Drive Plant Defenses and Growth in Aspen in the Subsequent Growing Season. Journal of Chemical Ecology, 2014, 40, 21-30.	1.8	24
45	Host phenology and potential saprotrophism of ectomycorrhizal fungi in the boreal forest. Functional Ecology, 2017, 31, 116-126.	3.6	24
46	Competition between <i>Calamagrostis</i><i>canadensis</i> and <i>Epilobium</i><i>angustifolium</i> under different soil temperature and nutrient regimes. Canadian Journal of Forest Research, 1994, 24, 2244-2250.	1.7	23
47	Root carbohydrates and aspen regeneration in relation to season of harvest and machine traffic. Forest Ecology and Management, 2008, 255, 68-74.	3.2	22
48	First-year growth response of cold-stored, nursery-grown aspen planting stock. New Forests, 2007, 33, 281-295.	1.7	21
49	Propagating trembling aspen from root cuttings: impact of storage length and phenological period of root donor plants. New Forests, 2010, 39, 169-182.	1.7	18
50	Seasonal changes in carbohydrate storage and regrowth in rhizomes and stems of four boreal forest shrubs: Applications in<i>picea glauca</i>understorey regeneration. Scandinavian Journal of Forest Research, 1997, 12, 27-32.	1.4	17
51	Effects of timing of cleaning and residual density on regeneration of juvenile aspen stands. Forest Ecology and Management, 2006, 232, 198-204.	3.2	17
52	Root competition, not soil compaction, restricts access to soil resources for aspen on a reclaimed mine soil. Botany, 2017, 95, 685-695.	1.0	17
53	Title is missing!. New Forests, 2003, 25, 49-66.	1.7	16
54	Nitrate stimulates root suckering in trembling aspen (Populus tremuloides). Canadian Journal of Forest Research, 2010, 40, 1962-1969.	1.7	14

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55	Impact of chipping residues and its leachate on the initiation and growth of aspen root suckers. Canadian Journal of Soil Science, 2007, 87, 361-367.	1.2	13
56	Role of microtopography in the expression of soil propagule banks on reclamation sites. Restoration Ecology, 2018, 26, S200.	2.9	13
57	Le gel de printemps et la pourriture fongique sont impliquÃ©s dans la suppression de la repousse des trembles rejetant aprÃ¨s un nettoiement partiel dans des peuplements juvÃ©niles. Annals of Forest Science, 2009, 66, 805-805.	2.0	12
58	The Role of Microsite Conditions in Restoring Trembling Aspen (Populus tremuloidesMichx) from Seed. Restoration Ecology, 2014, 22, 292-295.	2.9	12
59	Low soil temperatures increase carbon reserves in Picea mariana and Pinus contorta. Annals of Forest Science, 2014, 71, 371-380.	2.0	11
60	Mature beech and spruce trees under drought â€" Higher C investment in reproduction at the expense of whole-tree NSC stores. Environmental and Experimental Botany, 2021, 191, 104615.	4.2	11
61	Effects of Corylus cornuta stem density on root suckering and rooting depth of Populus tremuloidesThis article is one of a selection of papers published in the Special Issue on Poplar Research in Canada.. Canadian Journal of Botany, 2007, 85, 1041-1045.	1.1	10
62	Regeneration of aspen following partial and strip understory protection harvest in boreal mixedwood forests. Forestry Chronicle, 2009, 85, 631-638.	0.6	10
63	Suckering response of aspen to traffic-induced-root wounding and the barrier-effect of log storage. Forest Ecology and Management, 2009, 258, 2083-2089.	3.2	9
64	Depth of root placement, root size and carbon reserves determine reproduction success of aspen root fragments. Forest Ecology and Management, 2014, 313, 83-90.	3.2	9
65	Effects of substrate availability and competing vegetation on natural regeneration of white spruce on logged boreal mixedwood sites. Canadian Journal of Forest Research, 2018, 48, 324-332.	1.7	9
66	Preferential allocation of carbohydrate reserves belowground supports disturbance-based management of American chestnut (Castanea dentata). Forest Ecology and Management, 2022, 509, 120078.	3.2	9
67	Does mechanical site preparation affect trembling aspen density and growth 9â€"12Âyears after treatment?. New Forests, 2006, 32, 299-306.	1.7	8
68	Fertilization of lodgepole pine trees increased diameter growth but reduced root carbohydrate concentrations. Forest Ecology and Management, 2010, 260, 1914-1920.	3.2	8
69	Uniform versus Asymmetric Shading Mediates Crown Recession in Conifers. PLoS ONE, 2014, 9, e104187.	2.5	8
70	Splitting the Difference: Heterogeneous Soil Moisture Availability Affects Aboveground and Belowground Reserve and Mass Allocation in Trembling Aspen. Frontiers in Plant Science, 2021, 12, 654159.	3.6	7
71	Transfer of live aspen root fragments, an effective tool for large-scale boreal forest reclamation. Canadian Journal of Forest Research, 2015, 45, 1056-1064.	1.7	6
72	Growth traits of juvenile American chestnut and red oak as adaptations to disturbance. Restoration Ecology, 2018, 26, 712-719.	2.9	6

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73	Aspen regeneration on log decking areas as influenced by season and duration of log storage. New Forests, 2009, 38, 323-335.	1.7	5
74	Assessing structural and functional indicators of soil nitrogen availability in reclaimed forest ecosystems using¹⁵N-labelled aspen litter. Canadian Journal of Soil Science, 2018, 98, 357-368.	1.2	5
75	Exploring drivers and dynamics of early boreal forest recovery of heavily disturbed mine sites: a case study from a reconstructed landscape. New Forests, 2019, 50, 217-239.	1.7	5
76	Plant recolonization of reclamation areas from patches of salvaged forest floor material. Applied Vegetation Science, 2018, 21, 94-103.	1.9	4
77	Restoration of belowground fungal communities in reclaimed landscapes of the Canadian boreal forest. Restoration Ecology, 2019, 27, 1369-1380.	2.9	4
78	Exploring seedling-based aspen (Populus tremuloides) restoration near range limits in the Intermountain West, USA. Forest Ecology and Management, 2020, 476, 118470.	3.2	4
79	Surface and subsurface material selections influence the early outcomes of boreal upland forest restoration. Ecological Engineering, 2020, 144, 105705.	3.6	4
80	Forest floor protection during drilling pad construction promotes resprouting of aspen. Ecological Engineering, 2015, 75, 9-15.	3.6	3
81	Additive or synergistic? Early ectomycorrhizal fungal community response to mixed tree plantings in boreal forest reclamation. Oecologia, 2019, 189, 9-19.	2.0	3
82	Species-specific responses to targeted fertilizer application on reconstructed soils in a reclaimed upland area. Canadian Journal of Soil Science, 2021, 101, 45-61.	1.2	3
83	Regeneration dynamics of planted seedling-origin aspen (Populus tremuloides Michx.). New Forests, 2018, 49, 215-229.	1.7	2
84	Manipulating aspen (<i>Populus tremuloides</i>) seedling size characteristics to improve initial establishment and growth on competitive sites. Scandinavian Journal of Forest Research, 2020, 35, 29-45.	1.4	1