Werner A Kurz

List of Publications by Citations

107 papers	11,064 citations	40 h-index	105 g-index
119 ext. papers	12,551 ext. citations	6 avg, IF	5.88 L-index

#	Paper	IF	Citations
107	A large and persistent carbon sink in the world's forests. *Science*, **2011**, 333, 988-93	33.3	3950
106	Mountain pine beetle and forest carbon feedback to climate change. *Nature*, **2008**, 452, 987-90	50.4	1359
105	FOREST CARBON SINKS IN THE NORTHERN HEMISPHERE **2002**, 12, 891-899		578
104	A 70-YEAR RETROSPECTIVE ANALYSIS OF CARBON FLUXES IN THE CANADIAN FOREST SECTOR **1999**, 9, 526-547		466
103	Risk of natural disturbances makes future contribution of Canada's forests to the global carbon cycle highly uncertain. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 1551-5	11.5	372
102	CBM-CFS3: A model of carbon-dynamics in forestry and land-use change implementing IPCC standards. *Ecological Modelling*, **2009**, 220, 480-504	3	322
101	An inventory-based analysis of Canada's managed forest carbon dynamics, 1990 to 2008. *Global Change Biology*, **2011**, 17, 2227-2244	11.4	203
100	Belowground biomass dynamics in the Carbon Budget Model of the Canadian Forest Sector: recent improvements and implications for the estimation of NPP and NEP. *Canadian Journal of Forest Research*, **2003**, 33, 126-136	1.9	183
99	Boreal forests and tundra. *Water, Air, and Soil Pollution*, **1993**, 70, 39-53	2.6	182
98	No growth stimulation of Canada's boreal forest under half-century of combined warming and CO2 fertilization. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E8406-E8414	11.5	161
97	Estimation of root biomass and dynamics for the carbon budget model of the Canadian forest sector. *Canadian Journal of Forest Research*, **1996**, 26, 1973-1979	1.9	148
96	Animating the Carbon Cycle. *Ecosystems*, **2014**, 17, 344-359	3.9	123
95	Factoring out natural and indirect human effects on terrestrial carbon sources and sinks. *Environmental Science and Policy*, **2007**, 10, 370-384	6.2	115
94	Interannual variability of net ecosystem productivity in forests is explained by carbon flux phenology in autumn. *Global Ecology and Biogeography*, **2013**, 22, 994-1006	6.1	106
93	Negative impacts of high temperatures on growth of black spruce forests intensify with the anticipated climate warming. *Global Change Biology*, **2016**, 22, 627-43	11.4	104
92	Quantifying the biophysical climate change mitigation potential of Canada's forest sector. *Biogeosciences*, **2014**, 11, 3515-3529	4.6	101
91	Reconciling estimates of the contemporary North American carbon balance among terrestrial biosphere models, atmospheric inversions, and a new approach for estimating net ecosystem exchange from inventory-based data. *Global Change Biology*, **2012**, 18, 1282-1299	11.4	99

90	Land surface phenology from optical satellite measurement and CO2 eddy covariance technique. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		83
89	Could increased boreal forest ecosystem productivity offset carbon losses from increased disturbances?. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **2008**, 363, 2261-9	5.8	82
88	Estimating direct carbon emissions from Canadian wildland fires. *International Journal of Wildland Fire*, **2007**, 16, 593	3.2	82
87	Relationships between individual-tree mortality and water-balance variables indicate positive trends in water stress-induced tree mortality across North America. *Global Change Biology*, **2017**, 23, 1691-1710	11.4	77
86	Estimating time since forest harvest using segmented Landsat ETM+ imagery. *Remote Sensing of Environment*, **2004**, 93, 179-187	13.2	68
85	Future Spruce Budworm Outbreak May Create a Carbon Source in Eastern Canadian Forests. *Ecosystems*, **2010**, 13, 917-931	3.9	67
84	Future quantities and spatial distribution of harvesting residue and dead wood from natural disturbances in Canada. *Forest Ecology and Management*, **2010**, 260, 181-192	3.9	66
83	Developing Canada's National Forest Carbon Monitoring, Accounting and Reporting System to Meet the Reporting Requirements of the Kyoto Protocol. *Mitigation and Adaptation Strategies for Global Change*, **2006**, 11, 33-43	3.9	65
82	TELSA: the Tool for Exploratory Landscape Scenario Analyses. *Computers and Electronics in Agriculture*, **2000**, 27, 227-242	6.5	62
81	National level forest monitoring and modeling in Canada. *Progress in Planning*, **2004**, 61, 365-381	3.2	59
80	Forest carbon accounting at the operational scale. *Forestry Chronicle*, **2002**, 78, 672-679	1	59
79	Accelerating regrowth of temperate-maritime forests due to environmental change. *Global Change Biology*, **2012**, 18, 2026-2040	11.4	57
78	Reconciling global-model estimates and country reporting of anthropogenic forest CO2 sinks. *Nature Climate Change*, **2018**, 8, 914-920	21.4	57
77	Estimating product and energy substitution benefits in national-scale mitigation analyses for Canada. *GCB Bioenergy*, **2017**, 9, 1071-1084	5.6	56
76	Interannual and spatial impacts of phenological transitions, growing season length, and spring and autumn temperatures on carbon sequestration: A North America flux data synthesis. *Global and Planetary Change*, **2012**, 92-93, 179-190	4.2	54
75	The carbon budget of Canadian forests: a sensitivity analysis of changes in disturbance regimes, growth rates, and decomposition rates. *Environmental Pollution*, **1994**, 83, 55-61	9.3	53
74	Conntribution of northern forests to the global C cycle: Canada as a case study. *Water, Air, and Soil Pollution*, **1993**, 70, 163-176	2.6	51
73	Interannual variability of net carbon exchange is related to the lag between the end-dates of net carbon uptake and photosynthesis: Evidence from long records at two contrasting forest stands. *Agricultural and Forest Meteorology*, **2012**, 164, 29-38	5.8	50

72	Derivation of a spatially explicit 86-year retrospective carbon budget for a landscape undergoing conversion from old-growth to managed forests on Vancouver Island, BC. *Forest Ecology and Management*, **2008**, 256, 1677-1691	3.9	47
71	Accounting of forest carbon sinks and sources under a future climate protocol—factoring out past disturbance and management effects on age-class structure. *Environmental Science and Policy*, **2008**, 11, 669-686	6.2	47
70	North America's net terrestrial CO₂ exchange with the atmosphere 1990–2009. *Biogeosciences*, **2015**, 12, 399-414	4.6	44
69	Climate change mitigation strategies in the forest sector: biophysical impacts and economic implications in British Columbia, Canada. *Mitigation and Adaptation Strategies for Global Change*, **2018**, 23, 257-290	3.9	42
68	Approaches to monitoring changes in carbon stocks for REDD+. *Carbon Management*, **2013**, 4, 519-537	3.3	40
67	The carbon implications of large-scale afforestation of agriculturally marginal land with short-rotation willow in Saskatchewan. *GCB Bioenergy*, **2012**, 4, 70-87	5.6	40
66	Habitat patterns in forested landscapes: management practices and the uncertainty associated with natural disturbances. *Computers and Electronics in Agriculture*, **2000**, 27, 243-262	6.5	40
65	Uncertainty of 21st century growing stocks and GHG balance of forests in British Columbia, Canada resulting from potential climate change impacts on ecosystem processes. *Forest Ecology and Management*, **2011**, 262, 827-837	3.9	38
64	Effects of harvesting intensity on carbon stocks in eastern Canadian red spruce (Picea rubens) forests: An exploratory analysis using the CBM-CFS3 simulation model. *Forest Ecology and Management*, **2008**, 255, 3632-3641	3.9	37
63	Application of the CBM-CFS3 model to estimate Italy's forest carbon budget, 1995–2020. *Ecological Modelling*, **2013**, 266, 144-171	3	36
62	Science-based approach for credible accounting of mitigation in managed forests. *Carbon Balance and Management*, **2018**, 13, 8	3.6	32
61	Improved assessment of gross and net primary productivity of Canada's landmass. *Journal of Geophysical Research G: Biogeosciences*, **2013**, 118, 1546-1560	3.7	31
60	Temporal changes of forest net primary production and net ecosystem production in west central Canada associated with natural and anthropogenic disturbances. *Canadian Journal of Forest Research*, **2003**, 33, 2340-2351	1.9	30
59	Climate change mitigation potential of local use of harvest residues for bioenergy in Canada. *GCB Bioenergy*, **2017**, 9, 817-832	5.6	29
58	Are Mosses Required to Accurately Predict Upland Black Spruce Forest Soil Carbon in National-Scale Forest C Accounting Models?. *Ecosystems*, **2013**, 16, 1071-1086	3.9	29
57	Historic carbon budgets of Ontario's forest ecosystems. *Forest Ecology and Management*, **2002**, 169, 103-114	3.9	28
56	Climate, economic, and environmental impacts of producing wood for bioenergy. *Environmental Research Letters*, **2018**, 13, 050201	6.2	28
55	The European forest sector: past and future carbon budget and fluxes under different management scenarios. *Biogeosciences*, **2017**, 14, 2387-2405	4.6	27

54	Mapping the environmental limitations to growth of coastal Douglas-fir stands on Vancouver Island, British Columbia. *Tree Physiology*, **2007**, 27, 805-15	4.2	27
53	A 100-year conservation experiment: Impacts on forest carbon stocks and fluxes. *Forest Ecology and Management*, **2013**, 310, 242-255	3.9	24
52	Potential near-future carbon uptake overcomes losses from a large insect outbreak in British Columbia, Canada. *Geophysical Research Letters*, **2016**, 43, 2590-2598	4.9	23
51	Integration of Landsat time series and field plots for forest productivity estimates in decision support models. *Forest Ecology and Management*, **2016**, 376, 284-297	3.9	23
50	Increasing net ecosystem biomass production of Canada's boreal and temperate forests despite decline in dry climates. *Global Biogeochemical Cycles*, **2017**, 31, 134-158	5.9	23
49	Accelerating forest growth enhancement due to climate and atmospheric changes in British Colombia, Canada over 1956-2001. *Scientific Reports*, **2014**, 4, 4461	4.9	23
48	An ecosystem context for global gross forest cover loss estimates. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 9025-6	11.5	23
47	Estimating net primary production of forests in the Canadian Prairie Provinces using an inventory-based carbon budget model. *Canadian Journal of Forest Research*, **2002**, 32, 161-169	1.9	23
46	Natural climate solutions for Canada. *Science Advances*, **2021**, 7,	14.3	23
45	A practical approach for assessing the sensitivity of the Carbon Budget Model of the Canadian Forest Sector (CBM-CFS3). *Ecological Modelling*, **2008**, 219, 373-382	3	22
44	Modelling forest carbon stock changes as affected by harvest and natural disturbances. II. EU-level analysis. *Carbon Balance and Management*, **2016**, 11, 20	3.6	20
43	If forest dynamics in Canada's west are driven mainly by competition, why did they change? Half-century evidence says: Climate change. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E4340	11.5	19
42	Modelling forest carbon stock changes as affected by harvest and natural disturbances. I. Comparison with countries' estimates for forest management. *Carbon Balance and Management*, **2016**, 11, 5	3.6	19
41	Carbon sequestration by white spruce shelterbelts in Saskatchewan, Canada: 3PG and CBM-CFS3 model simulations. *Ecological Modelling*, **2016**, 325, 35-46	3	19
40	Climate and atmospheric drivers of historical terrestrial carbon uptake in the province of British Columbia, Canada. *Biogeosciences*, **2014**, 11, 635-649	4.6	19
39	A generalised approach of accounting for biospheric carbon stock changes under the Kyoto Protocol. *Environmental Science and Policy*, **2001**, 4, 73-85	6.2	19
38	Retrospective assessment of carbon flows in Canadian boreal forests **1996**, 173-182		19
37	Comparing measured and modelled forest carbon stocks in high-boreal forests of harvest and natural-disturbance origin in Labrador, Canada. *Ecological Modelling*, **2010**, 221, 825-839	3	18

36	Delineating managed land for reporting national greenhouse gas emissions and removals to the United Nations framework convention on climate change. *Carbon Balance and Management*, **2018**, 13, 9	3.6	17
35	Adaptive cluster sampling for estimation of deforestation rates. *European Journal of Forest Research*, **2005**, 124, 207-220	2.7	17
34	Improving carbon monitoring and reporting in forests using spatially-explicit information. *Carbon Balance and Management*, **2016**, 11, 23	3.6	17
33	Attributing changes in land cover using independent disturbance datasets: a case study of the Yucatan Peninsula, Mexico. *Regional Environmental Change*, **2016**, 16, 213-228	4.3	15
32	Carbon budget implications of the transition from natural to manged disturbance regimes in forest landscapes. *Mitigation and Adaptation Strategies for Global Change*, **1997**, 2, 405-421	3.9	15
31	A systems approach to assess climate change mitigation options in landscapes of the United States forest sector. *Carbon Balance and Management*, **2018**, 13, 13	3.6	15
30	Constraining the organic matter decay parameters in the CBM-CFS3 using Canadian National Forest Inventory data and a Bayesian inversion technique. *Ecological Modelling*, **2017**, 364, 1-12	3	14
29	Choice of satellite imagery and attribution of changes to disturbance type strongly affects forest carbon balance estimates. *Carbon Balance and Management*, **2015**, 10, 30	3.6	14
28	Implications of differing input data sources and approaches upon forest carbon stock estimation. *Environmental Monitoring and Assessment*, **2010**, 166, 543-61	3.1	14
27	Approximating natural landscape pattern using aggregated harvest. *Canadian Journal of Forest Research*, **2007**, 37, 1846-1853	1.9	13
26	Climate change mitigation in Canada's forest sector: a spatially explicit case study for two regions. *Carbon Balance and Management*, **2018**, 13, 11	3.6	13
25	Carbon dynamics on agricultural land reverting to woody land in Ontario, Canada. *Journal of Environmental Management*, **2017**, 193, 318-325	7.9	12
24	Simulating impacts of water stress on woody biomass in the southern boreal region of western Canada using a dynamic vegetation model. *Agricultural and Forest Meteorology*, **2014**, 198-199, 142-154	5.8	12
23	Cost of climate change mitigation in Canada□ forest sector. *Canadian Journal of Forest Research*, **2017**, 47, 604-614	1.9	11
22	Applying a systems approach to assess carbon emission reductions from climate change mitigation in Mexico□ forest sector. *Environmental Research Letters*, **2018**, 13, 035003	6.2	11
21	Effects of forest management, harvesting and wood processing on ecosystem carbon dynamics: a boreal case study **1996**, 279-292		10
20	The Canadian model for peatlands (CaMP): A peatland carbon model for national greenhouse gas reporting. *Ecological Modelling*, **2020**, 431, 109164	3	10
19	Modelling moss-derived carbon in upland black spruce forests. *Canadian Journal of Forest Research*, **2016**, 46, 520-534	1.9	10

18	Tree Ring Reconstructions of Stemwood Biomass Indicate Increases in the Growth Rate of Black Spruce Trees Across Boreal Forests of Canada. *Journal of Geophysical Research G: Biogeosciences*, **2019**, 124, 2460-2480	3.7	9
17	The impact of tropospheric ozone on landscape-level merchantable biomass and ecosystem carbon in Canadian forests. *European Journal of Forest Research*, **2013**, 132, 71-81	2.7	9
16	Climate change mitigation in British Columbia's forest sector: GHG reductions, costs, and environmental impacts. *Carbon Balance and Management*, **2020**, 15, 21	3.6	9
15	Restoring Degraded Lands. *Annual Review of Environment and Resources*, **2021**, 46,	17.2	7
14	A Canadian upland forest soil profile and carbon stocks database. *Ecology*, **2018**, 99, 989	4.6	5
13	Low Tree-Growth Elasticity of Forest Biomass Indicated by an Individual-Based Model. *Forests*, **2018**, 9, 21	2.8	4
12	Quantifying the biophysical climate change mitigation potential of Canada's forest sector		4
11	Empirical and Predicted Boreal Forest Carbon Pools Following Stem-Only Harvesting in Quebec, Canada. *Soil Science Society of America Journal*, **2019**, 83, S59	2.5	3
10	Statistical performance and behaviour of environmentally-sensitive composite models of lodgepole pine growth. *Forest Ecology and Management*, **2018**, 408, 157-173	3.9	3
9	Climate and atmospheric drivers of historical terrestrial carbon uptake in the province of British Columbia, Canada		2
8	North America's net terrestrial carbon exchange with the atmosphere 1990–2009		2
7	Past and Possible Future Carbon Dynamics of Canada's Boreal Forest Ecosystems **1998**, 63-88		2
6	Inward- versus outward-focused bioeconomy strategies for British Columbia's forest products industry: a harvested wood products carbon storage and emission perspective. *Carbon Balance and Management*, **2021**, 16, 30	3.6	2
5	Deforestation mapping sampling designs for Canadian landscapes. *Canadian Journal of Forest Research*, **2015**, 45, 1564-1576	1.9	1
4	WG2 Summary: Forests and the global carbon cycle: past, present, and future role **1996**, 199-208		1
3	Cumulative effects of natural and anthropogenic disturbances on the forest carbon balance in the oil sands region of Alberta, Canada; a pilot study (1985-2012). *Carbon Balance and Management*, **2021**, 16, 3	3.6	1
2	Projected forest carbon sinks highly vulnerable to increases in natural disturbances. *IOP Conference Series: Earth and Environmental Science*, **2009**, 6, 042020	0.3	
1	Bottom-up approaches for estimating terrestrial GHG budgets: Bookkeeping, process-based modeling, and data-driven methods **2022**, 59-85		