

Annika K. Jägerbrand**Publications***Peer-review publications*

1. Juha Alatalo, Annika Jägerbrand, Jaanis Juhansson, Anders Michelsen, and Peter Ľuptáčik. Accepted 2017. Impacts of twenty years of experimental warming on soil carbon, nitrogen, moisture and soil mites across alpine/subarctic tundra communities. Accepted for publication in Scientific Reports 2017-02-08.
2. Alatalo, J.M., Arshad, A, Molau, U. Bai, Y., Jägerbrand, A.K. 2016. Diversity-productivity dependent resistance of an alpine plant community to different climate change scenarios. Ecological Research, DOI 10.1007/s11284-016-1403-6, published online 6 October 2016.
3. Jägerbrand, A.K. 2016. LED (Light Emitting Diode) Road Lighting in Practice: An Evaluation of Compliance with Regulations and Improvements for Further Energy Savings. Energies 9(5): 357, doi:10.3390/en9050357. Published online 11 May 2016.
4. Jägerbrand, A.K. and Kudo, G. 2016. Short-term Responses in Maximum Quantum Yield of PS II (Fv/Fm), to ex situ Temperature Treatment of Populations of Bryophytes Originating from Different Sites in Hokkaido, Northern Japan. Plants 5(2), 22, DOI: 10.3390/plants 5020022. Published online 26 April 2016.
5. Jägerbrand, A.K. and Sjöbergh, J. 2016. Effects of weather conditions, light conditions, and road lighting on vehicle speed. SpringerPlus 5:505, DOI 10.1186/s40064-016-2124-6. Published online 23 April 2016.
6. Alatalo, J.M., Jägerbrand, A.K., Molau, U. 2016. Impacts of different climate change scenarios and extreme climatic events on an alpine meadow community. Scientific Reports 6, article number:21720, doi doi:10.1038/srep21720. Published online 18 February 2016.
7. Juha Alatalo, Annika K. Jägerbrand, Peter Čuchta. 2015. Collembola at three alpine subarctic sites resistant to twenty years of experimental warming. Scientific Reports 5:18161 | DOI: 10.1038/srep18161. Published online 16 December.
8. Gren I-M, Häggmark-Svensson, T., Andersson, H., Jansson, G., Jägerbrand, A.K. 2015. Using traffic data to estimate wildlife populations. Journal of Bioeconomics. DOI10.1007/s10818-015-9209-0 Print ISSN1387-6996 Online ISSN1573-6989. Online 26 November 2015, pp 1-15.
9. Jägerbrand, A.K. and Antonson, H. 2015/2016. Driving behaviour responses to a moose encounter, automatic speed camera, wildlife warning sign and radio message determined in a factorial simulator study. Accident Analysis and Prevention 86(2016): 229-238. doi:10.1016/j.aap.2015.11.004, Accepted 2 Nov 2015.
10. Little, C.J., Jägerbrand, A.K. Molau, U. and Alatalo, J.M. 2015. Community and species-specific responses to simulated global change in two subarctic-alpine plant communities. Ecosphere 6(11) article 227:1-18.
11. During, H.J., Verduyn, B. and Jägerbrand, A.K. 2015. Biomechanical properties of the terrestrial mosses Pleurozium schreberi (Brid.) Mitt. and Pogonatum japonicum Sull. & Lesq. along altitudinal gradients in northern Japan. Arctoa 24: 375-381.
12. Jägerbrand, A.K. 2015. Dead or alive? Testing the use of C:N ratios and chlorophyll fluorescence in vertical shoot profiles to determine depth of vitality and point of senescence in populations of bryophytes. Lindbergia 38: 4-13. Published 14 July 2015.

13. Alatalo, J.M., Jägerbrand, A.K. and Molau, U. 2015. Testing reliability of short-term responses to predict longer-term responses of bryophytes and lichens to environmental change. *Ecological Indicators* 58: 77-85. Published 10 June 2015.
14. Alatalo, J.M., Little, C.J., Jägerbrand, A.K., and Molau, U. 2015. Vascular plant abundance and diversity in an alpine heath under observed and simulated global change. *Scientific Reports* 5, article number 10197, doi:10.1038/srep10197. Published 7 May 2015.
15. Robertson, K., Jägerbrand, A.K., and Eriksson, J.R. 2015. Regional transport indicators used in Sweden for measurement reporting and verification of CO₂ emissions. *Challenges* 6: 55-70. Published 15 April 2015.
16. Jägerbrand, A.K. and Alatalo, J.M. 2015. Effects of human trampling on abundance and diversity of vascular plants, bryophytes and lichens in alpine heath vegetation, Northern Sweden. *SpringerPlus* 2015, 4:95, 1-12. Doi: doi:10.1186/s40064-015-0876-z, Published 25 February 2015.
17. Jägerbrand, A.K. 2015. New Framework of Sustainable Indicators for Outdoor LED (Light Emitting Diodes) Lighting and SSL (Solid State Lighting). *Sustainability* 2015, 7(1), 1028-1063; doi:10.3390/su7011028.
18. Antonson, H., Jägerbrand, A.K., and Ahlström, C. 2015. Experiencing moose and landscape while driving: a simulator and questionnaire study. *Journal of Environmental Psychology* 41: 91-100.
19. Alatalo, J.M., Jägerbrand, A.K., and Molau, U. 2014. Climate change and climatic events: community-, functional and species-level responses of bryophytes and lichens to constant, stepwise, and pulse experimental warming in an alpine tundra. *Alpine Botany*. DOI 10.1007/s00035-014-0133-z. Special issue "Vegetation in cold environments under climate change".
20. Jägerbrand, A.K. and Alatalo, J.M. 2014. Native roadside vegetation that enhances soil erosion control in boreal Scandinavia. *Environments* 1: 31-41.
21. Alatalo, J.M., Little, C.J., Jägerbrand, A.K., and Molau, U. 2014. Dominance hierarchies, diversity and species richness of vascular plants in an alpine meadow: contrasting short and medium term responses to simulated global change. *PeerJ* 2:e406. <http://dx.doi.org/10.7717/peerj.406>
22. Jägerbrand, A.K., Alatalo, J.M., and Kudo, G. 2014. Variation in responses to temperature treatments ex situ of the moss *Pleurozium schreberi* (Willd. ex Brid.) Mitt. originating from eight altitude sites in Hokkaido, Japan. *Journal of Bryology* 36(3): 209-216.
23. Korpelainen, H., Jägerbrand, A. and von Cräutlein, M. 2012. Genetic structure of mosses *Pleurozium schreberi* (Willd. ex Brid.) Mitt. and *Racomitrium lanuginosum* (Hedw.) Brid. along altitude gradients in Hokkaido, Japan. *Journal of Bryology* 34: 309-312.
24. Jägerbrand, A.K., Kudo, G., Alatalo, J.M., and Molau, U. 2012. Effects of neighboring vascular plants on the abundance of bryophytes in different vegetation types. *Polar Science* 6(2): 200-208.
25. Jägerbrand AK, Alatalo JM, Chrimes D & Molau U. 2009. Plant community responses to five seasons of simulated environmental change at Latnjajaure, northern Sweden. *Oecologia* 161: 601-610.
26. Cornelissen et al. (many co-authors) 2007. Global negative vegetation feedback to climate warming responses of leaf litter decomposition rates in cold biomes. *Ecology Letters* 10(7): 619-627.

27. Jägerbrand AK. 2007. Effects of in situ temperature increase on the short-term growth of arctic-alpine bryophytes. *Lindbergia* 32: 82-87.
28. Jägerbrand AK. 2007. A new method for assessing dispersal and colonization of bryophytes. *Journal of Bryology* 29: 133-134.
29. Jägerbrand AK, Lindblad KEM, Björk RG, Alatalo JM & Molau U. 2006. Bryophyte and lichen diversity under simulated environmental change compared with observed variation in unmanipulated alpine tundra. *Biodiversity and Conservation* 15:4453-4475.
30. Jägerbrand AK, Jónsdóttir IS & Økland RH. 2005. Phenotypic variation at different spatial scales in relation to environment in two circumpolar bryophyte species. *Lindbergia* 30(3): 125-142.
31. Jägerbrand AK & During HJ. 2005. Effects of simulated canopy shade on growth, branching number and biomass in *Hylocomium splendens* and *Racomitrium lanuginosum*. *Lindbergia* 30(3): 117-124.
32. Jägerbrand AK. 2004. Patterns of species richness and vegetative performance in heath ecosystems at Thingvellir, Southwest Iceland. *Icelandic Agricultural Sciences* 16-17: 29-38.
33. Jägerbrand AK, Molau U & Alatalo JM. 2003. Responses of bryophytes to simulated environmental change at Latnjajaure, northern Sweden. *Journal of Bryology* 25: 163-168.

Publications in journals with international coverage

1. Jägerbrand, A.K. & Robertson K. 2013. Renewal of street and road lighting in Swedish municipalities. Full text paper in CIE Conference proceedings 2013. Proceedings of CIE Centenary Conference "Towards a New Century of Light", April 15/16 2013, Paris, France. CIE x038:2013, 1009-1015.
2. Pracki, P & Jägerbrand, AK. 2013. Application of road lighting energy efficiency evaluation system in practice. Full text paper in CIE Conference proceedings 2013. Proceedings of CIE Centenary Conference "Towards a New Century of Light", April 15/16 2013, Paris, France. CIE x038:2013, 1038-1043.
3. Jägerbrand, AK. 2013. Comparison of different light sources on pedestrian and bicycle road. Abstract at the CIE Centenary Conference "Towards a New Century of Light", April 15/16 2013, Paris, France.

Publications in books or proceedings (full papers)

- Jägerbrand, AK, Björk RG, Callaghan TV, Seppelt R. Effects of Climate Change on Tundra Bryophytes. 2011. Chapter in the book: Climate change and bryophyte ecology, (ed: Nancy Slack, Zoltan Tuba and Lloyd Stark), Cambridge University Press.

Reports or short reports

1. Robertson, K. Jägerbrand, A.K. and Tschan, G.F. 2015. Evaluation of transport interventions in developing countries. VTI Report 855A.
2. Jägerbrand, A.K., Dickinson, J., Mellin, A., Viklund, M., and Dahlberg, S. 2014. Rebound effects of energy efficiency measures in the transport sector in Sweden. VTI Report 827A.
3. Jägerbrand, A.K. och Hellman, F. 2014. Energiutvinning ur vägar och vägmiljöer. En kunskapsöversikt. VTI Rapport 821.
4. Jägerbrand, A.K. 2014. Kollisioner och olyckor med rådjur i Sverige under 10 år (2003-2012). Variation i tid, geografi och kostnader. VTI Rapport 818.

5. Jägerbrand, A. K. 2014. Trafiksäkerhets- och trygghetsaspekter i samspelet mellan gatumiljöns utformning och en mer energieffektiv belysning. VTI Rapport 816.
6. Gustafsson, S., Sörensen, G., Eriksson, O., Genell, A. och Jägerbrand, A. 2014. Ljudvarningar vid vägarbetsplatser för att uppnå sänkta hastigheter. Kartläggning och praktisk utvärdering. VTI Rapport 805.
7. Jägerbrand, A.K., Robertson, K., Andersson, H.B., Folkesson, L. 2013. Planering och beslutsprocesser för energieffektivare väg- och gatubelysning i svenska kommuner. VTI rapport R786.
8. Robertson, K., Antonson, H., Arvidsson, B., Evanth, K., Genell, A., Hvitlock, N., Jägerbrand, A., Lundin, J., Niska, A., Sörensen, G., Wennberg, H. 2013. Hållbara turistresor inom Sverige. Hinder och möjligheter för resor med tåg och buss. VTI rapport 782.
9. Janhäll, S., Genell, A., Jägerbrand, A. 2013. Trafikinformation och miljöeffekter: beräkningar av omledningseffekter. VTI rapport R785.
10. Jägerbrand, A.K., och Antonson, H. 2013. Kan viltolyckor förebyggas av körsätt? En körsimulatorstudie utförd av VTI. Slutrapport till viltvårdsfonden.
11. Arvidsson, Anna., Blomqvist, Göran., Erlingsson, Sigurdur, Hellman, Fredrik., Jägerbrand, Annika och Gudrun Öberg. 2012. Klimatanpassning av vägkonstruktion, drift och underhåll. Ett temaprojekt. VTI rapport 771.
12. Jägerbrand, A.K. 2012. Anpassning av vägmiljö som åtgärd mot viltolyckor. VTI rapport 753.
13. Hemström, Kristian, Bramryd, Torleif, Wik, Ola, Johansson, Michael, and Jägerbrand, Annika. 2012. Ackumulering av metaller i vegetation på geotekniska askkonstruktioner. Värmeforsk rapport nummer 1222.
14. Jägerbrand, A.K., and Blomqvist, G. 2012. Observationer av funktionskonflikter mellan miljö och drift och underhåll av vägar. Erfarenhet från fältresor och frågor och synpunkter inkomna till trafikverket Region Mitt, Region Väst, Region Stockholm mellan 2009-10-31 till 2011-11-01. VTI notat N3-2012.
15. Jägerbrand, A.K., and Carlson, A. 2011. Potential för en energieffektivare väg- och gatubelysning: jämförelse mellan dimning och olika typer av ljuskällor. VTI Report R722.
16. Jägerbrand, A.K. 2011. Träds inverkan på belysningseffekt på gång- och cykelvägar. VTI Report R723.
17. Gustafsson, S., Jägerbrand, A.K., Grumert, E. 2011. Hastighetsdämpande åtgärder en litteraturstudie med fokus på nya trafikmiljöåtgärder och ITS-orienterade lösningar. VTI notat N17.