

Isla H Myers-Smith

List of Publications by Year in descending order

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Version: 2024-02-01

83
papers

12,168
citations

50566

48
h-index

66518

82
g-index

100
all docs

100
docs citations

100
times ranked

16272
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | The tundra phenology database: more than two decades of tundra phenology responses to climate change. <i>Arctic Science</i> , 2022, 8, 1026-1039. | 0.9 | 7 |
| 2 | Global application of an unoccupied aerial vehicle photogrammetry protocol for predicting aboveground biomass in non-forest ecosystems. <i>Remote Sensing in Ecology and Conservation</i> , 2022, 8, 57-71. | 2.2 | 13 |
| 3 | Tundra vegetation change and impacts on permafrost. <i>Nature Reviews Earth & Environment</i> , 2022, 3, 68-84. | 12.2 | 87 |
| 4 | Global maps of soil temperature. <i>Global Change Biology</i> , 2022, 28, 3110-3144. | 4.2 | 113 |
| 5 | Winters are changing: snow effects on Arctic and alpine tundra ecosystems. <i>Arctic Science</i> , 2022, 8, 572-608. | 0.9 | 43 |
| 6 | Range shifts in a foundation sedge potentially induce large Arctic ecosystem carbon losses and gains. <i>Environmental Research Letters</i> , 2022, 17, 045024. | 2.2 | 5 |
| 7 | Directional turnover towards larger-ranged plants over time and across habitats. <i>Ecology Letters</i> , 2022, 25, 466-482. | 3.0 | 39 |
| 8 | Flower Detection Using Object Analysis: New Ways to Quantify Plant Phenology in a Warming Tundra Biome. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2021, 14, 9287-9296. | 2.3 | 2 |
| 9 | Arctic tundra shrubification: a review of mechanisms and impacts on ecosystem carbon balance. <i>Environmental Research Letters</i> , 2021, 16, 053001. | 2.2 | 121 |
| 10 | Experimental warming differentially affects vegetative and reproductive phenology of tundra plants. <i>Nature Communications</i> , 2021, 12, 3442. | 5.8 | 56 |
| 11 | Accounting for year effects and sampling error in temporal analyses of invertebrate population and biodiversity change: a comment on Seibold <i>et al</i> . 2019. <i>Insect Conservation and Diversity</i> , 2021, 14, 149-154. | 1.4 | 43 |
| 12 | Shallow soils are warmer under trees and tall shrubs across Arctic and Boreal ecosystems. <i>Environmental Research Letters</i> , 2021, 16, 015001. | 2.2 | 39 |
| 13 | Status and trends in Arctic vegetation: Evidence from experimental warming and long-term monitoring. <i>Ambio</i> , 2020, 49, 678-692. | 2.8 | 119 |
| 14 | TRY plant trait database – enhanced coverage and open access. <i>Global Change Biology</i> , 2020, 26, 119-188. | 4.2 | 1,038 |
| 15 | Summer warming explains widespread but not uniform greening in the Arctic tundra biome. <i>Nature Communications</i> , 2020, 11, 4621. | 5.8 | 201 |
| 16 | Rare and common vertebrates span a wide spectrum of population trends. <i>Nature Communications</i> , 2020, 11, 4394. | 5.8 | 50 |
| 17 | Divergence of Arctic shrub growth associated with sea ice decline. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 33334-33344. | 3.3 | 43 |
| 18 | Landscape-scale forest loss as a catalyst of population and biodiversity change. <i>Science</i> , 2020, 368, 1341-1347. | 6.0 | 91 |

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|----|---|-----|-----------|
| 19 | Global plant trait relationships extend to the climatic extremes of the tundra biome. <i>Nature Communications</i> , 2020, 11, 1351. | 5.8 | 52 |
| 20 | Mapping human pressures on biodiversity across the planet uncovers anthropogenic threat complexes. <i>People and Nature</i> , 2020, 2, 380-394. | 1.7 | 139 |
| 21 | Woody plant encroachment intensifies under climate change across tundra and savanna biomes. <i>Global Ecology and Biogeography</i> , 2020, 29, 925-943. | 2.7 | 105 |
| 22 | SoilTemp: A global database of near-surface temperature. <i>Global Change Biology</i> , 2020, 26, 6616-6629. | 4.2 | 122 |
| 23 | Complexity revealed in the greening of the Arctic. <i>Nature Climate Change</i> , 2020, 10, 106-117. | 8.1 | 447 |
| 24 | Aboveground biomass corresponds strongly with drone-derived canopy height but weakly with greenness (NDVI) in a shrub tundra landscape. <i>Environmental Research Letters</i> , 2020, 15, 125004. | 2.2 | 36 |
| 25 | Drone data reveal heterogeneity in tundra greenness and phenology not captured by satellites. <i>Environmental Research Letters</i> , 2020, 15, 125002. | 2.2 | 35 |
| 26 | The geography of biodiversity change in marine and terrestrial assemblages. <i>Science</i> , 2019, 366, 339-345. | 6.0 | 385 |
| 27 | Rapid retreat of permafrost coastline observed with aerial drone photogrammetry. <i>Cryosphere</i> , 2019, 13, 1513-1528. | 1.5 | 51 |
| 28 | Species richness change across spatial scales. <i>Oikos</i> , 2019, 128, 1079-1091. | 1.2 | 160 |
| 29 | Eighteen years of ecological monitoring reveals multiple lines of evidence for tundra vegetation change. <i>Ecological Monographs</i> , 2019, 89, e01351. | 2.4 | 113 |
| 30 | Local snow melt and temperature—but not regional sea ice—explain variation in spring phenology in coastal Arctic tundra. <i>Global Change Biology</i> , 2019, 25, 2258-2274. | 4.2 | 52 |
| 31 | Seed predation increases from the Arctic to the Equator and from high to low elevations. <i>Science Advances</i> , 2019, 5, eaau4403. | 4.7 | 61 |
| 32 | Plant traits inform predictions of tundra responses to global change. <i>New Phytologist</i> , 2019, 221, 1742-1748. | 3.5 | 70 |
| 33 | Traditional plant functional groups explain variation in economic but not size-related traits across the tundra biome. <i>Global Ecology and Biogeography</i> , 2019, 28, 78-95. | 2.7 | 49 |
| 34 | Warming shortens flowering seasons of tundra plant communities. <i>Nature Ecology and Evolution</i> , 2019, 3, 45-52. | 3.4 | 79 |
| 35 | Vegetation monitoring using multispectral sensors—best practices and lessons learned from high latitudes. <i>Journal of Unmanned Vehicle Systems</i> , 2019, 7, 54-75. | 0.6 | 99 |
| 36 | Contrasting shrub species respond to early summer temperatures leading to correspondence of shrub growth patterns. <i>Environmental Research Letters</i> , 2018, 13, 034005. | 2.2 | 29 |

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|----|---|------|-----------|
| 37 | Comment on "Precipitation drives global variation in natural selection". <i>Science</i> , 2018, 359, . | 6.0 | 5 |
| 38 | Climate warming as a driver of tundra shrubline advance. <i>Journal of Ecology</i> , 2018, 106, 547-560. | 1.9 | 138 |
| 39 | Location, location, location: considerations when using lightweight drones in challenging environments. <i>Remote Sensing in Ecology and Conservation</i> , 2018, 4, 7-19. | 2.2 | 141 |
| 40 | Plant-plant interactions could limit recruitment and range expansion of tall shrubs into alpine and Arctic tundra. <i>Polar Biology</i> , 2018, 41, 2211-2219. | 0.5 | 11 |
| 41 | Global trait-environment relationships of plant communities. <i>Nature Ecology and Evolution</i> , 2018, 2, 1906-1917. | 3.4 | 397 |
| 42 | Tundra Trait Team: A database of plant traits spanning the tundra biome. <i>Global Ecology and Biogeography</i> , 2018, 27, 1402-1411. | 2.7 | 57 |
| 43 | Plant functional trait change across a warming tundra biome. <i>Nature</i> , 2018, 562, 57-62. | 13.7 | 451 |
| 44 | Reviews and syntheses: Changing ecosystem influences on soil thermal regimes in northern high-latitude permafrost regions. <i>Biogeosciences</i> , 2018, 15, 5287-5313. | 1.3 | 143 |
| 45 | BioTIME: A database of biodiversity time series for the Anthropocene. <i>Global Ecology and Biogeography</i> , 2018, 27, 760-786. | 2.7 | 289 |
| 46 | A warmer and greener cold world: summer warming increases shrub growth in the alpine and high Arctic tundra. <i>Erdkunde</i> , 2018, 72, 63-85. | 0.4 | 23 |
| 47 | Effect of Terrain Characteristics on Soil Organic Carbon and Total Nitrogen Stocks in Soils of Herschel Island, Western Canadian Arctic. <i>Permafrost and Periglacial Processes</i> , 2017, 28, 92-107. | 1.5 | 46 |
| 48 | Plant Biodiversity Change Across Scales During the Anthropocene. <i>Annual Review of Plant Biology</i> , 2017, 68, 563-586. | 8.6 | 179 |
| 49 | Different parts, different stories: climate sensitivity of growth is stronger in root collars vs. stems in tundra shrubs. <i>Global Change Biology</i> , 2017, 23, 3281-3291. | 4.2 | 38 |
| 50 | Greater temperature sensitivity of plant phenology at colder sites: implications for convergence across northern latitudes. <i>Global Change Biology</i> , 2017, 23, 2660-2671. | 4.2 | 171 |
| 51 | Trait covariance: the functional warp of plant diversity?. <i>New Phytologist</i> , 2017, 216, 976-980. | 3.5 | 22 |
| 52 | Background invertebrate herbivory on dwarf birch (<i>Betula glandulosa-nana</i> complex) increases with temperature and precipitation across the tundra biome. <i>Polar Biology</i> , 2017, 40, 2265-2278. | 0.5 | 47 |
| 53 | Estimates of local biodiversity change over time stand up to scrutiny. <i>Ecology</i> , 2017, 98, 583-590. | 1.5 | 106 |
| 54 | Shrub growth and expansion in the Arctic tundra: an assessment of controlling factors using an evidence-based approach. <i>Environmental Research Letters</i> , 2017, 12, 085007. | 2.2 | 101 |

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|----|--|-----|-----------|
| 55 | Transitions in Arctic ecosystems: Ecological implications of a changing hydrological regime. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2016, 121, 650-674. | 1.3 | 167 |
| 56 | Vegetation composition and shrub extent on the Yukon coast, Canada, are strongly linked to ice-wedge polygon degradation. <i>Polar Research</i> , 2016, 35, 27489. | 1.6 | 33 |
| 57 | Temperature-induced recruitment pulses of Arctic dwarf shrub communities. <i>Journal of Ecology</i> , 2015, 103, 489-501. | 1.9 | 90 |
| 58 | Experiment, monitoring, and gradient methods used to infer climate change effects on plant communities yield consistent patterns. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 448-452. | 3.3 | 200 |
| 59 | Climate sensitivity of shrub growth across the tundra biome. <i>Nature Climate Change</i> , 2015, 5, 887-891. | 8.1 | 447 |
| 60 | Methods for measuring arctic and alpine shrub growth: A review. <i>Earth-Science Reviews</i> , 2015, 140, 1-13. | 4.0 | 112 |
| 61 | A synthesis of methane emissions from 71 northern, temperate, and subtropical wetlands. <i>Global Change Biology</i> , 2014, 20, 2183-2197. | 4.2 | 389 |
| 62 | Assessing the relative importance of neutral stochasticity in ecological communities. <i>Oikos</i> , 2014, 123, 1420-1430. | 1.2 | 310 |
| 63 | Global meta-analysis reveals no net change in local-scale plant biodiversity over time. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 19456-19459. | 3.3 | 464 |
| 64 | Historical ecology: Using unconventional data sources to test for effects of global environmental change. <i>American Journal of Botany</i> , 2013, 100, 1294-1305. | 0.8 | 143 |
| 65 | Recent dynamics of arctic and sub-arctic vegetation. <i>Environmental Research Letters</i> , 2013, 8, 015040. | 2.2 | 62 |
| 66 | Shrub canopies influence soil temperatures but not nutrient dynamics: An experimental test of tundra snow-shrub interactions. <i>Ecology and Evolution</i> , 2013, 3, 3683-3700. | 0.8 | 142 |
| 67 | An Early-Career Scientist's Guide to Delving Into Data Synthesis. <i>Bulletin of the Ecological Society of America</i> , 2013, 94, 265-272. | 0.2 | 0 |
| 68 | Uniform female-biased sex ratios in alpine willows. <i>American Journal of Botany</i> , 2012, 99, 1243-1248. | 0.8 | 24 |
| 69 | Resilience: Easy to use but hard to define. <i>Ideas in Ecology and Evolution</i> , 2012, 5, . | 0.1 | 20 |
| 70 | Plot-scale evidence of tundra vegetation change and links to recent summer warming. <i>Nature Climate Change</i> , 2012, 2, 453-457. | 8.1 | 745 |
| 71 | Global assessment of experimental climate warming on tundra vegetation: heterogeneity over space and time. <i>Ecology Letters</i> , 2012, 15, 164-175. | 3.0 | 764 |
| 72 | Shrub expansion in tundra ecosystems: dynamics, impacts and research priorities. <i>Environmental Research Letters</i> , 2011, 6, 045509. | 2.2 | 1,021 |

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|----|--|-----|-----------|
| 73 | Expansion of Canopy-Forming Willows Over the Twentieth Century on Herschel Island, Yukon Territory, Canada. <i>Ambio</i> , 2011, 40, 610-623. | 2.8 | 91 |
| 74 | Multi-Decadal Changes in Tundra Environments and Ecosystems: Synthesis of the International Polar Year-Back to the Future Project (IPY-BTF). <i>Ambio</i> , 2011, 40, 705-716. | 2.8 | 98 |
| 75 | Reply to comment on Kane <i>et al</i> . 2008. Precipitation control over inorganic nitrogen import-export budgets across watersheds: a synthesis of long-term ecological research. <i>Ecohydrology</i> 1: 105-117. <i>Ecohydrology</i> , 2010, 3, 370-372. | 1.1 | 0 |
| 76 | Shrub Line Advance in Alpine Tundra of the Kluane Region: Mechanisms of Expansion and Ecosystem Impacts. <i>Arctic</i> , 2009, 60, . | 0.2 | 5 |
| 77 | Precipitation control over inorganic nitrogen import-export budgets across watersheds: a synthesis of long-term ecological research. <i>Ecohydrology</i> , 2008, 1, 105-117. | 1.1 | 26 |
| 78 | Changing climate sensitivity of black spruce (<i>Picea mariana</i> Mill.) in a peatland-forest landscape in Interior Alaska. <i>Dendrochronologia</i> , 2008, 25, 167-175. | 1.0 | 55 |
| 79 | Wetland succession in a permafrost collapse: interactions between fire and thermokarst. <i>Biogeosciences</i> , 2008, 5, 1273-1286. | 1.3 | 70 |
| 80 | Influence of disturbance on carbon exchange in a permafrost collapse and adjacent burned forest. <i>Journal of Geophysical Research</i> , 2007, 112, . | 3.3 | 29 |
| 81 | Tips for Effective Communication in Ecology. <i>Bulletin of the Ecological Society of America</i> , 2007, 88, 206-215. | 0.2 | 0 |
| 82 | Cumulative impacts on Alaskan arctic tundra of a quarter century of road dust. <i>Ecoscience</i> , 2006, 13, 503-510. | 0.6 | 33 |
| 83 | HOW DO BROWN-HEADED COWBIRDS (<i>MOLOTHRUS ATER</i>) CAUSE NEST FAILURES IN SONG SPARROWS (<i>MELOSPIZA MELODIA</i>)? A REMOVAL EXPERIMENT. <i>Auk</i> , 2003, 120, 772. | 0.7 | 22 |