

Zackenberg Bibliography (30.06.2014)

2014

Peer-reviewed papers

Barraquand, F., Høye, T.T., Henden, J.A., Sittler, B., Gilg, O., Schmidt, N.M., Yoccoz, N.G. and Ims, R.A. 2014. Demographic responses of a site-faithful and territorial predator to its fluctuating prey: long-tailed skuas and arctic lemmings. *Journal of Animal Ecology* 83: 375-387.

Bonnet, P., Gonzalez, J. and Granados, J. 2014. A Distributed Architecture for Sharing Ecological Data Sets with Access and Usage Control Guarantees. In Ames, D.P and Quinn, N. (eds). International Environmental Modelling and Software Society (iEMSs) 7th International Congress on Environmental Modelling and Software San Diego, California, USA.

Boulanger-Lapointe, N., Lévesque, E., Boudreau, S., Henry, G.H.R. and Schmidt, N.M. 2014. Population structure and dynamics of Arctic willow (*Salix arctica*) in the High Arctic. *Journal of Biogeography*. 7 June 2014. DOI: 10.1111/jbi.12350.

Burdfield-Steel, E.R. and Shuker, D.M. 2014. The evolutionary ecology of the Lygaeidae. *Ecology and Evolution* 4(11): 2278–2301. Doi: 10.1002/ece3.1093.

Falk, J. M., Schmidt, N. M. and Ström, L. 2014. Effects of simulated increased grazing on carbon allocation patterns in a high arctic mire. *Biogeochemistry*. DOI 10.1007/s10533-014-9962-5.

Hynek, B., Binder, D., Boffi, G., Schöner, W. and Verhoeven, G. 2014. Application of terrestrial 'structure-from-motion' photogrammetry on a medium-size Arctic valley glacier: potential, accuracy and limitations. *Geophysical Research Abstracts Vol. 16*, EGU2014-1783. EGU General Assembly 2014.

Høye, T.T., Eskildsen, A., Hansen, R.R., Bowden, J.J., Schmidt, N.M. and Kissling, D.W. 2014. Phenology of high-arctic butterflies and their floral resources: Species-specific responses to climate change. *Current Zoology* 60(2).

Legagneux, P., Gauthier, G., Lecomte, N., Schmidt, N.M., Reid, D., Cadieux, M-C., Berteaux, D., Béty, J., Krebs, C.J., Ims, R.A. Yoccoz, N.G., Morrison, R.I.G., Leroux, S.L., Loreau, M and Gravel, D. 2014. Arctic ecosystem structure and functioning shaped by climate and herbivore body size. *Nature Climate Change* 23 March. Doi: 10.1038/nclimate2168.

Lund, M., Hansen, B.U., Pedersen, S.H., Stiegler, C. and Tamstorf, M.P. 2014. Characteristics of summer-time energy exchange in a high Arctic tundra heath 2000-2010. *Tellus B*: in press.

Mbufong, H.N. et al 2014. Assessing the spatial variability in peak season CO₂ exchange characteristics across the Arctic tundra using a light response curve parameterization. *Biogeosciences Discussion* 11:6419-6460.

Mortensen, L.O. et al. 2014. Temporal trends and variability in a high-arctic ecosystem in Greenland: multidimensional analyses of limnic and terrestrial ecosystems. *Polar biology* 4. DOI:10.1007/s00300-014-1501-2.

Palmtag, J., Hugelius, G., Lashchinskiy, N., Tamstorf, M. P., Richter, A., Elberling, B. and Kuhry, P 2014. Mean storage, landscape distribution and burial history of soil organic matter in two contrasting areas of continuous permafrost (NE Greenland and NE Siberia). *Arctic, Antarctic and Alpine Research* (submitted).

Reneerkens, J., van Veelen, P., van der Velde, M., Luttikhuijen, P. and Piersma, T. 2014. Within-population variation in mating system and parental care patterns in the Sanderling (*Calidris alba*) in northeast Greenland. *The Auk* 131(2):235-247.

Riis, T., Christoffersen, K.S. and Baattrup-Pedersen, A. 2014. Effects of warming on annual production and nutrient-use efficiency of aquatic mosses in a high Arctic lake. *Freshwater Biology*, 24 March. DOI:10.1111/fwb.12368.

Roslin, T., O'Hara, J.E., Várkonyi, G. and Wirta, H.K. 2014. Studying tachinids at the top of the world. *The Tachinid Times* 27:4-10.

Schollert, M., Burchard, S., Faubert, P., Michelsen, A. and Rinnan, R. 2014. Biogenic volatile organic compound emissions in four vegetation types in high arctic Greenland. *Polar Biology* 37:237–249. DOI 10.1007/s00300-013-1427-0.

Wagner, B. and Bennike, O. 2014. Holocene environmental change in the Skallingen area, eastern North Greenland, based on a lacustrine record. *Boreas* 10.1111/bor.12085. ISSN 0300-9483.

Wirta, H.K., Hebert, P.D.N., Kaartinen, R., Prosser, S.W., Várkonyi, G. and Roslin, T. 2014. Complementary molecular information changes our perception of food web structure. *PNAS* 111(5):1885-1890.

Wullschleger, S.D. et al 2014. Plant functional types in Earth system models: past experiences and future directions for application of dynamic vegetation models in high-latitude ecosystems. *Annals of Botany* Page 1 of 16. 2014. Doi:10.1093/aob/mcu077.

Reports and Books

Kroon, A. 2014. Chapter 14 High-Latitude Coasts. In Masselink, G. and Gehrels, R. (eds). *Coastal Environments and Global Change*. Wiley-Blackwell 2014. ISBN: 978-0-470-65660-0. 448 pp.

Sigsgaard, C., Mylius, M.R. and Skov, K. 2014. Zackenberg Ecological Research Operations. GeoBasis - Guidelines and sampling procedures for the geographical monitoring programme of Zackenberg Basic. Department of Bioscience, Aarhus University and Department of Geosciences and Natural Resource Management, University of Copenhagen. 138 pp.

Skov, K. 2014. Spatiotemporal variability in methane emission from an Arctic fen over a growing season – dynamics and driving factors. Master Thesis, Lund University, Department of Physical Geography and Ecosystems Science. 52 pp.

World Meteorological Organization 2014. GCW CryoNet Team Meeting, 1st Session, draft report. World Meteorological Organization GCW (Global Cryosphere Watch) CryoNet Team Meeting, Reykjavik, Iceland, January 20-22, 2014. GCW Report 4 (2014). 27 pp.

2013

Peer-reviewed papers

Campioli, M., Schmidt, N.M., Albert, K.R., Leblans, N., Ro-Poulsen, H. and Michelsen, A. 2013: Does warming affect growth rate and biomass production of shrubs in the High Arctic? *Plant Ecology* 214: 1049–1058.

Citterio, M. and Ahlström, A.P. 2013. Brief Communication: The Aerophotogrammetric Map of Greenland Ice Masses. *The Cryosphere* 7(2): 445–449. Doi:10.5194/tc-7-445-2013.

Colgan, W., S. Luthcke, W. Abdalati and Citterio, M. 2013. Constraining GRACE-Derived Cryosphere-Attributed Signal to Irregularly Shaped Ice-Covered Areas. *The Cryosphere* 7(6):1901–1914.
Doi:10.5194/tc-7-1901-2013.

Eidesen, P.B., Ehrich, D., Bakkestuen, V., Alsos, I.G., Gilg, O., Taberlet, P. and Brochmann, C. 2013. Genetic roadmap of the Arctic: plant dispersal highways, traffic barriers and capitals of diversity. *New Phytologist* 200:898–910.

Elberling B., Michelsen A., Schädel C., Schuur E.A.G., Christiansen H.H., Berg L., Tamstorf M.P. and Sigsgaard, C. 2013. Long-term CO₂ production following permafrost thaw. *Nature Climate Change* 3:890-894.

Gacitúa, G., Bay, C., Pedersen, M. and Tamstorf, M. 2013. Quantifying snow and vegetation interactions in the high arctic based on ground penetrating radar (GPR). *Arctic, Antarctic and Alpine Research* 45(2):201-210.

Geilfus, N.-X., Galley, R., Hare, A., Wang, F., Søgaard, D. and Rysgaard, S. 2013. Ikaite and gypsum crystals observed in experimental and natural sea ice. *Geophysical Research Letters* 40:1-6.
Doi: 10.1002/2013GL058479.

Gilg, O., Moe, B., Hansen, S.A., Schmidt, N.M., Sittler, B., Hansen, J., Reneerkens, J., Sabard, B., Chastel, O., Moreau, J., Phillips, R.A., Oudman, T., Biersma, E.M., Fenstad, A.A., Lang, J. and Bollache, L. 2013. Trans-Equatorial Migration Routes, Staging Sites and Wintering Areas of a High-Arctic Avian Predator: The Long-tailed Skua (*Stercorarius longicaudus*). *PLoS One* 8(5):e64614.

Granados, J.A., Bonnet, P., Hansen, L.H. and Schmidt, N.M. 2013. EcoIS: An image serialization library for plot-based plant flowering phenology. *Ecological Informatics* 18:194-202.

Hugelius, G., Tarnocai, C., Bockheim, J.G., Camill, P., Elberling, B., Grosse, G., Harden, J.W., Johnson, K., Jorgenson, T., Koven, C., Kuhry, P., Michaelson, G., Mishra, U., Palmtag, J., Ping, C-L., O'Donnell, J., Schirrmeyer, L., Schuur, E.A.G., Sheng, Y., Smith, L.C., Strauss, J. and Yu, Z. 2013. A new dataset for estimating organic carbon storage to 3 m depth in soils of the northern circumpolar permafrost region. *Earth System Science Data Discussions* 6:73-93. DOI: 10.5194/essdd-6-73-2013.

Hugelius, G., Tarnocai, C., Kuhry, P., Harden, J., Ping, C-L., Schuur, E.A.G., Schirrmeyer, L., O'Donne, J., Mishra, U., Palmtag, J., Grosse, G., Michaelson, G., Strauss, J., Elberling, B., Jorgenson, T., Johnson, K. and Yu, Z. 2013. Spatially distributed estimates of soil organic carbon storage between 1 to 3 m depth in the northern circumpolar permafrost region (an extension of the Northern Circumpolar Soil Carbon Database). *Earth System Science Data* 5(1): 73-93.

Høye, T., Post, E., Schmidt, N.M., Trøjelsgaard, K. and Forchhammer, M.C. 2013. Shorter flowering seasons and declining abundance of flower visitors in a warmer Arctic. *Nature Climate Change* 3:759-763.

Høye, T.T. and Sikes, D.S. 2013. Arctic entomology in the 21st century. *Canadian Entomology* 145:125-130.

Iler, A.M., Høye, T.T., Inouye, D.W. and Schmidt, N.M. 2013. Long-term trends mask variation in the direction and magnitude of short-term phenological shifts. *American Journal of Botany* 100 (7):1398-1406.

Iler, A.M., Høye, T.T., Inouye, D.W. and Schmidt, N.M. 2013. Nonlinear flowering responses to climate: Are species approaching their limits of phenological change? *Royal Society of London, Philosophical Transactions B. Biological Sciences* 368(1624). DOI: 10.1098/rstb.2012.0489.

Josefson, A.B., Mokievsky, V., Bergmann, M., Blicher, M.E., Bluhm, B., Cochrane, S., Denisenko, N.V., Hasemann, C., Jørgensen, L. L., Klages, M., Schewe, I., Sejr, M.K., Soltwedel, T., Weslawski, J.M. and Włodarska-Kowalcuk, M. 2013. Marine Invertebrates p. 277-309. In Meltofte, H. (ed.). Arctic Biodiversity Assessment. Status and trends in Arctic biodiversity. Conservation of Arctic Flora and Fauna, Akureyri, Iceland. 674 pp. ISBN: 978-9935-431-22.

Machguth, H., Rastner, P., Bolch, T., Mölg, N., Sandberg Sørensen, L., Aðalgeirsdóttir, G., van Angelen, J.H., van den Broeke, M.R. and Fettweis, X. 2013. The Future Sea-level Rise Contribution of Greenland's Glaciers and Ice Caps. *Environmental Research Letters* 8(2):025005. Doi: 10.1088/1748-9326/8/2/025005.

Mastepanov, M., Sigsgaard, C., Tagesson, T., Ström, L., Tamstorf, M.P., Lund, M. and Christensen, T.R. 2013. Revisiting factors controlling methane emissions from high-Arctic tundra. *Biogeosciences* 10: 5139-5158.

Meltofte, H. 2013. Populations and breeding performance of divers, geese and ducks at Zackenberg, northeast Greenland, 1995-2005. *Wildfowl* 56: 129-151.

Mosbacher J. B., Schmidt N.M. and Michelsen A. 2013. Impacts of eriophyoid gall mites on arctic willow in a rapidly changing Arctic. *Polar Biology* 36: 1735–1748.

Oberbauer, S., Troxler, T., Bret-Harte, S., Elmendorf, S., Fosaa, A.M., Høye, T.T., Henry, G., Hollister, R., Jarrad, F., Jónsdóttir, I.S., Klanderud, K., Klein, J., Molau, U., Rixen, C., Rocha, A., Schmidt, N.M., Shaver, G., Slider, R., Totland, Ø., Wahren, C-H. and Welker, J. 2013. Phenological changes in tundra plants in response to climate warming using the International Tundra Experiment (ITEX) Network. *Philosophical Transactions of the Royal Society of London B* 368, 20120481.

Parmentier, F.J.W., Christensen, T.R., Sørensen, L.L., Rysgaard, S., McGuire, A.D., Miller, P.A. and Walker, D.A. 2013. The impact of a lower sea-ice extent on Arctic greenhouse-gas exchange. *Nature Climate Change* 3: 195-202. Doi: 10.1038/nclimate1784.

Pellisier, L., Meltofte, H., Hansen, J., Schmidt, N.M., Tamstorf, M.P., Maiorano, L., Aastrup, P., Olsen, J., Guisan, A. and Wisz, M.S. 2013. Suitability, success and sinks: how do predictions of nesting distributions relate to fitness parameters in high arctic waders? *Diversity and Distributions* 19: 1496-1505.

Post, E. and Høye, T.T. 2013. Advancing the long view of ecological change in tundra systems. *Philosophical Transactions of the Royal Society of London B* 368, 20120477.

Rasmussen, C., Dupont, Y.L., Mosbacher, J.B., Trøjelsgaard, K. and Olesen, J.M. 2013. Strong Impact of Temporal Resolution on the Structure of an Ecological Network. *PLoS ONE* 8(12): e81694. Doi: 10.1371/journal.pone.0081694.

Roslin, T., Wirta, H., Hopkins, T., Hardwick, B., & Várkonyi, G. (2013). Indirect interactions in the high arctic. *PloS one*, 8: e67367.

Rysgaard, S., Søgaard, D.H., Cooper, M., Pucko, M., Lennert, K., Papakyriakou, T.N., Wang, F., Geilfus, N.X., Glud, R.N., McGinnis, D.F., Attard, K., Sievers, J., Deming, J.W. and Barber, D. 2013. Ikaite crystal distribution in winter sea ice and implications for CO₂ system dynamics. *The Cryosphere* 7: 707-718.

Schädel, C., Schuur, E.A.G., Bracho, R., Elberling, B., Knoblauch, C., Lee, H., Luo, Y., Shaver, G.R. and Turetsky, M.R. 2013. Circumpolar assessment of permafrost C quality and its vulnerability over time using long-term incubation data. *Global Change Biology*. DOI: 10.1111/gcb.12417.

- Steele, J., Orsel, K., Cuyler, C., Hoberg, E.P., Schmidt, N.M. and Kutz, S.J. 2013. Divergent parasite faunas in adjacent populations of west Greenland caribou: Natural and anthropogenic influences on diversity. *International Journal for Parasitology: Parasites and Wildlife* 2:197-202.
- Tagesson, T., Mastepanov, M., Mölder M., Tamstorf, M.P., Eklundh, L., Smith, B., Sigsgaard, C., Lund, M., Ekberg, A., Falk, J. M., Friberg, T., Christensen, T.R. and Ström L. 2013. Modelling of growing season methane fluxes in a high-Arctic wet tundra ecosystem 1997[1]2010 using in situ and high-resolution satellite data. *Tellus* 65B: 19722.
- Várkonyi, G. and Roslin, T. 2013. Freezing cold yet diverse: dissecting a high-Arctic parasitoid community associated with Lepidoptera hosts. *The Canadian Entomologist* 145:193-218.
- Walker D. A., I. G. Alsos, C. Bay, N. Boulanger-Lapointe, A. L. Breen, H. Bültmann, T. Christensen, C. Damgaard, F. J. A. Daniëls, and S. Hennekens. 2013. Rescuing valuable Arctic vegetation data for biodiversity models, ecosystem models and a panarctic vegetation classification. *Arctic*, 66:133-137.
- Westergaard-Nielsen, A., Lund, M., Hansen, B. and Tamstorf, M.P. 2013. Camera derived vegetation greenness index as proxy for gross primary production in a low Arctic wetland area. *ISPRS Journal of Photogrammetry and Remote Sensing* 86: 89-99.
- Wisz M. S., J. Pottier, W. D. Kissling, L. C. Pellissier, J. Lenoir, C. F. Damgaard, C. F. Dormann, M. C. Forchhammer, J. A. Grytnes, A. Guisan, R. K. Heikkinen, T. T. Høye, I. Kühn, M. Luoto, L. Maiorano, M. C. Nilsson, S. Normand, E. Öckinger, N. M. Schmidt, M. Termansen, A. Timmermann, D. A. Wardle, P. Aastrup, and J. C. Svenning. 2013. The role of biotic interactions in shaping distributions and realised assemblages of species: implications for species distribution modelling. *Biological Reviews*, 88:15-30.
- Reports and Books**
- CAFF 2013. Arctic Biodiversity Assessment. Status and trends in Arctic biodiversity. Conservation of Arctic Flora and Fauna, Akureyri, Iceland. 678 pp.
- Callaghan, T. V., N. Matveyeva, Y. Chernov, N. M. Schmidt, R. Brooker, and M. Johansson. 2013. Arctic Terrestrial Ecosystems. Pages 227-244. Encyclopedia of Biodiversity, Volume 1. Academic Press, Waltham, MA.
- Christensen T., Payne J., Doyle M., Ibarguchi G., Taylor J., Schmidt N.M., Gill M., Svoboda M., Aronsson M. and Behe C. 2013. Arctic Terrestrial Biodiversity Monitoring Plan: Terrestrial Expert Monitoring Group, Circumpolar Biodiversity Monitoring Program. CAFF International Secretariat. Iceland.
- Forchhammer, M.C. 2013. Zackenberg - on the edge of winter. Aarhus University Press. 176 pp.
- Jensen, L.M, Rasch, M. and Schmidt, N.S. 2013. Zackenberg Ecological Research Operations, 18th Annual Report 2012. Roskilde, DCE - Danish Centre for Environment and Energy, Aarhus University, Denmark. 122 pp.
- Larsen, S.H. 2013. Surface mass and energy balance at A.P. Olsen Ice Cap (NE Greenland) from observations and modelling. Master Thesis, University of Copenhagen, Niels Bohr Institute. 77 pp.
- Nielsen, P.S. (2013). Pollinator communities in a changing Arctic. Master thesis. Aarhus University. 54pp.
- World Meteorological Organization 2013. CryoNet Implementation Meeting, 1st Session, final report. World Meteorological Organization GCW (Global Cryosphere Watch), Vienna, Austria, 20-22 November 2012. GCW Report 2 (2013), 94 pp.

General information

Danmarks Radio (2013). Isen smelter i lyntempo. DR1 21 Søndag (TV news).

Elberling, B. 2013. Ny viden om permafrost giver bedre klimamodeller. Fagligt Forum, Dansk Magisterforening. 10 December.

Fajstrup, M. (2013). Trækkende havkrydser følges af chip. Berlingske Tidende (Newspaper).

Kretz, S. (2013). Grønland sveder i høje temperaturer. DR Nyheder (Online).

Lund, M. 2013. Forskere advarer: CO₂ og methan fosser ud af tundraen i fremtiden. Ingeniøren, 15 October.

Lund, M. 2013. La toundra pourrait devenir une source d'émission de carbone. Portail Free, 14 October.

Lund, M. 2013. The Tundra: A Dark Horse in Planet Earth's Greenhouse Gas Budget. Science Daily, 10 October.

Lund, M. 2013. The Tundra's Greenhouse Gas Contribution. Red Orbit, 10 October.

Lund, M. 2013. Tundraen – en dark horse i Jordens klimaregnskab. AU Newsroom, 9 October.

Philbert, P-E. 2013. Sikkert over Zackenbergelven. Polarfronten 4:19.

Philbert, P-E. 2013. Færre insekter i Nordøstgrønland. Polarfronten 2:17.

Philbert, P-E, 2013. Zackenberg på frimærke. Polarfronten 2:24.

Skriver, J. (2013). Ny forskning giver unik viden om lille kjove på langfart. Pandion (Online).

2012

Peer-reviewed papers

Albert, K.R., Mikkelsen, T.N., Ro-Poulsen, H., Arndal, M.F., Boesgaard, K., Michelsen, A. and Schmidt, N.M. 2012. Solar UV-B effects on PSII performance in *Betula nana* are influenced by PAR level and reduced by EDU. Results of a 3-year experiment in the High Arctic. *Physiologia Plantarum* 145:485-500.

Allen, G.A., Marr, K.L., McCormick, L.J. and Hebda, R.J. 2012. The impact of Pleistocene climate change on an ancient arctic–alpine plant: multiple lineages of disparate history in *Oxyria digyna*. *Ecology and Evolution Ecology and Evolution* 2:649–665.

Boesgaard, K. S., Albert, K. R., Ro-Poulsen, H., Michelsen, A., Mikkelsen, T. N. and Schmidt, N. M. 2012. Long-term structural canopy changes sustain net photosynthesis per ground area in high arctic *Vaccinium uliginosum* exposed to changes in near-ambient UV-B levels. *Physiologia Plantarum* 145:540-550.

Callaghan, T. V., Matveyeva, N., Chernov, Y., Schmidt, N. M., Brooker, R. and Johansson, M. 2013. Arctic Terrestrial Ecosystems. In Levin, S. (ed): *Encyclopedia of Biodiversity*, 2nd Edition. Academic Press. 5504 pp.

Cazzanelli, M., Forsström, L., Rautio, M., Michelsen, A., and Christoffersen, K.S. 2012. Benthic resources are the key to *Daphnia middendorffiana* survival in a high arctic pond. *Freshwater Biology* 57:541–551.

Christiansen, C. T., Schmidt, N.M and Michelsen, A. 2012. High Arctic Dry Heath CO₂ Exchange during the Early Cold Season. *Ecosystems* 15(7):1083-1092.

- Christiansen, C. T., Svendsen, S.H., Schmidt, N.M and Michelsen, A. 2012. High arctic heath soil respiration and biogeochemical dynamics during summer and autumn freeze-in – effects of long-term enhanced water and nutrient supply. *Global Change Biology* 18(10):3224-3226.
- Elmendorf, S.C. et al. 2012. Global assessment of experimental climate warming on tundra vegetation: heterogeneity over space and time. *Ecology Letters* 15:164-75.
- Elmendorf et al. 2012. Plot-scale evidence of tundra vegetation change and links to recent summer warming. *Nature*. DOI: 10.1038/NCLIMATE1465.
- Gacitua, G., Tamstorf, M.P., Kristiansen, S.M. and Uribe, J.A. 2012. Estimations of moisture content in the active layer in an Arctic ecosystem by using ground-penetrating radar. *Journal of Applied Geophysics* 79:100-106.
- Gilg, O. et al 2012. Climate change and the ecology and evolution of Arctic vertebrates. *Annals of the New York Academy of Science* 1249:166-190.
- Gross, Michael 2012. Life changes as Polar Regions thaw. *Current Biology* 22(14):R547-R550.
- Hansen, J., Hansen, L.H., Kyhn, L.A., Schmidt, N.M. and Reneerkens, J. 2012. Bird monitoring at Zackenberg, Northeast Greenland, 2009. *Bird Populations* 11:30-41.
- Hansen, J., Hansen, L.H., Schmidt, N.M. and Reneerkens, J. 2012. Bird monitoring at Zackenberg, Northeast Greenland, 2010, with comparison with 1996-2009. *Bird Populations* 11:42-51.
- Jensen, J.F. and Krause, T. 2012. Wehrmacht occupations in the new world: archaeological and historical investigations in Northeast Greenland. *Polar Record* 48(245):269-279.
- King, R, Illian, J. B., King, S. E., Nightingale, G. F. and Hendrichsen, D. 2012. A Bayesian approach to fitting Gibbs processes with temporal random effects. *Journal of Agricultural, Biological and Environmental Statistics* 17(4):601-622.
- Krause-Jensen, D., Marbà, N., Olesen, B., Sejr, M.K., Christensen, P.B., Rodrigues, J., Renaud, P.E., Balsby, T.J. and Rysgaard, S. 2012. Seasonal sea ice cover as principal driver of spatial and temporal variation in depth extension and annual production of kelp in Greenland. *Global Change Biology* 18(10):2981-2994.
- Lund, M., Falk, J.M., Friberg, T., Mbufong, H.N., Sigsgaard, C., Soegaard, H. and Tamstorf, M.P. 2012. Trends in CO₂ exchange in a high Arctic tundra heath, 2000-2010. *Journal of Geophysical Research - Biosciences* 117: G02001. Doi:10.1029/2011JG001901.
- Masson-Delmotte, V., Seidenkrantz, M., Gauthier, E., Jomelli, V., Adalgeirsdottir, G., Arneborg, J., Bhatt, U., Bichet, V., Elberling, B., et al. 2012. Greenland Climate change: from the past to the future. *Wiley Interdisciplinary reviews – Climate change* 186:1-23.
- Meyling, N. V., Schmidt, N. M. and Eilenberg, J. 2012. Occurrence and diversity of fungal entomopathogens in soils of low and high Arctic Greenland. *Polar Biology* 35(9):1439-1445.
- Reid, D. G., Ims, R. A., Schmidt, N. M., Gauthier, G. and Ehrlich, D. 2012. Arctic Report cards: Update for 2012: Lemmings (*Lemmus* and *Dicrostonyx* spp.). <http://www.arctic.noaa.gov/reportcard/lemmings.html>

Resch, G., Weyss, G., Hynek, B., Schöner, W. and Glade, T. 2012. Quantifying the influence of refreezing melt water on the mass balance and runoff of Freya Glacier in Northeast Greenland. Geophysical Research Abstracts 14:EGU2012-12369-1.

Rysgaard, S., Søgaard, D.H., Cooper, M., Pucko, M., Lennert, K., Papakyriakou, T.N., Wang, F., Geilfus, N.X., Glud, R.N., Egn, J., McGinnis, D.F., Attard, K., Sievers, J., Deming, J.W. and Barber, D. 2012. Ikaite crystal distribution in Arctic winter sea ice and implications for CO₂ system dynamics. The Cryosphere Discuss 6:5037-5068.

Schmidt, N.M., Ims, R.A., Høye, T.T., Gilg, O., Hansen, L.H., Hansen, J., Lund, M., Fuglei, E., Forchhammer, M.C. and Sittler, B. 2012. Response of an arctic predator guild to collapsing lemming cycles. Proceedings of Royal Society 279:4417-4422. Doi: 10.1098/rspb.2012.1490.

Schmidt, N.M., Kristensen, D.K., Michelsen, A. and Bay, C. 2012. High Arctic plant community responses to a decade of ambient warming. Biodiversity 13(3/4):1-9.

Ström, L., Tagesson, T., Mastepanov, M. and Christensen, T. R. 2012. Presence of *Eriophorum scheuchzeri* enhances substrate availability and methane emission in an Arctic wetland. Soil Biology and Biochemistry 45:61-70.

Tagesson, T., Mastepanov, M., Tamstorf, M. P., Eklundh, L., Schubert, P., Ekberg, A., Sigsgaard, C., Christensen, T. R. and Ström, L. 2012. High-resolution satellite data reveal an increase in peak growing season gross primary production in a high-Arctic wet tundra ecosystem 1992-2008. International Journal of Applied Earth Observation and Geoinformation 18:407-416.

Tagesson, T., Mölder, M., Mastepanov, M., Sigsgaard, C., Tamstorf, M. P., Lund, M., Falk, J. M., Lindroth, A., Christensen, T. R. and Ström, L. 2012. Land-atmosphere exchange of methane from soil thawing to soil freezing in a high-Arctic wet tundra ecosystem. Global Change Biology 18(6):1928-1940.

J. D. Watts, et al. 2013. A satellite data driven biophysical modelling approach for estimating northern peatland and tundra CO₂ and CH₄ fluxes. Biogeosciences Discussion 10:16491-16549. Doi: 10.5194 /bgd-10-16491-2013.

Reports and Books

Hassel, K., Prestø, T., and Schmidt, N. M. 2012. Bryophyte diversity in high and low arctic Greenland: Establishment of permanent monitoring transects and bryophyte mapping in Zackenberg and Kobbefjord 2009-2010. Aarhus University, DCE - Danish Centre for Environment and Energy - Scientific Report no. 27. 44 pp.

Hopkins, T. 2012. An extended food web from Greenland – adding birds, spiders and plants to a parasitoid-lepidopteran web. Master thesis, Department of Biosciences, University of Helsinki. 38 pp.

Jensen, L.M. (ed.) 2012: Zackenberg Ecological Research Operations, 17th Annual Report, 2011 Roskilde, DCE – Danish Centre for Environment and Energy, Aarhus University, Denmark. 120 pp.

Larsen, M., Hangaard, P., Petersen, D. and Thorsøe, K. 2012. Freshwater Discharge to Young Sund. Measurements from Three Rivers. Asiaq Report 2012-17. 32 pp.

Marke, T. 2011. Glacier Mass and Energy balance Modelling. Project Report, Julius Payer Scholarship 2010, Austrian Society for Polar Research. 10 pp.

Mosbacher, J.B. 2012. Consequences of Herbivory for Tundra Plants: a case study with Eriophyoid gall mites on Arctic Willow in high-arctic Greenland. Master thesis. Department of Biology, University of Copenhagen, Copenhagen. 72 pp.

Nissen, E.L. and Rasmussen K.K. 2012: Permafrostens udvikling i Zackenberg, 1996-2001: En undersøgelse af 20 udvalgte felter i ZEROCALM-2 samt en kritisk vurdering af muligheden for at estimere fremtidige tødybder. Bachelor project. Department of Geography and Geology, University of Copenhagen, Denmark. 60 pp.

Olsen, J. 2012. Species distribution modelling in a changing high arctic landscape. The case of *Calidris alpina* - a migratory wader. Master thesis. Department of Environmental, Social and Spatial Change, Roskilde University, Roskilde. 37 pp.

Schmidt, N.M. 2012. BioBasis Manual. Conceptual design and sampling procedures of the biological monitoring programme within Zackenberg Basic. 15th edition. Zackenberg Ecological Research Operations. Department of Bioscience, Aarhus University. 110 pp.

Skovgaard, M.S. 2012. Nitrogen fixation and carbon exchange in high arctic heath – effects of experimental warming and UV-B exclusion. Master thesis. Department of Biology, University of Copenhagen. 85 pp.

Thorsøe, K., Hangaard, P., Larsen, M. and Petersen, D. 2012. Climate Basis Monitoring Programme Zackenberg, 2010-2011. Asiaq Report no. 2012-04. 31 pp.

General information

Hansen, E.S. 2012. Hvad fortæller laverne om klimaet i Grønland. Grønland 60(1):42-51.

Hansen, L.H. 2012. På moskusoksetælling ved Zackenberg/Counting musk oxen at Zackenberg. Greenland Today 14: 52-58.

Philbert, P-E. 2012. Fokus på permafrost. Polarfronten 1: 7.

Schmidt, N.M. 2012. Kälteliebende Pflanzen unter Druck. Neues Deutschland, 6 January.

Schmidt, N.M. 2012. Mossset sukker i længere arktiske somre. Politiken, 15 January.

Schmidt, N.M. 2012. Store forandringer venter Arktis. Sermitsiaq, 16 January.

Schmidt, N.M. 2012. Grøn væksteksplosion i Arktis. Berlingske Tidende, 17 April.

Schmidt, N.M. 2012. Weniger Schnee, weniger Lemminge, weniger Eulen. Der Standard, 12 September.

Schmidt, N.M. 2012. Hul i den arktiske fødekæde. Weekendavisen, 14 September.

Schmidt, N.M. 2012. Lemming Predators in Trouble. ScienceNow, 14 September.

Schmidt, N.M. 2012. Rovdyrs fødegrundlag er kollapset på Grønland. Jyllands-Posten, 21 September.

Schmidt, N.M. 2012. Fødekæderne ændrer sig dramatisk i Arktis. Videnskab.DK, 21 September.

Schmidt, N.M. 2012. Greenland Lemmings' Collapse Pushes Predators to Brink. ScienceNow, 11 November.

2011

Peer-reviewed papers

Abramson, G., Soto, C.A.T. and Oña, L. 2011. The role of asymmetric interactions on the effect of habitat destruction in mutualistic networks. PLoS ONE 6(6): e21028.

Albert, K.R., Mikkelsen, T.N., Ro-Poulsen, H., Arndal, M.F. and Michelsen, A. 2011. Ambient UV-B radiation reduces PSII performance and net photosynthesis in high Arctic *Salix arctica*. Environmental and Experimental Botany 73: 10-18.

Berg, T.B. and Pedersen, H. 2011. Gylp fra Lille Kjove og Sneugle i relation til lemmingbestanden ved Zackenberg i Nordøstgrønland. (with English summary: Pellets from Long-tailed Skuas and Snowy Owls in relation to the lemming population at Zackenberg in NE Greenland). Dansk Ornitologisk Forenings Tidsskrift 105(4): 206-210.

Blicher, M.E. and Sejr, M.K. 2011. Abundance, oxygen consumption and carbon demand of brittle stars in Young Sound and the NE Greenland shelf. Marine Ecology Progress Series 422: 139-144.

Bol, A., Haddrath, O., Luttkhuizen, P.C., Witte, H., van Bleijswijk, J., Baker, A.J., Piersma, T. and Reneerkens, J. 2011. Novel and cross-species microsatellite markers for parentage analysis in Sanderling *Calidris alba*. Journal of Ornithology 152: 807 - 810. DOI: 10.1007/s10336-011-0681-6.

Böcher, J. and Nachman, G. 2011: Coexistence of bisexual and unisexual populations of *Nysius groenlandicus* in the Zackenberg Valley, Northeast Greenland. Entomologia Experimentalis et Applicata 140(3): 196-206.

Elmendorf, S.C. et al. 2011: Global assessment of experimental climate warming on tundra vegetation: heterogeneity over space and time. Ecology Letters 2011: 1-15. Doi: 10.1111/j.1461-0248.2011.0176.x

Hansen, J. 2011. Zackenberg, Greenland, Denmark (78° 28'N, 20° 34' W). Arctic Birds 12: 43-44.

Hansen, J., Schmidt, N.M. and Reneerkens, J. 2011. Egg hatchability in high Arctic breeding wader species Charadriiformes is not affected by determining incubation stage using the egg flotation technique. Bird Study 58(4): 522-525.

Hollesen, J., Elberling, B. and Jansson, P.E. 2011. Future active layer dynamics and carbon dioxide production from thawing permafrost layers in Northeast Greenland. Global Change Biology 17(2): 911-926.

Ilmonen, J. and Várkonyi, G. 2011: First record of *Prosimulium ursinum* (Diptera: Simuliidae) in Northeast Greenland. Entomologiske Meddelelser 79(1): 27-30.

Jørgensen, A., Møbjerg, N. and Kristensen, R.M. 2011. Phylogeny and evolution of the Echiniscidae (Echiniscoidea, Tardigrada) – an investigation of the congruence between molecules and morphology. Journal of Zoological Systematics and Evolutionary Research 49: 6-16.

Kristensen, D.K., Kristensen, E., Forchhammer, M.C., Michelsen, A. and Schmidt, N.M. 2011. Arctic herbivore diet can be inferred from stable carbon and nitrogen isotopes in C3 plants, faeces, and wool. Canadian Journal of Zoology 89: 892-899.

Moles, A.T., Wallis, I.R., Foley, W.J., Warton, D.I., Stegen, J.C., Bisigato, A.J., Cella-Pizarro, L., Clark, C.J., Cohen, P.S., Cornwell, W.K., Edwards, W., Ejrnæs, R., Gonzales-Ojeda, T., Graae, B.J., Hay, G., Lumbwe, F.C., Magaña-Rodríguez, B.N., Moore, B.D., Peri, P.L., Poulsen, J.R., Veldtman, R., von Zeipel, H., Andrew N.R., Boulter, S.L., Borer, E.T., Campón, F.F., Coll, M., Farji-Brener, A.G., De Gabriel, J., Jurado, E., Kyhn,

L.A., Low, B., Mulder, C.P.H., Reardon-Smith, K., Rodríguez-Velázquez, J., Seabloom, E.W., Veske, P.A., van Cauter, A., Waldram, M.S., Zheng, Z., Blendinger, P.G., Enquist, B.J., Facelli, J.M., Knight, T., Majer, J.D., Martínez-Ramos, M., McQuillan, P. and Prior, L.D. 2011. Putting plant resistance traits on the map: a test of the idea that plants are better defended at lower latitudes. *New Phytologist* 191: 777-788.

Myers-Smith, I. M. et al. 2011. Shrub expansion in tundra ecosystems: dynamics, impacts and research priorities. *Environmental Research Letters* 6. Doi: 10.1088/1748-9326/6/4/045509.

Olesen, J. M., Bascompte, J., Dupont, Y. O., Elberling, H., Rasmussen, C. and Jordano, P. 2011. Missing and forbidden links in mutualistic networks. *Proceedings of Royal Society B* 278: 725–732. Doi: 10.1098/rspb.2010.1371.

Pedersen, J.B.T., Kroon, A. and Jakobsen, B.H. 2011. Holocene sea-level reconstruction in the Young Sound region, Northeast Greenland. *Journal of Quaternary Science* 26(2): 219-226.

Piepenburg, D., Archambault, P., Ambrose, W.G., Blanchard, A., Bluhm, B., Carroll, M.L., Conlan, K.A., Cusson, M., Feder, H.M., Grebmeier, J.M., Jewett, S.C., Levesue, M., Petryashev, V.V., Sejr, M.K., Sirenko, B.I. and Włodarska-Kowalcuk, M. 2011. Towards a pan-Arctic inventory of the species diversity of the macro and mega benthic fauna of the Arctic shelf seas. *Marine Biodiversity* 41: 51-70.

Reneerkens, J., Grond, K., Schekkerman, H., Tulp, I. and Piersma, T. 2011. Do uniparental Sanderlings *Calidris alba* increase egg heat input to compensate for low nest attentiveness? *PLoS ONE* 6(2): e16834. Doi: 10.1371/journal.pone.0016834.

Rigét, F., Tamstorf, M.P., Larsen, M.M., Søndergaard, J., Asmund, G., Falk, J.M. and Sigsgaard, C. 2011. Mercury (Hg) transport in a High Arctic river in northeast Greenland. *Water, Air and Soil Pollution* 222(1-4): 233-242.

Rysgaard, S., Bendtsen, J., Delille, B., Dieckmann, G., Glud, R.N., Kennedy, H., Mortensen, J., Papadimitriou, S., Thomas, D. and Tison, J-L. 2011. Sea ice contribution to air-sea CO₂ exchange in the Arctic and Southern Oceans. *Tellus* 63 B: 823-830. Doi: 10.1111/j.1600-0889.2011.00571.x

Santibanez, P.A., Kohshima, S., Scheihing, R.A., Silva, R., Jaramillo, J.I., Labarca, P.J., Casassa, G. 2011. First Record of Testate Amoebae on Glaciers and Description of a New Species *Puytoracia jenswendti nov sp* (Rhizaria, Euglyphida). *Acta Protozoologica* 50(1): 1-14.

Schroeder, W., Holy, M., Pesch, R., Zechmeister, H., Harmens, H. and Ilyin, I. 2011. Mapping atmospheric depositions of cadmium and lead in Germany based on EMEP deposition data and the European Moss Survey 2005. *Environmental Sciences Europe* 23(1): Article 19. Doi: 10.1186/2190-4715-23-19.

Sejr, M.K., Krause-Jensen, D., Rysgaard, S., Sørensen, L.L., Christensen, P.B. and Glud, R.N. 2011. Air-sea flux of CO₂ in arctic coastal waters influenced by glacial melt water and sea ice. *Tellus B* 63: 815-822. DOI: 10.1111/j.1600-0889.2011.00540.x

Thulin, C.-G., Englund, L., Ericsson, G. and Spong, G. 2011. The impact of founder events and introductions on genetic variation in the musk ox *Ovibos moschatus* in Sweden. *Acta Theriologica* 56: 305-314.

Tsyganova, A.N., Nijs, I. and Beyens, L. 2011. Does Climate Warming Stimulate or Inhibit Soil Protist Communities? A Test on Testate Amoebae in High-Arctic Tundra with Free-Air Temperature Increase. *Protist* 162(2): 237-248.

Wassmann, P., Duarte, C.M., Agusti, S. and Sejr, M.K. 2011. Footprint of climate change in the Arctic marine ecosystems. *Global Change Biology* 17: 1235-1249.

Weslawski, J.M., Kendall, M.A., Włodarska-Kowalcuk, M., Iken, K., Kedra, M., Legezynska, J. and Sejr, M.K. 2011. Arctic Fjord and coastal macrobenthos biodiversity. *Marine Biodiversity* 41: 71-85.

Wu, Z., Dijkstra, P., Koch, G.W., Penuelas, J. and Hungate, B.A. 2011. Responses of terrestrial ecosystems to temperature and precipitation change: a meta-analysis of experimental manipulation. *Global Change Biology* 17: 927-942.

Zechmeister, H.G., Dullinger, S., Koellensperger, G., Ertl, S., Lettner, C. and Reiter, K. 2011. Do metal concentrations in moss from the Zackenberg area, Northeast Greenland, provide a baseline for monitoring? *Environmental Science and Pollution Research* 18(1): 91-98.

Books and reports

Boulanger-Lapointe, N. 2011. Étude de populations de Saules Arctiques dans le Haut-Arctique Canadien et Groenlandais. Master thesis, University of Quebec à Trois-Rivières. 67 pp.

Faarup, S. 2011. Evapotranspiration i arktiske egne. Estimeret ved 6 forskellige metoder. Master thesis. Department of Geography and Geology, University of Copenhagen. 70 pp.

Gauthier, G. and Berteaux, D. (ed.). 2011. ArcticWOLVES: Arctic Wildlife Observatories Linking Vulnerable EcoSystems. Final synthesis report. Centre d'études nordiques, Université Laval, Quebec City, Quebec, Canada. 160 pp.

Jensen, L.M. and Rasch, M. (eds.) 2011. Zackenberg Ecological Research Operations, 16th Annual Report, 2010. DCE – Danish Centre for Environment and Energy, Aarhus University, Denmark. 134 pp.

Jensen, S. 2011. Surface air temperature gradients in Greenland – Identification, quantification, and temperature modelling. Master thesis. Department of Geography and Geology, University of Copenhagen. 70 pp.

Larsen, M., Petersen, D. and Thorsøe, K. 2011. Discharges in ice affected periods in Zackenbergelven. Asiaq Report 2011-16. 24 pp.

Nielsen, A. B. 2011. Aquatic Ecosystem Climate Response Revealed Through Retrospective Otolith Analysis of Arctic Char (*Salvelinus alpinus*, L.) from NE Greenland. Master thesis from University of Copenhagen, Denmark. 56 pp.

Rosing, M., Ingels, B., Mikkelsen, N., Elberling, B., Harper, D., Philip, A., Worsaae, T., Metz, J., Dencick, D., Riel, J., Møhl, J., Dahl, T.W., Steffensen, E., Haslund-Christensen, M., Jensen, J.F., Rasch, M., Fyllgraf, B., Munch, M., Rubaldo, S., Kirkeby, P., Tanquerelle, H., Christoffersen, K.S., Hardenberg, M., Dtouge, S., Vilstrup, K., Jensen, P.B., Lislegaard, A., Marg, V., Richeter, D., Forsberg, T., Regson, R., Leisner, V.C.W., R., T., Fremmich, A., Svendsen, S. and Bergsøe, J. 2011. Nordøstgrønlands-ekspeditionen 2011. Forlaget Ehrhorn-Hummerston, København. 195 pp.

Schmidt, N.M., Krogh, P.H. and Forchhammer, M.C. 2011. Herbivore influences on ecosystem functioning. Establishment of musk ox exclosures at Zackenberg. Aarhus University, DCE - Danish Centre for Environment and Energy. Technical report No. 2. 20 pp.

Tagesson, T. 2011: Land-atmosphere exchange of carbon in a high-Arctic wet tundra ecosystem. Doctoral Dissertation. Faculty of Science, Lund University. 141 pp.

Thorsøe, K., Hangaard, P. and Larsen, M. 2011. Climate Basis Monitoring Programme Zackenberg, 2009-2010. Asiaq Report no. 2011-13. 28 pp.

Westergaard-Nielsen, A. 2010. Pixelating plants. Spatial temporal monitoring of phenology and snow cover dynamics in Arctic using unmodified digital cameras. Master thesis. Department of Geography and Geology, University of Copenhagen. 90 pp.

Yuan, Y. 2011. "Measuring Surface Deformation Caused by Permafrost Thawing Using Radar Interferometry Case Study: Zackenberg, NE Greenland." MS diss., Delft University of Technology, Netherlands.

General information

Elberling, B. 2011. Permafrosten tør: Hvad ved vi om bidraget til det globale drivhusbudget. Grøn hverdag 1:12-16.

Elberling, B. and Rasch, M. 2011. En opdagelsesrejse med kunst og videnskab. Aktuel Naturvidenskab 6:32-35.

Forchhammer, M.C., Schmidt, N.M., Mortensen, L.O. and Nabe-Nielsen, J. 2011. Arktisk økologi under klimaændringer. Aktuel Naturvidenskab 2:6-9.

Reneerkens, J. 2011. Supersnelle Drieteen. Langeafstandstrekker en snelheidsduivel. Mens en Vogel 1, 2011. (In Dutch).

2010

Peer-reviewed papers

Agusti, S., Sejr, M.K. and Duarte, C. 2010. Impacts of climate warming on polar marine and freshwater ecosystems. *Polar Biology* 33:1595-1598.

Albert, K. R., Mikkelsen, T. N., Ro-Poulsen, H., Michelsen, A., Arndal, M. F., Bredahl, L., et al. 2010. Improved UV-B screening capacity does not prevent negative effects of ambient UV irradiance on PSII performance in high arctic plants - results from a six-year UV exclusion study. *Journal of Plant Physiology* 167(18):1542-1549.

Böcher, J. and Nachman, G. 2010. Are environmental factors responsible for geographic variation in the sex ratio of the Greenlandic seed-bug *Nysius groenlandicus*? *Entomologia Experimentalis et Applicata* 134:122-130.

Chang, M. and Bonnet, P. 2010. Monitoring in a High-Arctic Environment: Some Lessons from MANA. *IEEE Pervasive Computing* 9:16-23.

Christiansen, H. H., Etzelmüller, B., Isaksen, K., Juliussen, H., Farbrot, H., Humlum, O., Johansson, M., Ingeman-Nielsen, T., Kristensen, J., Hjort, J., Holmlund, P., Sannel, A.B.K., Sigsgaard, C., Åkerman, H. J., Foged, N., Blikra, L. H., Pernosky, M. A. and Ødegård, R. S. 2010: The thermal state of permafrost in the Nordic area during the international polar year 2007-2009. *Permafrost and Periglacial Processes* 21:156-181.

Christensen, T.R., Mastepanov, M., Johansson, M. and Charman, D. 2010. Peatland exchanges of CO₂ and CH₄: The importance of presence or absence of permafrost. *PAGES News* 18(1):29-31.

Egevang, C., Stenhouse, I.J., Phillips, R.A., Petersen, Æ., Fox, J.W. and Silk, J.R.D. 2010. Tracking of Arctic terns *Sterna paradisaea* reveals longest animal migration. *Proceedings of the National Academy of Sciences of the United States of America* 107(5):2078-2081.

- Elberling, B., Christiansen, H.H. and Hansen, B.U. 2010. High nitrous oxide production from thawing permafrost. *Nature Geoscience* 3(5):332-335.
- Godfredsen, A.B. 2010. Faunal remains from the Wollaston Forland – Clavering Ø Region, Northeast Greenland – Thule Culture subsistence in a High Arctic Polynya and ice-edge habitat. *Danish Journal of Geography* 110(2):175-200.
- Grønnnow, B. 2010: The history of archaeological research in North East Greenland: Putting the GeoArk project into perspective. *Danish Journal of Geography* 110(2):117-129.
- Hansen, E.S. and McGune, B. 2010. The lichen genus Hypogymnia in Greenland. *Folia Cryptogamica Estonica* 47:13-20.
- Hansen, J., Hansen, L.H., Schmidt, N.M. and Reneerkens, J. 2010. Bird monitoring at Zackenberg, Northeast Greenland, 2008, with comparison to 1995-2007. *Bird Populations* 10:68-78.
- Hansen, J., Hansen, L.H., Schmidt, N.M. and Reneerkens, J. 2010. Bird monitoring at Zackenberg, Northeast Greenland, 2007. *Bird Populations* 10:56-67.
- Hardenberg, M. 2010. In search of Thule children: Construction of playing houses as a means of socializing children. *Danish Journal of Geography* 110(2):201-214.
- Hollesen, J., Elberling, B. and Jansson, P. E. Future active layer dynamics and CO₂ production from thawing permafrost layers in Northeast Greenland. *Global Change Biology* 17:911–926.
- Illian, J.B. and Hendrichsen, D.K. 2010. Gibbs point processes with mixed effects. *Environmetrics* 21:341–353.
- Kroon, A., Jakobsen, B.H. and Pedersen, J.B.T. 2010. Coastal environments around Thule settlements in Northeast Greenland. *Danish Journal of Geography* 110(2):143-154.
- Miller-Rushing, A.J., Høye, T.T., Inouye, D.W. and Post, E. 2010. The effects of phenological mismatches on demography. *Philosophical Transactions of the Royal Society B: Biological Sciences* 365:3177-3186.
- Olesen, J.M., Bascompte, J., Dupont, Y.L., Elberling, H., Rasmussen, C. and Jordano, P. 2010. Missing and forbidden links in mutualistic networks. *Proceedings from the Royal Society B* 278: 725-732.
- Olesen, J. M., Dupont, Y. L., O'Gorman, E., Ings, T. C., Layer, K., Melián, C. J., et al. 2010. From broadstone to Zackenberg: space, time and hierarchies in ecological networks. *Advances in Ecological Research* 42 (C):1-69.
- Pedersen, J.B.T., Jakobsen, B.H. and Kroon, A. 2010. Optically stimulated luminescence dating of Inuit settlements structures in coastal landscapes of Northeast Greenland. *Danish Journal of Geography* 110(2): 365-371.
- Pedersen, J.B.T., Kaufmann, L.H., Kroon, A. and Jakobsen, B.H. 2010. The Northeast Greenland Sirius water polynya dynamics and variability inferred from satellite imagery. *Danish Journal of Geography* 110(2):131-142.
- Riis, T., Olesen, B., Katborg, C.K. and Christoffersen, K.S. 2010. Growth Rate of an Aquatic Bryophyte (*Warnstorffia fluitans* (Hedw.) Loeske) from a High Arctic Lake: Effect of nutrient concentration. *Arctic* 63(1):100-106.

Schmidt, N. M., Baittinger, C., Kollmann, J. and Forchhammer, M. C. 2010. Consistent dendrochronological response of the dioecious *Salix arctica* to variation in local snow precipitation across gender and vegetation types. Arctic, Antarctic and Alpine Research 42(4):471-475.

Sørensen, M. 2010: Inuit landscape use and responses to climate change in the Wollaston Forland – Clavering Ø region, North East Greenland. Danish Journal of Geography 110(2):155-174.

Woodward, G., Benstead, J.P., Beveridge, O.S., Blanchard, J., Brey, T., Brown, L.E., Cross, W.F., Friberg, N., Ings, T.C., Jacob, U., Jennings, S., Ledger, M.E., Milner, A.M., Montoya, J.M., O'Gorman, E.J., Olesen, J.M., Petchar, O.L., Pichler, D.E., Reuman, D.C., Thompson, M.S.A., Van Veen, F.J.F. and Yvon-Durocher, G. 2010. Ecological Networks in a Changing Climate. Advances in Ecological Research 40: 71-138.

Yallop, M.L. and Anesio, A.M. 2010. Benthic diatom flora in supraglacial habitats: A generic-level comparison. Annals of Glaciology 51:15-22.

Zechmeister, H. G., Dullinger, S., Koellensperger, G., Ertl, S., Lettner, C., and Reiter, K. 2010. Do metal concentrations in moss from the Zackenberg area, Northeast Greenland, provide a baseline for monitoring? Environmental Science & Pollution Research 18: 91-98.

Books and reports

Boesgaard, K. 2010. Long-term effects of reduced UV-B radiation on high arctic *Vaccinium uliginosum*. Master thesis. Institute of Biology, University of Copenhagen. 94 pp.

Christiansen, C.T. 2010. Ecosystem carbon-exchange, soil microbial biomass and nutrient availability in a high arctic semi desert during autumn freeze-in. Master thesis. University of Copenhagen. 106 pp.

Dijksterhuis, K. 2010. Een Groenlander in Afrika, de wonderbaarlijke reis van de drieteenstrandloper. Uitgeverij Bert Bakker/Prometheus, Amsterdam. 336 pp.

Egevang, C. 2010. Migration and breeding biology of Arctic Terns in Greenland. PhD thesis. Greenland Institute of Natural Resources/Institute of Biology, University of Copenhagen/National Environmental Research Institute, Aarhus University. 104 pp.

Jensen, L.M. and Rasch, M. (eds.) 2010. Zackenberg Ecological Research Operations, 15th Annual Report, 2009. National Environmental Research Institute, Aarhus University. 134 pp.

Kandrup, N. and Larsen, M. 2010. Climate Basis Monitoring Programme Zackenberg, 2008-2009. Asiaq Report no. 2010-03. 30 pp.

Mastepanov, M. 2010. Towards a Changed View on Greenhouse Gas Exchange in the Arctic. New Findings and Improved Techniques. Doctoral Dissertation, Faculty of Science, Lund University. 141 pp.

Svendsen, S.H. 2010. Effects of watering and nutrient addition on vegetation and carbon balance in a high arctic ecosystem. Master thesis. University of Copenhagen. 71 pp.

General information

Elberling, B. and Hollesen, J. 2010. Permafrosten tør - hvad ved vi om bidraget til det globale drivhusgasbudget? Geografisk Orientering 8: 27-31.

Elberling, B. 2010. Permafrost og lattergas. Aktuel Videnskab 2:6-10.

Philbert, P-E. 2010. Ude af balance. Polarfronten 1:18-19.

Rasch, M. 2010. Zackenberg udvider igen. Polarfronten 1:20.

2009

Peer-reviewed papers

Arndal, M.F., Illeris, L., Michelsen, A., Albert, K., Tamstorf, M.P. and Hansen, B. U. 2009. Seasonal Variation in Gross Ecosystem Production, Plant Biomass, and Carbon and Nitrogen Pools in Five High Arctic Vegetation Types. *Arctic, Antarctic and Alpine Research* 41(2):164-173.

Bascompte, J. 2009. Mutualistic networks. *Frontiers in Ecology and the Environment* 7:429-436.

Bascompte, J., and Stouffer, D.B. 2009. The assembly and disassembly of ecological networks. *Philosophical Transactions of the Royal Society, Biological Sciences* 364:1781-1787.

Beyens, L., Ledeganck, P., Graae, B.J. and Nijs, I. 2009: Are soil biota buffered against climatic extremes? An experimental test on testate amoebae in arctic tundra. *Polar Biology* 32(3):453-462.

Böcher, J. 2009. Fund af den grønlandske mariehøne (*Coccinella transversoguttata Falderman, 1835*) i Zackenbergdalen, Nordøstgrønland. *Entomologiske Meddelelser* 77(2):115-116. (Danish, English summary).

Dupont, Y.L., Padron, B., Olesen, J.M., and Petanidou, T. 2009. Spatio-temporal variation in the structure of pollination networks. *Oikos* 118:1261-1269.

Egevang, C., Stenhouse, I.J., Phillips, R.A., Petersen, Æ., Fox, J.W. and Silk, J.R.D. 2009. Tracking of Arctic terns *Sterna paradisaea* reveals longest animal migration. *Proceedings of the National Academy of Sciences of the United States of America* 107(5):2078-2081.

Gilg, O., Sittler, B. and Hanski, I. 2009. Climate change and cyclic predator-prey population dynamics in the high-Arctic. *Global Change Biology* 15:2634-2652.

Glud, R.N., Wöfel, J., Karsten, U., Kühl, M. and Rysgaard, S. 2009. Benthic microalgal production in the Arctic: applied methods and status of the current database. *Botanica Marina* 52:559-571.

Hansen, J., Schmidt, N.M. and Meltofte, H. 2009. Bird monitoring at Zackenberg, Northeast Greenland, 2006. *Bird Populations* 9:1-12.

Høye, T. T., Hammel, J.U., Fuchs, T. and Toft, S. 2009. Climate change and sexual size dimorphism in an Arctic spider. *Biology Letters* 5(4):542-544.

Matteo, C., Street, L.E., Michelsen, A., Shaver, G.R., Maere, T., Samson, R., and Lemeur, R. 2009. Determination of Leaf Area Index, Total Foliar N, and Normalized Difference Vegetation Index for Arctic Ecosystems Dominated by *Cassiope tetragona*. *Arctic, Antarctic and Alpine Research* 41:426-433.

McGuire, D.A., Anderson, L.G., Christensen, T.R., Dallimore, S., Guo, L., Hayes, D.J., Heimann, M., Lorenson, T.D., Macdonald, R.W. and Roulet, N. 2009. Sensitivity of the carbon cycle in the Arctic to climate change. *Ecological Monographs* 79:523-555.

Mernild, S.H., Liston, G.E., Hiemstra, C.A., Steffen, K., Hanna, E. and Christensen, J.H. 2009. Greenland Ice Sheet surface mass-balance modelling and freshwater flux for 2007, and in a 1995-2007 perspective. *Hydrological Processes* 23:2470-2484.

Post, E.S., Forchhammer, M.C., Syndonia Bret-Harte, M., Callaghan, T.V., Christensen, T.R., Elberling, B., Fox, A.D., Gilg, O., Hik, D.S., Høye, T.T., Ims, R.A., Jeppesen, E., Klein, D.R., Madsen, J., McGuire, A.D.,

Rysgaard, S., Schindler, D.E., Stirling, I., Tamstorf, M.P., Tyler, N.J.C., van der Wal, R., Welker, J., Wookey, P.A., Schmidt, N.M. and Aastrup, P. 2009. Ecological Dynamics Across the Arctic Associated with Recent Climate Change. *Science* 325:1355-1358.

Pradal, C., Olesen, J.M., and Wiuf, C. 2009. Temporal development and collapse of an Arctic plant-pollinator network. *BMC Ecology* 9:24.

Reneerkens, J. 2009. Grønlandske sandløbere på vinterophold fra Skagen til Kapstaden. *Dansk Ornitoligisk Forenings Tidsskrift* 103:97-98.

Reneerkens, J., Grond, K., Koomson, E., Ntiamo-Baidu, Y. and Piersma, T. 2009. Waarom overwinteren sommige Drieteenstrandlopers in de Waddenzee terwijl andere tropische stranden verkiezen? (Why does some Sanderlings *Calidris alba* winter in the Wadden Sea while others prefer tropical beaches?) *Limosa* 82:141-148. (in Dutch, English summary).

Reneerkens, J., Benhoussa, A., Boland, H., Collier, M., Grond, K., Günther, K., Hallgrímsson, G.T., Hansen, J., Meissner, W., de Meulenaer, B., Ntiamo-Baidu, Y., Piersma, T., Poot, M., van Roomen, M., Summers, R.W., Tomkovich, P.S. and Underhill, L.G. 2009. Sanderlings using African-Eurasian flyways: a review of current knowledge. *Wader Study Group Bulletin* 116(1):2-20.

Rysgaard, S., Bendtsen, J.B., Pedersen, L.T., Ramløv, H. and Glud, R.N. 2009. Increased CO₂ uptake due to sea-ice growth and decay in the Nordic Seas. *Journal of Geophysical Research Ocean* 114. C09011. Doi: 10.1029/2008JC005088.

Sejr, M.K., Blicher, M.E. and Rysgaard, S. 2009. Sea ice cover affects inter-annual and geographic variation in growth of the Arctic cockle *Clinocardium ciliatum* (Bivalvia) in Greenland. *Marine Ecology Progress Series* 389:149-158.

Slotsbo, S., Maraldo, K., Malmendal, A., Nielsen, N.C., and Holmstrup, M. 2009. Freeze tolerance and accumulation of cryoprotectants in the enchytraeid *Enchytraeus albidus* (Oligochaeta) from Greenland and Europe. *Cryobiology* 57:286-291.

Books and reports

Albert, K.R. 2009. Plant eco-physiological responses to multiple environmental and climate changes. PhD thesis. Department of Biology, University of Copenhagen. 374 pp.

Falk, J.M. 2009. CO₂ årsbudgettet fra to højarktiske miljøer. Zackenberg, Nordøstgrønland. Master thesis. Department of Geography and Geology, University of Copenhagen. 76 pp.

Forchhammer, M.C., Meltofte, H. and Rasch, M. 2009. *Naturen og klimaændringerne i Nordøstgrønland*. Aarhus Universitetsforlag. 128 pp.

Jensen, L.M. and Rasch, M. (eds.) 2009. Zackenberg Ecological Research Operations, 14th Annual Report, 2008. National Environmental Research Institute, Aarhus University. 116 pp.

Kristensen, D.K. 2009. Impact of muskoxen on the vegetation in the Zackenberg Valley, Northeast Greenland. Master thesis. Institute of Biology, University of Southern Denmark. 80 pp.

Hendrichsen, D.K. 2009. Population dynamics in the high Arctic: Climate variations in time and space. PhD thesis. Department of Biology, University of Copenhagen. 206 pp.

General information

- Christoffersen, K.S., Lauridsen, T.L. and Jeppesen, E. 2009. Søerne. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Elberling, B., Sigsgaard, C. and Christensen, T. R. 2009. Jordmiljøet – permafrost og kulstofomsætning. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Fog, J. and Krause, T. 2009. Kampen om vejret – battlefield-arkæologi i Grønland. Nationalmuseets Arbejdsmark 2009.
- Forchhammer, M.C., Christensen, T.R., Meltofte, H. and Rasch, M. 2009. Hvorfor studere et økosystem. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Forchhammer, M.C., Meltofte, H. and Rasch, M. 2009. Zackenberg – et økosystem under luppen. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Hansen, B.U., Stendel, M. and Buus-Hinkler, J. 2009. Klimaet ændrer sig. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Meltofte, H. 2009. Zackenberg Research Station, Northeast Greenland – 10 years of climate, flora and fauna studies. National Environmental Research Institute, Aarhus University. 16 pp.
- Meltofte, H. 2009. Forskningsstation Zackenberg I Nordøstgrønland: Ti års undersøgelser af klimaet, planter og dyrelivet. Danmarks Miljøundersøgelser, Aarhus Universitet. 16 pp.
- Meltofte, H., Forchhammer, M.C., Christensen, T.R., Rysgaard, S. and Rasch, M. 2009. Fremtidens højarktiske økosystemer. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Meltofte, H. and Rasch, M. 2009. Forskningsstation Zackenberg i Nordøstgrønland: Historien, 1991-2008. Tidsskriftet Grønland 57 (1):2-17.
- Meltofte, H., Schmidt, N.M., Høye, T.T. and Forchhammer, M.C. 2009. Trækfuglene. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Mernild, S.H. and Hasholt, B. 2009. Ferskvandsafstrømning – fra Østgrønland i en tid med klimaforandringer. GeologiskNyt 3:4-9.
- Philbert, P-E. 2009. Et spørgsmål om timing. Polarfronten 4:6-7.
- Rasch, M. and Meltofte, H. 2009. Historie, etablering og drift. In Forchhammer, M.C., Meltofte, H. and Rasch, M. *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Rysgaard, S., Sejr, M.K., Christensen, P.B., Born, E.W. and Glud, R.N. 2009. Det marine miljø. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Schmidt, N.M., Høye, T.T., Berg, T.B., Meltofte, H. and Forchhammer, M.C. 2009. Rovdyr og byttedyr. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.
- Sejr, M.K., Christensen, P.B., Rysgaard, S., Glud, R.N. and Blicher, M.E. 2009. Livet på den arktiske havbund. Aktuel Naturvidenskab 1:13-17.

Tamstorf, M.P., Høye, T.T., Illeris, L., Forchhammer, M.C. and Schmidt, N.M. 2009. Plantedækket. In Forchhammer, M.C., Meltofte, H. and Rasch, M. (eds.). *Naturen og klimaændringerne*. Aarhus Universitetsforlag. 128 pp.

2008

Peer-reviewed papers

Albert, K.R., Mikkelsen, T.N. and Ro-Poulsen, H. 2008. Ambient UV-B radiation decreases photosynthesis in the high arctic *Vaccinium uliginosum*. *Physiologia Plantarum* 133(2):199-210.

Albert, K.R., Rinnan, R., Ro-Poulsen, H., Mikkelsen, T.N., Häkansson, K.B., Arndal, M.F. and Michelsen, A. 2008. Solar ultraviolet-B radiation at Zackenberg: the impact on higher plants and soil microbial communities. pp. 421-440. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). *High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland*. Advances in Ecological Research 40. 563 pp.

Bennike, O., Sørensen, M., Fredskild, B., Jacobsen, B.H., Böcher, J., Amsinck, S.L., Jeppesen, E., Andreasen, C., Christiansen, H.H. and Humlum, O. 2008. Late quaternary environmental and cultural changes in the Wollaston Forland region, Northeast Greenland. pp. 45-79. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). *High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland*. Advances in Ecological Research 40. 563 pp.

Berg, T.B., Schmidt, N.M., Høye, T.T., Aastrup, P.J., Hendrichsen, D.K., Forchhammer, M.C. and Klein, D.R. 2008. High-arctic plant-herbivore interactions under climate influence. pp. 275-298. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). *High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland*. Advances in Ecological Research 40. 563 pp.

Bruun, H.H., Lundgren, R. and Philipp, M. 2008. Enhancement of local species richness in tundra by seed dispersal through guts of musk ox and barnacle goose. *Oecologia* 155:101-110.

Christiansen, H.H., Sigsgaard, C., Humlum, O., Rasch, M. and Hansen, B.U. 2008. Permafrost and periglacial geomorphology at Zackenberg. pp. 150-174. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). *High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland*. Advances in Ecological Research 40. 563 pp.

Christoffersen, K.S., Amsinck, S.L., Landkildehus, F., Lauridsen, T.L. and Jeppesen, E. 2008. Lake flora and fauna in relation to ice-melt, water temperature and chemistry at Zackenberg. pp. 371-389. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). *High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland*. Advances in Ecological Research 40. 563 pp.

Christoffersen, K.S., Jeppesen, E., Moorhead, D. L. and Tranvik, L. J. 2008. Food-web relationships and community structure in high-latitude lakes. In: W. F. Vincent and J. Laybourn-Parry (eds.), *Polar lakes and rivers*. Oxford, pp. 269-289.

Elberling, B., Nordstrøm, C., Grøndahl, L., Søgaard, H., Friberg, T., Christensen, T.R., Ström, L., Marchand, F. and Nijs, I. 2008. High-arctic soil CO₂ and CH₄ production controlled by temperature, water, freezing and snow. pp. 441-472. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). *High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland*. Advances in Ecological Research 40. 563 pp.

Elberling, B., Tamstorf, M.P., Michelsen, A., Arndal, M.F., Sigsgaard, C., Illeris, L., Bay, C., Hansen, B.U., Christensen, T.R., Hansen, E.S., Jakobsen, B.H. and Beyens, L. 2008. Soil and plant community-characteristics and dynamics at Zackenberg. pp. 223-248. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Ellebjerg, S.M., Tamstorf, M.P., Illeris, L., Michelsen, A. and Hansen, B.U. 2008. Inter-annual variability and controls of plant phenology and productivity at Zackenberg. pp. 249-273. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Forchhammer, M.C., Schmidt, N.M., Høye, T.T., Berg, T.B., Hendrichsen, D.K. and Post, E. 2008. Population dynamical responses to climate change. pp. 391-419. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Forchhammer, M.C., Christensen, T.R., Hansen, B.U., Tamstorf, M.P., Schmidt, N.M., Høye, T.T., Nabe-Nielsen, J., Rasch, M., Meltofte, H., Elberling, B. and Post, E. 2008. Zackenberg in a circumpolar context. pp. 499-544. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Grøndahl, L., Friberg, T., Christensen, T.R., Ekberg, A., Elberling, B., Illeris, L., Nordstrøm, C., Rennermalm, Å., Sigsgaard, C. and Søgaard, H. 2008. Spatial and inter-annual variability of trace gas fluxes in a heterogeneous high-arctic landscape. pp. 473-498. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Hansen, J., Meltofte, H. and Høye, T.T. 2008. Population fluctuations in rock ptarmigan in high-arctic Greenland. *Dansk Ornitologisk Forenings Tidsskrift* 102: 319-324.

Hansen, B.U., Sigsgaard, C., Rasmussen, L., Cappelen, J., Hinkler, J., Mernild, S.H., Petersen, D., Tamstorf, M.P., Rasch, M. and Hasholt, B. 2008. Present-day climate at Zackenberg. pp. 111-149. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Hasholt, B., Mernild, S.H., Sigsgaard, C., Elberling, B., Petersen, D., Jakobsen, B.H., Hansen, B.U., Hinkler, J. and Søgaard, H. 2008. Hydrology and transport of sediment and solutes at Zackenberg. pp. 197-221. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Hinkler, J., Hansen, B.U., Tamstorf, M.P., Sigsgaard, C. and Petersen, D. 2008. Snow and snow-cover in central Northeast Greenland. pp. 175-195. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Holfort, J., Hansen, E., Østerhus, S., Dye, S., Jonsson, S., Meincke, J., Mortensen, J. and Meredith, M. 2008. Freshwater Fluxes East of Greenland. pp 263-287. In Dickson, Robert R., Meincke, Jens and Rhines, Peter

(eds.). Arctic-Subarctic Ocean Fluxes. Defining the Role of the Northern Seas in Climate. Springer. ISBN 978-1-4020-6774-7. 748 pp.

Høye, T.T. and Forchhammer, M.C. 2008. The influence of weather conditions on the activity of high-arctic arthropods inferred from long-term observations. *BMC Ecology* 8(8):1-7.

Høye, T.T. and Forchhammer, M.C. 2008. Phenology of high-arctic arthropods: effects of climate on spatial, seasonal, and inter-annual variation. pp. 299-324. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Klein, D.R., Bruun, H.H., Lundgren, R. and Philipp, M. 2008. Climate change influences on species interrelationships and distributions in high-arctic Greenland. pp. 81-100. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Lopes, R.J., Hortas, F. and Wennerberg, L. 2008. Geographical segregation in Dunlin Calidris alpine populations wintering along the East Atlantic migratory flyway – evidence from mitochondrial DNA analysis. *Diversity and Distributions* 14: 732-741.

Mastepanov, M., Sigsgaard, C., Dlugokencky, E.J., Houweling, S., Ström, L., Tamstorf, M.P. and Christensen, T.R. 2008. Large tundra methane burst during onset of freezing. *Nature* 456 (7222):628-630.

Meltofte, H. 2008. BioBasis, a long-term biological monitoring programme at Zackenberg Research Station in high-arctic Northeast Greenland. pp. 1-16. In Hacquebord, L. and Boschman, N. (eds.) 2008: A passion for the Pole: Ethological research in Polar Regions. *Circumpolar Studies* 4.

Meltofte, H., Høye, T.T. and Schmidt, N.M. 2008. Effects of food availability, snow and predation on breeding performance of waders at Zackenberg. pp. 325-343. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Meltofte, H. and Rasch, M. 2008: The study area at Zackenberg. pp. 101-110. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.

Mernild, S.H., Hasholt, B. and Liston, G.E. 2008. Climatic control on river discharge simulations, Zackenberg River drainage basin, northeast Greenland. *Hydrological Processes* 22(12):1932-1948.

Mernild, S.H., Liston, G.E. and Hasholt, B. 2008. East Greenland freshwater runoff to the Greenland-Iceland-Norwegian Seas 1999-2004 and 2071-2100. *Hydrological Processes* 22(23):4571-4586.

Mernild, S.H., Liston, G.E., Hiemstra, C.A. and Steffen, K. 2008. Surface Melt Area and Water Balance Modelling on the Greenland Ice Sheet 1995-2005. *Journal of Hydrometeorology* 9(6):1191-1211.

Olesen, J.M., Bascompte, J., Elberling, H. and Jordano, P. 2008. Temporal dynamics in a pollination network. *Ecology* 89:1573-1582.

Rysgaard, S., Glud, R.N., Sejr, M.K., Blicher, M.E. and Stahl, H.J. 2008. Denitrification activity and oxygen dynamics in Arctic sea ice. *Polar Biology* 31:527-537.

- Samchyshyna, L., Hansson, L-A., and Christoffersen K. S., 2008. Patterns in the distribution of Arctic freshwater zooplankton related to glaciation history. *Polar Biology* DOI 10.1007/s00300-008-0482-4.
- Schmidt, N.M., Berg, T.B., Forchhammer, M.C., Hendrichsen, D.K., Kyhn, L.A., Meltofte, H. and Høye, T.T. 2008. Vertebrate predator-prey interactions in a seasonal environment. pp. 345-370. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: Ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.
- Stendel, M., Christensen, J.H. and Petersen, D. 2008. Arctic climate and climate change with a focus on Greenland. pp. 13-43. In Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (eds.). High-arctic ecosystem dynamics in a changing climate: Ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.
- Slotsbo, S., Maraldo, K., Malmendal, A., Nielsen, N.C. and Holmstrup, M. 2008. Freeze tolerance and accumulation of cryoprotectants in the enchytraeid *Enchytraeus albidus* (Oligochaeta) from Greenland and Europe. *Cryobiology* 57:286-291.
- Wennerberg, L., Marthinsen, G. and Lifjeld, J.T. 2008. Conservation genetics and phylogeography of southern dunlins *Calidris alpina schinzii*. *Journal of Avian Biology* 39:423-437.
- Books and reports**
- Anon. 2008. GeoArk 2007 – kyst, mennesker og miljø i Nordøstgrønland. - Geografi / Det Kongelige Danske Geografiske Selskab: 35-43.
- Berg, T.B. 2008. Zackenberg: an arctic pearl in the North East Greenland National Park. Rhodos. 232 pp.
- Berg, T.B. 2008. Zackenberg: en arktisk perle i den nordøstgrønlandske nationalpark. Rhodos. 232 pp.
- Klitgaard, A.B. and Rasch, M. (eds.) 2008. Zackenberg Ecological Research Operations 13th Annual Report, 2007. Danish Polar Center, Danish Agency for Science, Technology and Innovation, Ministry of Science, Technology and Innovation. 98 pp.
- Egevang, C., Stenhouse, I.J., Rasmussen, L.M., Willemoes, M. and Ugarte, F. 2008. Field report from Sand Island, Northeast Greenland 2008. Greenland Institute of Natural Resources, Nuuk.
- Meltofte, H. 2008. De første 10 år i Zackenberg. Geografi/ Det Kongelige Danske Geografiske Selskab.
- Meltofte, H. 2008. Forskningsstation Zackenberg i Nordøstgrønland: Ti års undersøgelser af klimaet, planter og dyrelivet. Danmarks Miljøundersøgelser, Aarhus Universitet. 16 pp.
- Meltofte, H. 2008. Zackenberg, Tunup Avannaani ilisimatusarfik : ukiuni qulini silap pissusaanik, naasoqassutsimik uumasoqassutsimillu misissuinerit. Danmarks Miljøundersøgelser, Aarhus Universitet. 16 pp.
- Meltofte, H., Christensen, T.R., Elberling, B., Forchhammer, M.C. and Rasch, M. (red.) 2008. High-arctic ecosystem dynamics in a changing climate: ten years of monitoring and research at Zackenberg Research Station, Northeast Greenland. *Advances in Ecological Research* 40. 563 pp.
- Mikkelsen, P.S., Nielsen, A.L., Andersen, S., Nielsen, F.P. and Vedel, M. 2008: Feltrapport fra rejsen til Nordøstgrønland 2008. Nanok. 18 pp.

General information

- Barnett, A. 2008. Methane bursts from frozen tundra. Nature News, 3 December.
- Bondo, P., Glud, R.N. and Rysgaard, S. 2008. Havisen i Arktis – en vigtig brik i det globale klima. Naturens Verden 91(5):2-9.
- Christensen, M. 2008. 74° Nord. Fjeldørredeventyr i Arktis. Sportsfiskeren 10: 74-78.
- Christensen, T. 2008. Kulstofomsætning i Zackenbergdalen. DMUNyt 9.
- Christoffersen, K.S. 2008. I den store (h)vide verden. Frederiksborg Amts Avis 3 April.
- Elberling, B., Sigsgaard, C. and Christensen, T.R. 2008. Zackenberg - jord, permafrost og kulstof. Naturens Verden 91(7/8):52-61.
- Foghsgaard, L. 2008. Når Grønland letter sig. Weekendavisen 49.
- Forchhammer, M.C. 2008. Hvordan reagerer et helt økosystem på klimaændringer. DMUNyt 9.
- Forchhammer, M.C., Christensen, T.R., Meltofte, H. and Rasch, M. 2008. Zackenberg – et holistisk studie af klimaeffekter. Naturens Verden 91(5):12-19.
- Godtfredsen, M. 2008. Klimatförändringen slår hårt mot högarktiska områden. Landsbygdens folk 62(21): 26-27.
- Hildebrandt, S. 2008. Frossen tundra prutter også metan. Videnskab.dk, 4 December.
- IPY 2008. Large methane emissions from permafrost areas during freeze-in. <http://www.ipy.org>. 4 December.
- Kahn, M. (2008) Arctic tundra emits methane even in winter. Reuters, 3 December.
- Kaufmann, L.R.H. 2008. Vandet gik i Grønland. DMI,
- Kristensen, K. 2008. Zackenbergimiut Utoqqarmiut Kangerluarsunnguannut (En lige linie fra Zackenberg til Kobbefjorden). Sermitsiaq 22 August.
- Meltofte, H. 2008. Forårets snedække og temperaturer er nøglefaktorer i det højarktiske miljø. DMUNyt 9.
- Meltofte, H. and Rasch, M. 2008. Klimaændringerne vil medføre store forandringer i Nordøstgrønlands natur. DMUNyt 9.
- Meltofte, H., Rasch, M. and Stendel, M. 2008. Allanngoriartorneq ilungersunartoq. Suluk 4:48-57.
- Meltofte, H., Rasch, M. and Stendel, M. 2008. Dramatiske forandringer. Suluk 4:48-57.
- Perkins, S. 2008. Methane even escapes from freezing permafrost. Science News, 4 December.
- Philbert, P-E. 2008. På arbejde blandt moskusokser. Videnskab.dk. 10 November.
- Philbert, P.-E. 2008. Hvad sørbunden gemmer. Polarfronten, Tillæg 4:6-7.
- Philbert, P.-E. 2008. Den usynlige hånd. Polarfronten, Tillæg 4:4-5.
- Philbert, P-E. 2008. Det spirer i Zackenberg. Polarfronten 3:6-7.

- Rasch, M. 2008. Forskningsstation Zackenberg - Siriuspatruljens mindre kendte nabo. DMUNyt 9.
- Rasch, M. 2008. Jøkelløb ved vintertide. Polarfronten 4:12.
- Rasch, M. 2008. Metan frosset ud. Polarfronten 4:4-5.
- Rasch, M. and Meltofte, H. 2008. Zackenberg – et langtidsmoniteringsprogram. Naturens Verden 91(4):24-31.
- SRON – Netherlands' Institute for Space Research 2008. Freezing tundra a source of greenhouse gas methane. 4 December.
- Stendel, M. and Meltofte, H. 2008. Klima og klimaændringer i Grønland. DMUNyt 9.
- Sørensen, B.H. 2008. Drivhusgasser vælter ud af tundra. Berlingske Tidende 4 December.
- Sørensen, B.H. 2008. Du skal bare lige 450 km nord for Ittoqqortoormiit. Berlingske Tidende, 4 December.
- Sørensen, M., Grønnnow, B., Jensen, J.F., Jakobsen, B.H., Pedersen, J.B.T., Gotfredsen, A.B., Kroon, A. and Gulløv, H.C. 2008. Hvorfor forsvandt Thulekulturen fra Nordøstgrønland? Geografisk Orientering 5:694-703.

2007

Peer-reviewed papers

- Albert, K.R., Mikkelsen, T. N. and Ro-Poulsen, H. 2007. Ambient UV-B radiation decreases photosynthesis in high arctic *Vaccinium uliginosum*. *Physiologia Plantarum* 133 (2):199-210.
- Bendtsen, J., Gustafsson, K.E., Rysgaard, S. and Vang, T. 2007. Physical conditions, dynamics and model simulations during the ice-free period of the Young Sound/ Tyrolerfjord system. pp. 45-59. In Rysgaard, S. and Glud, R.N. (eds.). Carbon cycling in Arctic marine ecosystems: Case study Young Sound. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.
- Blicher, M.E., Rysgaard, S. and Sejr, M.K. 2007. Growth and production of sea urchin *Strongylocentrotus droebachiensis* in a high-Arctic fjord, and growth along a climatic gradient (64 to 77 degrees N). *Marine Ecology Progress Series* 341:89-102.
- Born, E.W. and Acquarone, M. 2007. An estimation of walrus (*Odobenus rosmarus*) predation on bivalves in the Young Sound area (NE Greenland). pp. 175-191. In Rysgaard, S. and Glud, R.N. (eds.). Carbon cycling in Arctic marine ecosystems: Case study Young Sound. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.
- Buch, E. 2007. Physical oceanography of the Greenland Sea. pp. 13-21. In Rysgaard, S. and Glud, R.N. (eds.). Carbon cycling in Arctic marine ecosystems: Case study Young Sound. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.
- Buus-Hinkler, J., Hansen, B.U., Tamstorf, M.P. and Pedersen, S.B. 2007. Snow-vegetation relations in a High Arctic ecosystem: Inter-annual variability inferred from new monitoring and modeling concepts. *Remote Sensing of Environment* 105(3):237-247.
- Glud, R.N. and Rysgaard, S. 2007. The annual organic carbon budget of Young Sound, NE Greenland. pp. 193-203. In Rysgaard, S. and Glud, R.N. (eds.). Carbon cycling in Arctic marine ecosystems: Case study Young Sound. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.

- Glud, R.N., Rysgaard, S., Kühl, M. and Hansen, J.W. 2007. The sea ice in Young Sound: Implications for carbon cycling. pp. 61-85. In Rysgaard, S. and Glud, R.N. (eds.). Carbon cycling in Arctic marine ecosystems: Case study Young Sound. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.
- Grøndahl, L., Friborg, T. and Søgaard, H. 2007. Temperature and snow-melt controls on inter-annual variability in carbon exchange in the high Arctic. Theoretical and Applied Climatology 88(1-2):111-125.
- Høye, T.T., Ellebjerg, S.M. and Philipp, M. 2007. The impact of climate on flowering in the High Arctic – the case of Dryas in a hybrid zone. Arctic, Antarctic and Alpine Research 39(3):412-421.
- Høye, T.T., Post, E., Meltofte, H., Schmidt, N.M. and Forchhammer, M.C. 2007. Rapid advancement of spring in the High Arctic. Current biology 17(12):449-451 + Supplemental data. 4 pp.
- Krause-Jensen, D., Kühl, M., Christensen, P.B. and Borum, J. 2007. Benthic primary production in Young Sound, Northeast Greenland. pp. 159-173. In Rysgaard, S. and Glud, R.N. (eds.). Carbon cycling in Arctic marine ecosystems: Case study Young Sound. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.
- Marthinsen, G., Wennerberg, L. and Lifjeld, J.T. 2007. Phylogeography and subspecies taxonomy of dunlins (*Calidris alpina*) in western Palearctic analysed by DNA microsatellites and amplified fragment length polymorphism markers. Biological Journal of the Linnean Society 92:713–726.
- Meltofte, H. 2007. A one-year-old long-tailed skua apparently visiting its parents on its birthplace. Dansk Ornitolologisk Forenings Tidsskrift 101:121.
- Meltofte, H. and Høye, T.T. 2007. Reproductive response to fluctuating lemming density and climate of the long-tailed skua *Stercorarius longicaudus* at Zackenberg, Northeast Greenland, 1996-2006. Dansk Ornitolologisk Forenings Tidsskrift 101:109-119.
- Meltofte, H., Høye, T.T., Schmidt, N.M. and Forchhammer, M.C. 2007. Differences in food abundance cause inter-annual variation in the breeding phenology of High Arctic waders. Polar Biology 30(5):601-606.
- Meltofte, H., Piersma, T., Boyd, H., McCaffery, B., Ganter, B., Golovnyuk, V.V., Graham, K., Gratto-Trevor, C.L., Morrison, R.I.G., Nol, E., Rösner, H.-U., Schamel, D., Schekkerman, H., Soloviev, M.Y., Tomkovich, P.S., Tracy, D.M., Tulp, I. and Wennerberg, L. 2007. Effects of climate variation on the breeding ecology of Arctic shorebirds. Danish Polar Center. Bioscience 59. 46 pp.
- Meltofte, H., Sittler, B. and Hansen, J. 2007. Breeding performance of tundra birds in High Arctic Northeast Greenland 1988-2007. Arctic Birds 9:45-53.
- Mernild, S.H., Sigsgaard, C., Rasch, M., Hasholt, B., Hansen, B.U., Stjernholm, M and Petersen, D. 2007. Climate, river discharge and suspended sediment transport in the Zackenberg River drainage basin and Young Sound/Tyrolerfjord, Northeast Greenland, 1995-2003. pp. 23-43. In Rysgaard, S. and Glud, R.N. (eds.). Carbon cycling in Arctic marine ecosystems: Case study Young Sound. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.
- Mernild, S.H., Liston, G.E. and Hasholt, B. 2007. Snow-distribution and melt modelling for glaciers in Zackenberg river drainage basin, north-eastern Greenland. Hydrological Processes 21 (24):3249-3263.
- Nielsen, T.G., Ottosen, L.D. and Hansen, B.W. 2007. Structure and function of the pelagic ecosystem in Young Sound, NE Greenland. pp. 87-107. In Rysgaard, S. and Glud, R.N. (eds.). Carbon cycling in Arctic marine ecosystems: Case study Young Sound. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.

Roeselers, G., Norris, T.B., Castenholz, R.W., Rysgaard, S., Glud, R.N., Kühl, M. and Muyzer, G. 2007. Diversity of phototrophic bacteria in microbial mats from arctic hot springs (Greenland). *Environmental Microbiology* 9(1):26-38.

Rysgaard, S. and Glud, R.N. 2007. Carbon cycling and climate change: Predictions for a High Arctic marine ecosystem (Young Sound, NE Greenland). pp. 205-214. In Rysgaard, S. and Glud, R.N. (eds.). *Carbon cycling in Arctic marine ecosystems: Case study Young Sound*. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.

Rysgaard, S. and Sejr, M.K. 2007. Vertical flux of particulate organic matter in a High Arctic fjord: Relative importance of terrestrial and marine sources. pp. 109-119. In Rysgaard, S. and Glud, R.N. (eds.). *Carbon cycling in Arctic marine ecosystems: Case study Young Sound*. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.

Sejr, M.K. and Christensen, P.B. 2007. Growth, production and carbon demand of macrofauna in Young Sound, with special emphasis on the bivalves *Hiatella arctica* and *Mya truncata*. pp. 121-135. In Rysgaard, S. and Glud, R.N. (eds.). *Carbon cycling in Arctic marine ecosystems: Case study Young Sound*. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.

Tamstorf, M.P., Illeris, L., Hansen, B.U. and Wisz, M.S. 2007. Spectral measures and mixed models as valuable tools for investigating controls on land surface phenology in high arctic Greenland. *BMC Ecology* 7(9):1-16.

Thamdrup, B., Glud, R.N. and Hansen, J.W. 2007. Benthic carbon cycling in Young Sound, Northeast Greenland. pp. 137-157. In Rysgaard, S. and Glud, R.N. (eds.). *Carbon cycling in Arctic marine ecosystems: Case study Young Sound*. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.

Books and reports

Klitgaard, A.B., Rasch, M. and Caning, K. (eds.) 2007. Zackenberg Ecological Research Operations 12th Annual Report, 2006. Danish Polar Center, Danish Agency for Science, Technology and Innovation, Ministry of Science, Technology and Innovation. 104 pp.

Rysgaard, S. and Glud, R.N. (eds.) 2007. *Carbon cycling in Arctic marine ecosystems: Case study Young Sound*. Commission for Scientific Research in Greenland. Bioscience 58. 214 pp.

General information

Damsgaard, M.H. 2007. Flere planter og dyr i Grønland. Augustus 1:27-28.

Damsgaard, M.H. 2007. Tundraen optager drivhusgasser. Augustus 1:29.

Hansen, E.S. 2007. Laver sladrer om dyreliv og klimaændringer i Nordøstgrønland. Naturens Verden 90(1):22-31.

Sigsgaard, C. and Hansen, B.U. 2007. Forskningsstation Zackenberg – Geografi. Det Kongelige Danske Geografiske Selskab: 48-54.

2006

Peer-reviewed papers

Buus-Hinkler, J., Hansen, B.U., Tamstorf, M.P. and Pedersen, S.B. 2006. Snow-vegetation relations in a High Arctic ecosystem: Inter-annual variability inferred from new monitoring and modelling concepts. *Remote sensing of environment* 105(3):237-247.

Christensen, B. and Dózsa-Farkas, K. 2006. Invasion of terrestrial enchytraeids into two postglacial tundras: North-eastern Greenland and the Arctic archipelago of Canada (Enchytraeidae, Oligochaeta). *Polar Biology* 29(6):454-466.

Hansen, E.S., Dawes, P.R. and Thomassen, B. 2006. Epilithic lichen communities in High Arctic Greenland: Physical, environmental, and geological aspects of their ecology in Inglefield Land (78° - 79° N). *Arctic, Antarctic and Alpine Research* 38(1):72-81.

Meltofte, H. 2006. Populations and breeding performance of divers, geese and ducks at Zackenberg, northeast Greenland, 1995-2005. *Wildfowl* 56:129-151.

Meltofte, H. and Lahrmann, D.P. 2006. Time allocation in Greenland high-arctic waders during summer. *Dansk Ornitolologisk Forenings Tidsskrift* 100:75-87.

Meltofte, H. 2006. Wader populations at Zackenberg, high-arctic Northeast Greenland, 1996-2005. *Dansk Ornitolologisk Forenings Tidsskrift* 100:16-28.

Piersma, T., Meltofte, H., Jukema, J., Reneerkens, J., de Goeij, P. and Ekster, W. 2006. A single-year comparison of two methods of censusing breeding red knot and sanderling in High Arctic Greenland. *Wader Study Group bulletin* 109:83-87.

Rysgaard, S. and Nielsen, T.G. 2006. Carbon cycling in a high-arctic marine ecosystem – Young Sound, NE Greenland. *Progress in Oceanography* 71(2-4):426-445.

Schmidt, N.M., Baittinger, C. and Forchhammer, M.C. 2006. Reconstructing century-long snow regimes using estimates of High Arctic *Salix arctica* radial growth. *Arctic, Antarctic and Alpine Research* 38(2):257-262.

Sørensen, L.I., Holmstrup, M., Maraldo, K., Christensen, S. and Christensen, B. 2006. Soil fauna communities and microbial respiration in high Arctic tundra soils at Zackenberg, Northeast Greenland. *Polar Biology* 29:189-195.

Vadeboncoeur, Y., Kalf, J., Christoffersen, K., and Jeppesen, E. 2006. Substratum as a driver of variation in periphyton chlorophyll and productivity in lakes. *North American Benthology Society*. 25:379-392.

Wrona, F.J., Prowse, T.D., Reist, J.D., Hobbie, J.E., Lévesque, L.M.J. and Vincent, W.F. 2006. Climate change effects on aquatic biota, ecosystem structure and function. *Ambio* 35(7):359-369.

Books and reports

Alsen, P. 2006. The early Cretaceous (late Ryazanian – early Hauterivian) ammonite fauna in North-East Greenland: Taxonomy, biostratigraphy, and biogeography. Oslo. Taylor and Francis. *Fossils & Strata* 53. 229 pp.

Callaghan, T.V., Rudels, B. and Tweedie, C.E. 2006. International review of the Zackenberg Research Station. 27 pp.

Grøndahl, L. 2006. Carbon dioxide exchange in the High Arctic: Examples from terrestrial ecosystems. PhD thesis. National Environmental Research Institute, Roskilde.

Hansen, J. and Meltofte, H. 2006. Zackenberg, Greenland, Denmark ($74^{\circ}28'N$, $20^{\circ}34'W$). *Arctic Birds* 8:42.

Klitgaard, A.B., Rasch, M. and Caning, K. (eds.) 2006. Zackenberg Ecological Research Operations. 11th Annual Report, 2005. Danish Polar Center, Ministry of Science, Technology and Innovation. 111 pp.

Schmidt, N.M. 2006. Climate, agriculture and density-dependent dynamics within and across trophic levels in contrasting ecosystems. PhD thesis. Department of Ecology, Royal Veterinary and Agricultural University, Copenhagen. 130 pp.

General information

Bondo, P. 2006. Laborant langt ude i kulden. *Laboranten* 50(2):14-19.

Dalager, L. 2006. Bliver det 12 grader koldere i Danmark? *Politiken* 12 September.

Meltofte, H. and Madsen, J. 2006. Det Internationale Polarår – et kvantespring fremad. *Jyllands-Posten* 12 June.

Meltofte, H. and Madsen, J. 2006. Det Internationale Polarår 2007-09 (Naalagaaffit assigiaqngitsut 2007-09-mi issittulerinissaat). AG Grønlandsposten 20 June.

Person, M. 2006. Ons ijs is jullie probleem. *de Volkskrant Holland* 23 december.

2005

Peer-reviewed papers

Albert, K.R., Mikkelsen, T.N. and Ro-Poulsen, H. 2005. Effects of ambient versus reduced UV-B radiation on high arctic *Salix arctica* assessed by measurements and calculations of chlorophyll *a* fluorescence parameters from fluorescence transients. *Physiologia Plantarum* 124(2):208-226.

Albert, K.R., Ro-Poulsen, H., Mikkelsen, T.N., Bredahl, L. and Haakansson, K.B. 2005. Effects of reducing the ambient UV-B radiation in the High Arctic on *Salix arctica* and *Vaccinium uliginosum*. *Phyton* 45:41-49.

Alsen, P. and Rawson, P.F. 2005. The early Valanginian (Early Cretaceous) ammonite Delphinites (Pseudogarnieria) from North-East Greenland. *Bulletin of the Geological Society of Denmark* 52:201-212.

Alsos, I.G., Engelskjøn, T., Gielly, L., Taberlet, P. and Brochmann, C. 2005. Impacts of ice ages on circumpolar molecular diversity: Insights from an ecological key species. *Molecular Ecology* 14: 2739-2753.

Forchhammer, M.C., Post, E., Berg, T.B.G., Høye, T.T. and Schmidt, N.M. 2005. Local-scale and short-term herbivore-plant spatial dynamics reflect influences of large-scale climate. *Ecology* 86:2644-2651.

Harper, D.A.T., Alsen, P., Owen, E.F. and Sandy, M.R. 2005. Early Cretaceous brachiopods from North-East Greenland: Biofacies and biogeography. *Bulletin of the Geological Society of Denmark* 52:213-225.

Marchand, F.L., Mertens, S., Kockelbergh, F., Beyens, L. and Nijs, I. 2005. Performance of high arctic tundra plants improved during but deteriorated after exposure to a simulated extreme temperature event. *Global Change Biology* 11:2078-2089.

Reneerkens, J., Piersma, T., Jukema, J., De Goeij, P., Bol, A., and Meltofte, H. 2005. Sex-ratio and body size of sandpiper chicks at Zackenberg, northeast Greenland in 2003. *Wader Study Group Bulletin* 106:12-16.

Rennermalm, A.K., Soegaard, H. and Nordstroem, C. 2005. Inter-annual variability in carbon dioxide exchange from a High Arctic fen estimated by measurements and modelling. *Arctic, Antarctic and Alpine Research* 37(4):545-556.

Rinnan, R., Keinänen, M.M., Kasurinen, A., Asikainen, J., Kekki, T.K., Holopainen, T., Ro-Poulsen, H., Mikkelsen, T.N. and Michelsen, A. 2005. Ambient ultraviolet radiation in the Arctic reduces root biomass and alters microbial community composition but has no effects on microbial biomass. *Global Change Biology* 11:564-574.

Safargaleev, V., Sergienko, T., Nilsson, H., Kozlovsky, A., Massetti, S., Osipenko, S. and Kotikov, A. 2005. Combined optical, EISCAT and magnetic observations of an auroral torch and Ps6 pulsations in the late morning hours: a case study. *Annales Geophysicae* 23:1821-1835.

Thorup, O. and Meltofte, H. 2005. Zackenberg, Greenland, Denmark (74°28'N, 20°34'W). *Arctic Birds* 7: 36.

Books and reports

Elberling, B. 2005. Subsurface oxygen consumption: Environmental controls and impacts. Det Kongelige Danske Geografiske Selskab. 137 pp. (*Folia Geographica Danica* 23).

Forskning uten spor 2005. Integrering av miljøhensyn i forsknings- og utdanningssektoren – Grønland, Island og Svalbard. København, Nordisk Ministerråd, 2005. 163 pp. (TemaNord 2005:547).

Heal, O.W., Bayfield, N., Callaghan, T.V., Høye, T.T., Järvinen, A., Johansson, M., Kohler, J., Magnusson, B., Mortensen, L., Neuvonen, S., Rasch, M. and Saelthun, N.R. 2005. SCANNET: a Scandinavian-North European network of terrestrial field bases. pp 359-364. In D.B.A. Thompson, M.F. Price and C.A. Galbraith (eds.). Mountains of northern Europe.

Hjort, C. and Häkansson, L. 2005. A cosmogenic approach to the glacial history of Greenland. In Polarforskningssekretariats Årsbok 2004:103-108.

Jensen, C.W. 2005. Undersøgelse over grønlandske svampe mygs (Diptera: Mycetophilidae) flyveaktivitet i relation til klimatiske faktorer baseret på indsamlinger fra Zackenbergdalen, Nordøstgrønland. Institut for Biologi og Kemi, Roskilde Universitetscenter. 45 pp.

Rasch, M. and Caning, K. (eds.) 2005. Zackenberg Ecological Research Operations, 10 th Annual Report, 2004. Danish Polar Center, Ministry of Science, Technology and Innovation. 85 pp.

Sigsgaard, C. 2005. GeoBasis Guidelines and sampling procedures for the geographical monitoring programme of Zackenberg Basic. National Environmental Research Institute and Institute of Geography, University of Copenhagen. 108 pp.

General information

Andersen, P. 2005. Naturen reagerer hurtigt på varmere klima. Berlingske Tidende 7 October.

Elberling, B. 2005. Jordbund og klima på Grønland. *Geografisk orientering* 35(4):170-175.

Grossman, D. 2005. Observing those who observe. *Nieman Reports* 59(4):80-85.

Grønnow, B., Jakobsen, B.H. and Møller, H.S. 2005. Hvad ødemarken gemte. *Weekendavisen* 11.-17. November.

Jessen, M.-A. 2005. En gave til de kommende generationer: den grønlandske nationalparks fortid, nutid og fremtid. *Geografisk Orientering* 35(4):190-195.

Kyhn, L.A. 2005. Polarrævens fødesøgningsstrategi – eller kunsten at lære at fange en polarræv. Grønland 53(2-3):78-84.

Mikkelsen, P. 2005. Zackenberg databasen. Fønix 4:4-5.

Odgaard, J. 2005. Forskere med på Greenpeace' Grønlands-ekspedition. Sermitsiaq 8 July.

Rasch, M. 2005. Klimaforskning ved Forskningsstation Zackenberg. Geografisk Orientering 35 (4):158-160.

Rasch, M. 2005. Nyt tag over hovedet. Polarfronten 2:18.

Sønderriis, E. 2005. Foråret kommer pludseligt til Grønland. Information 18 August.

2004

Peer-reviewed papers

Bredahl, L., Ro-Poulsen, H. and Mikkelsen, T.N. 2004. Reduction of the ambient UV-B radiation in the high-Arctic increases Fv/Fm in *Salix arctica* and *Vaccinium uliginosum* and reduces stomatal conductance and internal CO₂ concentration in *Salix arctica*. Arctic, Antarctic and Alpine Research 36(3):364-369.

Callaghan, T.V., Johansson, M., Heal, O.W., Sælthun, N.R., Barkved, L.J., Bayfield, N., Brandt, O., Brooker, R., Christiansen, H.H., Forchhammer, M., Høye, T.T., Humlum, O., Järvinen, A., Jonasson, C., Kohler, J., Magnusson, B., Meltofte, H., Mortensen, L., Neuvonen, S., Pearce, I., Rasch, M., Turner, L., Hasholt, B., Huhta, E., Leskinen, E., Nielsen, N. and Siikamäki, P. 2004. Environmental changes in the North Atlantic region: SCANNET as a collaborative approach for documenting, understanding and predicting changes. In The ACIA international scientific symposium on climate change in the Arctic: Extended abstracts. Reykjavik, Iceland, 9-12 November 2004.

Christiansen, H.H. 2004. Meteorological control on inter-annual spatial and temporal variations in snow cover and ground thawing in two Northeast Greenlandic circumpolar-active-layer-monitoring (CALM) sites. Permafrost and Periglacial Processes 15:155-169.

Elberling, B., Jakobsen B.H., Berg, P., Søndergaard, J. and Sigsgaard, C. 2004. Influence of vegetation, temperature, and water content on soil carbon distribution and mineralization in four high Arctic soils. Arctic, Antarctic and Alpine Research 36(4):528-538.

Glud, R.N., Rysgaard, S., Fenchel, T. and Nielsen, P.H. 2004. A conspicuous H₂S oxidizing microbial mat from a high Arctic fjord (Young Sound, NE Greenland). Marine Biology 145: 51-60.

Marchand, F.L., Nijs, I., Heuer, M., Mertens, S., Kockelbergh, F., Pontailler, J.-Y., Impens, I. and Beyens, L. 2004. Climate warming postpones senescence in high arctic tundra. Arctic, Antarctic and Alpine Research 36(4):390-394.

Marchand, F., Nijs, I. and Beyens, L. 2004. Effects on the carbon balance of high-Arctic tundra: Entire growing season warming versus heat wave exposure. In The ACIA international scientific symposium on climate change in the Arctic. Extended abstracts. Reykjavik, Iceland, 9-12 November 2004.

Marchand, F.L., Nijs, I., de Boeck, H.J., Kockelbergh, F., Mertens, S. and Beyens, L. 2004. Increased turnover but little change in the carbon balance of high-arctic tundra exposed to whole growing season warming. Arctic, Antarctic and Alpine Research 36(3):298-307.

Meltofte, H. 2004. Estimating wader populations in High Arctic Greenland. International Wader Studies 14:132-134.

- Meltofte, H. and Berg, T.B. 2004. Post-breeding phenology of waders in central NE Greenland. Wader Study Group bulletin 104:22-27.
- Meltofte, H., Piersma, T., Boyd, H., McCaffery, B., Golovnyuk, V.V., Graham, K., Morrison, R.I.G., Nol, E., Schamal, D., Schekkerman, H., Soloviev, M.Y., Tomkovich, P.S., Tracy, D., Tulp, I. and Wennerberg, L. 2004. Vulnerability of Arctic shorebirds to climate variability and change. In The ACIA international scientific symposium on climate change in the Arctic: Extended abstracts. Reykjavik, Iceland, 9-12 November 2004.
- Rasch, M., Hansen, B.U., Meltofte, H., Petersen, D., Rysgaard, S. and Tamstorf, M.P. 2004. Zackenberg basic: Monitoring of ecosystem dynamics in high-Arctic Northeast Greenland. In The ACIA international scientific symposium on climate change in the Arctic: Extended abstracts, Reykjavik, Iceland, 9-12 November 2004.
- Rysgaard, S. and Glud, R.N. 2004. Anaerobic N₂ production in Arctic sea ice. Limnology and Oceanography 49(1):86-94.
- Rysgaard, S., Glud, R.N., Risgaard-Petersen, N. and Dalsgaard, T. 2004. Denitrification and anammox activity in Arctic sediments. Limnology and Oceanography 49:1493-1502.
- Rysgaard, S. 2004. Ecosystem changes in high Arctic marine ecosystems. In The ACIA international scientific symposium on climate change in the Arctic: Extended abstracts. Reykjavik, Iceland, 9-12 November 2004.
- Sejr, M.K., Petersen, J.K., Jensen, K.T. and Rysgaard, S. 2004. Effect of food concentration on clearance rate and energy budget of the Arctic bivalve *Hiatella arctica* (L) at sub-zero temperature. Journal of Experimental Marine Biology and Ecology 311:171-183.
- Soegaard, H., Sørensen, L., Rysgaard, S., Grøndahl, L., Elberling, B., Friberg, T., Larsen, S.E. and Bendtsen, J. 2004. High Arctic carbon sinks identification – a systems approach. Global Change Newsletter 59: 11-14.
- Books and reports**
- Albert, K.R. 2004. Effects of reducing the ambient UV-B radiation on the photosynthetic performance of *Salix arctica* and *Vaccinium uliginosum* in High Arctic Greenland. Master thesis. Biological Institute, University of Copenhagen. 189 pp.
- Meltofte, H. 2004. Zackenberg, Greenland, Denmark (74°28'N, 20°34'W).Arctic Birds 6:26.
- Meltofte, H. and Berg, T. B. 2004. BioBasis Conceptual design and sampling procedures of the biological programme of Zackenberg Basic 7th edition. National Environmental Research Institute, Department of Arctic Environment. 90 pp.
- Rasch, M. and Caning, K. (eds.) 2004. Zackenberg Ecological Research Operations. 9th Annual Report, 2003. Danish Polar Center, Ministry of Science, Technology and Innovation. 91 pp.
- Reiersen, L.-O. and Wilson, S. 2004. Monitoring of climate change effects: the AMAP trends and effects monitoring programme 1998-2003. pp. 45-46. In S. Gerland and B. Njåstad (eds.). Arctic climate feedback mechanisms.
- General information**
- Berg, T.B. 2004. Halsbåndlemmingen og dens populationsdynamik. Naturens Verden 87(1):18-27.
- Ejsing, J. 2004. Grønland får sved på panden. Berlingske Tidende, 24 June.
- Ejsing, J. 2004. Grønland gør klar til hedetur. Berlingske Tidende, 5 November.

- Krarup, P. 2004. Regentparret i det grønne. Sermitsiaq 28.
- Philbert, P.-E. 2004. Metan i kæret. Polarfronten 2:8-9.
- Philbert, P.-E. 2004. Rugekassen i Zackenberg. Polarfronten 2:18.
- Reneerkens, J. and Piersma, T. 2004. Strandlopers op de toendra. Natuurwetenschap & Techniek 72:40-44.

2003

Peer-reviewed papers

- Berg, P., Rysgaard, S. and Thamdrup, B. 2003. Dynamic modelling of early diagenesis and nutrient cycling: a case study in Arctic marine sediment. American Journal of Science 303:905-955.
- Berg, T.B. 2003. Catechin content and consumption ratio of the collared lemming. Oecologia 135:242-249.
- Born, E.W., Rysgaard, S., Ehlmé, G., Sejr, M., Acquarone, M. and Levermann, N. 2003. Underwater observations of foraging free-living walruses (*Odobenus rosmarus*) including estimates of their food consumption. Polar Biology 26(5):348-357.
- Christensen, T.R., Joabsson, A., Strom, L., Panikov, N., Masteponov, M., Oquist, M., Svensson, B.H., Nykanen, H., Martikainen, P. and Oskarsson, H. 2003. Factors controlling large scale variations in methane emissions from wetlands. Geophysical Research Letters 30:1414.
- Elberling, B. and Brandt, K.K. 2003. Uncoupling of microbial CO₂ production and release in frozen soil and its implications for field studies of arctic C cycling. Soil Biology & Biochemistry 35(2): 263-272.
- Hansen, A.S., Nielsen, T.G., Levinse, H., Madsen, S.D., Thingstad, F. and Hansen, B.W. 2003. Impact of changing ice cover on pelagic productivity and food web structure in Disko Bay, west Greenland: A dynamic model approach. Deep Sea Research 50:171-187.
- Illeris, L., Michelsen, A. and Jonasson, S. 2003. Soil plus root respiration and microbial biomass following water, nitrogen, and phosphorus application at a high arctic semi desert. Biogeochemistry 65:15-29.
- Jeppesen, E., Jensen, J. P., Jensen, C., Faafeng, B., Hessen, D. O., Søndergaard, M., Lauridsen, T., Brettum, P., and Christoffersen, K. 2003. The impact of nutrient state and lake depth on top-down control in the pelagic zone of lakes: study of 466 lakes from the temperate zone to the Arctic. Ecosystems 6:313-325.
- Levermann, N., Galatius, A., Ehlmé, G., Rysgaard, S. and Born, E.W. 2003. Feeding behaviour of free-ranging walruses with notes on apparent dextrality on flipper use. BMC Ecology 3:9.
- Petersen, J.K., Sejr, M.K. and Larsen, J.E.N. 2003. Clearance rates in the arctic bivalves *Hiatella arctica* and *Mya truncata*. Polar Biology 26(5):334-341.
- Risgaard-Petersen, N., Nielsen, L.P., Rysgaard, S., Dalsgaard, T. and Meyer, R.L. 2003. Application of the isotope pairing technique in sediments where anammox and denitrification co-exist. Limnology and Oceanography Methods 1:63-73.
- Rysgaard, S., Vang, T., Stjernholm, M., Rasmussen, B., Windelin, A. and Kiilsholm, S. 2003. Physical conditions, carbon transport, and climate change impacts in a Northeast Greenland fjord. Arctic, Antarctic and Alpine Research 35(3):301-312.

Strom, L., Ekberg, A. and Christensen, T.R. 2003. Species-specific effects of vascular plants on carbon turnover and methane emissions from a tundra wetland. *Global Change Biology* 9: 1185-1192.

Vadeboncoeur, Y., Jeppesen, E., van der Zanden, M.J., Schierup, H.-H., Christoffersen, K. and Lodge, D.M. 2003. From Greenland to green lakes: Cultural eutrophication and the loss of benthic pathways in lakes. *Limnology and Oceanography* 48: 1408-1418.

Books and reports

Alsos, I.G. 2003. Conservation biology of the most thermophilous plant species in the Arctic: genetic variation, recruitment and phylogeography in a changing climate. Doctor thesis. University of Tromsø, Norway. 200 pp.

Berg, T.G.B. 2003. The collared lemming (*Dicrostonyx groenlandicus*) in Greenland: population dynamics and habitat selection in relation to food quality. PhD. thesis. National Environmental Research Institute. 126 pp.

Berg, T.B. 2003. Habitat selection and feeding ecology by the collared lemming. *Apodemus* 7: 15-16.

Bredahl Johansen, L. 2003. Plantefysiologiske effekter af ambient UV-B stråling på to arter i Nordøst Grønland. Institute of Biology, University of Copenhagen.

Caning, K. and Rasch, M. (eds.) 2003. Zackenberg Ecological Research Operations 7th Annual Report, 2001. Danish Polar Center, Ministry of Science, Technology and Innovation. 75 pp.

Karlsen, H.G. and Larsen, J.N. 2003. Palnatoke og Lindemansgletcheren: glaciologisk forprojekt i Zackenberg 2002. Asiaq rapport 2003-1. 20 pp.

Larsen, J.N. and Karsen, H.G. 2003. GPR snow cover survey. Asiaq rapport 2003-4.

Massetti, S., Candidi, M., Cerulli-Irelli, P. and Orsini, S. 2003. Studio dell'attività aurorale ad alta latitudine e le relazioni terra-sole. Polarnet technical report 2: 18-19.

Rasch, M. and Caning, K. (eds.) 2003. Zackenberg Ecological Research Operations 8th Annual Report, 2002. Danish Polar Center, Ministry of Science, Technology and Innovation. 80 pp.

General information

Andersen, P. 2003. Lemminger er ikke selvmordspiloter. *Berlingske Tidende*, 5. sektion, 5 November.

Berg, T.B. 2003. Den nordøstgrønlandske halsbåndlemming og dens populationsdynamik. *Årsskrift Dansk Naturhistorisk Forening* 13: 35-41.

Bondo, P. 2003. Tøbrud over Arktis. *Information*, 1 April.

Christensen, P.B. 2003. Tøbrud over Arktis. *Information*, 1 April.

Ejsing, J. 2003. Luffe bruger højre luffe - interview. *Berlingske Tidende*, 23 October.

Jastrup, M. 2003. Hvalrossen bruger højre hånd. *Politiken*, 22 October.

Jastrup, M. 2003. Lemminger vil også gerne leve. *Politiken*, 9 November.

Kyhn, L.A. 2003. Et feltstudium af halsbåndlemmingen i Nordøstgrønlands Nationalpark. *Årsskrift Dansk Naturhistorisk Forening* 13: 46-49.

- Levermann, N. 2003. Hvad fik hvalrossen til middag? Årsskrift Dansk Naturhistorisk Forening 13:50-54.
- Mernild, S.H. 2003. Hydrological modelling at eastern Greenland. Measurement 26:6-7.
- Pedersen, H. 2003. Grønlands varmeste kilde. Polarfronten 3: 4-5.
- Pedersen H. 2003. Havisen smelter. pp. 74-79. In Pedersen, H. Det ukendte Grønland: De 10.000 arters land.
- Pedersen H. 2003. Lemmingen er nøglen. pp. 64-65. In Pedersen, H. Det ukendte Grønland: De 10.000 arters land.
- Pedersen H. 2003. Lys og varme til plankton og ørreder. pp. 52-55. In Pedersen, H. Det ukendte Grønland: De 10.000 arters land.
- Pedersen H. 2003. Sne, is, planter og dyr. pp. 18-25. In Pedersen, H. Det ukendte Grønland: De 10.000 arters land.
- Pedersen H. 2003. Tundraen går amok. pp. 80-81. In Pedersen, H. Det ukendte Grønland: De 10.000 arters land.
- Pedersen, P.L. 2003. Zackenberg siunissarlu = Zackenberg og fremtiden. Nutaarsiassat Asiaq 1:10-14.
- Rasch, M. 2003. Zackenberg - et dansk bidrag til international klimaforskning. Polarfronten 2:15.
- Wilken, U. 2003. Ædedolkene i Østgrønland. pp. 20-23. In Wilken, U. Strømninger i Nordatlanten: en præsentation af Det Nordiske Forskningsprogram.

2002

Peer-reviewed papers

- Borum, J., Pedersen, M.F., Krause-Jensen, D., Christensen, P.B. and Nielsen, K. 2002. Biomass, photosynthesis and growth of *Laminaria saccharina* in a high-arctic fjord, NE Greenland. Marine Biology 141:11-19.
- Christensen, T.R., Lloyd, D., Svensson, B., Martikainen, P., Harding, R., Oskarsson, H., Friberg, T., Soegaard, H. and Panikov, N. 2002. Biogenic controls on trace gas fluxes in northern wetlands. IGBP global change newsletter 51:9-15.
- Christiansen, H.H., Bennike, O., Böcher, J., Elberling, B., Humlum, O. and Jakobsen, B.H. 2002. Holocene environmental reconstruction from deltaic deposits in Northeast Greenland. Journal of Quaternary Science 17(2):145-160.
- Eyre, B., Rysgaard, S., Dalsgaard, T. and Christensen, P.B. 2002. Comparison of isotope pairing and N₂: Are methods for measuring sediment denitrification – assumptions, modifications and implications. Estuaries 25:1077-1087.
- Glud, R.N., Kühl, M., Wenzhöfer, F. and Rysgaard, S. 2002. Benthic diatoms of a high arctic fjord (Young Sound NE Greenland): importance for ecosystem primary production. Marine Ecology Progress Series 238:15-29.
- Glud, R.N., Rysgaard, S. and Kühl, M. 2002. Oxygen dynamics and photosynthesis in ice algae communities: quantification by microsensors, O₂ exchange rates, ¹⁴C-incubations and PAM-fluorometer. Aquatic Microbial Ecology 27:301-311.

- Hinkler, J., Pedersen, S.B., Rasch, M. and Hansen, B.U. 2002. Automatic snow cover monitoring at high temporal and spatial resolution, using images taken by a standard digital camera. International Journal of Remote Sensing 23(21):4669-4682.
- Levinsen, H. and Nielsen, T.G. 2002. The trophic role of marine pelagic ciliates and heterotrophic dinoflagellates in arctic and temperate coastal ecosystems: a cross-latitude comparison. Limnology and Oceanography 47: 427-439.
- Niehoff, D., Madsen, S.D., Hansen, B.W. and Nielsen, T.G. 2002. Reproductive cycles of three dominant Calanus species in Disko Bay, west Greenland. Marine Biology 140:567-576.
- Post, E. and Forchhammer, M.C. 2002. Synchronization of animal population dynamics by large-scale climate. Nature 420(6912):168-171.
- Roberts, R., Glud, R.N., Kühl, M. and Rysgaard, S. 2002. Primary production of crustose coralline red algae in a high arctic fjord. Journal of Phycology 38: 1-11.
- Schmidt, N.M., Berg, T.B. and Jensen, T.S. 2002. The influence of body mass on daily movement patterns and home ranges of the collared lemming (*Dicrostonyx groenlandicus*). Canadian Journal of Zoology 80(1):64-69.
- Sejr, M.K., Jensen, K.T. and Rysgaard, S. 2002. Annual growth bands in the bivalve *Hiatella arctica* validated by a mark-recapture study in NE Greenland. Polar Biology 25: 794-796.
- Sejr, M.K., Sand, M.K., Jensen, K.T., Petersen, J.K., Christensen, P.B. and Rysgaard, S. 2002. Growth and production of *Hiatella arctica* (Bivalvia) in high arctic Young Sound, Northeast Greenland. Marine Ecology Progress Series 244: 163-169.
- Trappeniers, K., Van Kerckvoorde, A., Chardez, D., Nijs, I. and Beyens, L. 2002. Testate amoebae assemblages from soils in the Zackenberg area, Northeast Greenland. Arctic, Antarctic and Alpine Research 34(1):94-101.

Books and reports

- Falk-Petersen, S., Hop, H., Shimmield, G., Rysgaard, S., Lindahl, O., and Hanelt, D. 2002. Envinet marine sites: Report on programmes for long term data collection. Norwegian Polar Institute.
- Hansen, E.S. 2002. Lichenes Groenlandici exsiccati: Fasc. XXI (nos. 801-825) and Fasc. XXII (nos. 826-850). Botanisk Museum. 28 pp.
- Meltofte, H.(ed.) 2002. Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland. DMU (Tema-rapport fra DMU; 41/2002). 88 pp.
- Pedersen, S.B. and Hinkler, J. 2002. The spatiotemporal snow cover distribution in Zackenbergdalen, Northeast Greenland mapped using different remote sensing techniques. M. Sc. thesis. University of Copenhagen. 118 pp.
- Rasch, M. and Koudahl, N. 2002. Research Facilities in Greenland, page 8-11: Zackenberg.
- Sigsgaard, C. 2002. Kulstofpuljer og CO₂ dynamik i veldrænede arktiske tundrajorde - belyst ved feltstudier på tre lokaliteter i Zackenberg, NØ Grønland. Master thesis Københavns Universitet, Geografisk Institut. 69 pp.

General information

Berg, T.B. 2002. Op- og nedture for tundraens lemminger. pp. 61-66. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

Christensen, T.R., Lloyd, D., Svensson, B., Martikainen, P.J., Harding, R., Oskarsson, H., Friborg, T., Soegaard, H. and Panikov, N. 2002. Biogenic controls on trace gas fluxes in northern wetlands. IGBP global change newsletter 51: 9-15.

Christiansen, H.H. 2002. Sne indeholder visdom. Information, 18 March.

Christoffersen, K. and Jeppesen, E. 2002. Isdækkets varighed har stor indflydelse på livet i sørerne. pp. 79-84. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

Elander, M. 2002. Det hänger på morrhåret. Forskning & Framsteg 2:29-33.

Forchhammer, M.C. 2002. Analyser og modeller i relation til forandringer i klimaet. pp. 15-24. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

Forchhammer, M.C. 2002. Moskusokserne i Zackenbergdalen påvirkes af snemængde og plantevækst. pp. 67-72. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

From, L. 2002. Havisen i Arktis smelter. Jyllands-Posten, 21 December.

From, L. 2002. Isbjørnen er truet. Jyllands-Posten, 21 December.

Grubbe, K. 2002. Isen holder sig væk fra Østgrønland. Berlingske Tidende, 13 September.

Larsen, S. 2002. Insekter og edderkopper reagerer hurtigt på ændringer i klimaet. pp. 47-52. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

Meltofte, H. 2002. "Tropiske" vadefugle i is og sne. pp. 53-60. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

Meltofte, H. and Forchhammer, M.C. 2002. Udsigt til mere snerige vintrer og mere fugtige somre? pp. 25-28. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

Meltofte, H. 2002. Zackenberg – en miljøovervågnings- og forskningsstation i højarktisk Grønland. pp. 7-14. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

Meltofte, H. 2002. Zackenberg, Greenland (74°28'N, 20°34'W). pp. 27. In Soloviev, M., Tomkovich, P. Arctic birds. Newsletter of International Breeding Conditions Survey 5.

Mølgaard, P., Forchhammer, M.C., Grøndahl, L. and Meltofte, H. 2002. Blomsterne må vente på sneen og på varmen. pp. 43-46. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

Philbert, P.-E. 2002. Grønlandske sører. Et simpelt og sårbart liv. Polarfronten 3:8-9.

Sayers, S. 2002. Moskusokser trues af mildere vintrer. MetroXpress, 9 April.

Schmidt, N.M., Meltofte, H. and Berg, T.B. 2002. Prædatorerne i højarktisk Grønland foretrækker lemminger. pp. 73-78. In Meltofte, H. (ed.). Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.

- Schultz-Lorentzen, C. 2002. The walrus – giant among seals. *Suluk* 1.
- Soegaard, H. 2002. Optager eller afgiver tundraen kultveilte. pp. 29-34. In Meltofte, H. (ed.). *Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.*
- Tamstorf, M. and Bay, C. 2002. Snedækket bestemmer plantesamfundenes udbredelse og produktion. pp. 35-42. In Meltofte, H. (ed.). *Sne, is og 35 graders kulde. Hvad er effekterne af klimaændringer i Nordøstgrønland.*
- Thornbjerg, J. 2002. Grønland undrer sig over unormalt klima. *Politiken*, 22 December.

2001

Peer-reviewed papers

- Berg, P., Rysgaard, S., Funch, P. and Sejr, M.K. 2001. The effects of bioturbation on solutes and solids in marine sediments. *Aquatic Microbial Ecology* 26:81-94.
- Christiansen, H.H. 2001. Snow-cover depth, distribution and duration data from northeast Greenland obtained by continuous automatic digital photography. *Annals of Glaciology* 32:102-108.
- Christoffersen, K. 2001. Predation on *Daphnia pulex* by *Lepidurus arcticus*. *Hydrobiologia* 442(1-3):223-229.
- Hansen, E.S. 2001. Lichen-rich soil crusts of Arctic Greenland. *Ecological studies* 150:57-65.
- Harding, R.J., Gryning, S.-E., Halldin, S. and Lloyd, C.R. 2001. Progress in understanding of land surface/atmosphere exchanges at high latitudes. *Theoretical and applied climatology* 70:5-18.
- Jeppesen, E., Christoffersen, K., Landkildehus, F., Lauridsen, T., Amsick, S. L. and Søndergaard, M. 2001. Fish and crustaceans in northeast Greenland lakes with special emphasis on interactions between Arctic char (*Salvelinus alpinus*), *Lepidurus arcticus* and benthic chydorids. *Hydrobiologia* 442: 329-337.
- Joabsson, A. and Christensen, T.R. 2001. Methane emissions from wetlands and their relationship with vascular plants: an Arctic example. *Global Change Biology* 7: 919-932.
- Klaassen, M., Lindström, Å., Meltofte, H. and Piersma, T. 2001. Arctic waders are not capital breeders. *Nature* 413 (6858):794.
- Kühl, M., Glud, R.N., Borum, J., Roberts, R. and Rysgaard, S. 2001. Photosynthetic performance of surface-associated algae below sea ice as measured with a pulse-amplitude-modulated (PAM) fluorometer and O₂ microsensors. *Marine Ecology Progress Series* 223:1-14.
- Laurila, T., Soegaard, H., Lloyd, C.R., Aurela, M., Tuovinen, J.-P. and Nordstrøm, C. 2001. Seasonal variations of net CO₂ exchange in European Arctic ecosystems. *Theoretical and applied climatology* 70:183-201.
- Lloyd, C.R., Harding, R.J., Friberg, T. and Aurela, M. 2001. Surface fluxes of heat and water vapour from sites in the European Arctic. *Theoretical and applied climatology* 70:19-33.
- Meltofte, H. 2001. Wader population censuses in the Arctic: getting the timing right. *Arctic* 54(4):367-376.
- Mertens, S., Nijs, I., Heuer, M., Kockelbergh, F., Beyens, L., Van Kerckvoorde, A. and Impens, I. 2001. Influence of high temperature on end-of-season tundra CO₂-exchange. *Ecosystems* 4:226-236.

Nordstrøm, C., Soegaard, H., Christensen, T.R., Friberg, T. and Hansen, B.U. 2001. Seasonal carbon dioxide balance and respiration of a high-arctic fen ecosystem in NE-Greenland. *Theoretical and Applied Climatology* 70(1-4):149-166.

Petersen, H., Meltofte, H., Rysgaard, S., Rasch, M., Jonasson, S., Christensen, T.R., Friberg, T., Soegaard, H. and Pedersen, S.A. 2001. The Arctic. pp 303-330. In Climate change research. Danish contributions / edited by A.M.K. Jørgensen, J. Fenger and K. Halsnæs.

Rysgaard, S., Kühl, M., Nøhr Glud, R. and Würgler Hansen, J. 2001. Biomass, production and horizontal patchiness of sea ice algae in a high-Arctic fjord (Young Sound, NE Greenland). *Marine Ecology Progress Series* 223: 15-26.

Soegaard, H., Hasholt, B., Friberg, T. and Nordstrøm, C. 2001. Surface energy- and water balance in a high-arctic environment in NE Greenland. *Theoretical and applied climatology* 70: 35-51.

Turner, J., Levinse, H., Nielsen, T.G. and Hansen, B.W. 2001. Zooplankton feeding ecology: grazing on phytoplankton and predation on protozoans by copepod and barnacle nauplii in Disko Bay, West Greenland. *Marine Ecology Progress Series* 221: 209-219.

Van Kerckvoorde, A., Trappeniers, K., Nijs, I., and Beyens, L. 2001. The epiphytic diatom assemblages from terrestrial mosses in Zackenberg (Northeast Greenland). *Systematics and Geography of Plants* 70: 301-314.

Books and reports

Caning, K. and Rasch, M. (eds.) 2001. Zackenberg Ecological Research Operations 6th Annual Report, 2000. Danish Polar Center, Ministry of Research and Information Technology. 80 pp.

Illeris, L. 2001. Controls of carbon cycling in dry Arctic ecosystems. Botanical Institute, Faculty of Science, University of Copenhagen. 100 pp.

Kunnerup, O.F. 2001. Food, growth and migration of an anadromous stock of arctic charr (*Salvelinus alpinus* L.) in a NE-Greenland fjord. Department of Marine Ecology, Aarhus University. 45 pp.

Meltofte, H. and Berg, T.B. 2001. Zackenberg Ecological Research Operations. BioBasis: Conceptual design and sampling procedures of the biological programme of Zackenberg Basic. 5th ed. National Environmental Research Institute, Department of Arctic Environment. 63 pp.

General information

Anon. 2001. Arctic waders are fully dependent on local food resources. *Danish Environment Newsletter* 12.

Anon. 2001. DMU-forsake i "Nature". *DMUNyt* 4:8.

Anon. 2001. Vadefugle spiser hjemme. *Polarfronten* 4:10.

Anon. 2001. Verdensnyhed! Afhængig af arktisk føde. *Weekendavisen* 9-15 November.

Berg, T.B.G. 2001. Populationsøkologi på tundraen: halsbåndlemmingen under lup. *DMUNyt* 4:7.

Born, E.W. and Acquarone, M. 2001. Tilbage til Hvalrosodden. *Grønland* 49(2):51-61.

Christensen, P.B., Krause-Jensen, D. and Rysgaard, S. 2001. Det eksotiske liv under isen. *Polarfronten* 1:12-13.

- Christiansen, H.H. 2001. Automatisk digital fotografering af snedriver i Nordøstgrønland. Diversitet 27-28.
- Gregersen, J. 2001. Zackenberg – en oase i isen. Horsens Folkeblad, 6 March.
- Mikkelsen, T.N. 2001. Ultraviolet stråling stresser planter – et forsøg på økosystemniveau. Risø Nyt 3:10.
- Nielsen, R.H. 2001. Global opvarmning truer arktiske vadefugle. Ingeniøren 27(43):8.
- Pedersen, H. 2001. Klimaet i Zackenberg, Grønland, Verden. pp. 27-35. In Det dansk-grønlandske miljøsamarbejde. 12 historier om miljøprojekter i Grønland.
- Skriver, J. 2001. Klimaændringer: vadefugles spisekammer i fare. Berlingske Tidende, 27 October.
- Steen, J. 2001. Biologi - om det levende: Natsiaq. Atuakkorfik Undervisning. 63 pp.

2000

Peer-reviewed papers

Christensen, T.R., Friberg, T., Sommerkorn, M., Kaplan, J., Illeris, L., Soegaard, H., Nordstrøm, C. and Jonasson, S. 2000. Trace gas exchange in a high-arctic valley. 1. Variations in CO₂ and CH₄ flux between tundra vegetation types. *Global Biogeochemical Cycles* 14(3):701-713.

Christiansen, H.H. 2000. Greenland. pp. 199-201. In Brown, J., Hinkel, K.M. and Nelson, F.E. The circumpolar active layer monitoring (CALM) program: Research designs and initial results. *Polar Geography* 24(3):166-258.

Friberg, T., Christensen, T.R., Hansen, B.U., Nordstrøm, C. and Soegaard, H. 2000. Trace gas exchange in a high-arctic valley. 2. Landscape CH₄ fluxes measured and modelled using eddy correlation data. *Global Biogeochemical Cycles* 14(3):715-723.

Glud, R.N., Risgaard-Petersen, N., Thamdrup, B., Fossing, H. and Rysgaard, S. 2000. Benthic carbon mineralization in a high-Arctic sound, (Young Sound, NE-Greenland). *Marine Ecology Progress Series* 206:59-71.

Hansen, J.W., Thamdrup, B. and Jørgensen, B.B. 2000. Anoxic incubation of sediment in gas-tight plastic bags: a method for biogeochemical process studies. *Marine Ecology Progress Series* 208:273-282.

Hasholt, B. and Hagedorn, B. 2000. Hydrology and geochemistry of river-born material in a high Arctic drainage system: Zackenberg Northeast Greenland. *Arctic, Antarctic and Alpine Research* 32(1):84-94.

Levinsen, H., Nielsen, T.G. and Hansen, B.W. 2000. Annual succession of marine pelagic protozoans in Disko Bay, West Greenland, with emphasis on winter dynamics. *Marine Ecology Progress Series* 206:119-134.

Levinsen, H., Turner, J.T., Nielsen, T.G. and Hansen, B.W. 2000. On the trophic coupling between protists and copepods in Arctic marine ecosystems. *Marine Ecology Progress Series* 204:65-77.

Nijs, I., Kockelbergh, F., Heuer, M., Beyens, L., Trappeniers, K. and Impens, I. 2000. Climate-warming simulation in tundra: enhanced precision and repeatability with an improved infrared-heating device. *Arctic, Antarctic and Alpine Research* 32(3):346-350.

Rasch, M., Elberling, B., Holm Jakobsen, B. and Hasholt, B. 2000. High-resolution measurements of water discharge, sediment, and solute transport in the river Zackenbergelven, Northeast Greenland. *Arctic, Antarctic and Alpine Research* 32(3):336-345.

Riget, F., Lauridsen, T. L., Landkildehus, F., Geertz-Hansen, P., Christoffersen, K., and Sparholdt, H. 2000. Landlocked Arctic charr (*Salvelinus alpinus*) population structure and lake morphometry in Greenland – is there a connection? *Polar Biology* 23: 550-528.

Rysgaard, S., Christensen, P.B., Sørensen, M.V., Funch, P. and Berg, P. 2000. Marine meiofauna, carbon and nitrogen mineralization in sandy and soft-sediments of Disko Bay, West Greenland. *Aquatic Microbial Ecology* 21:59-71.

Sejr, M.K., Jensen, K.T. and Rysgaard, S. 2000. Macrozoobenthic community structure in a high-arctic Greenland fjord. *Polar Biology* 23: 792-801.

Soegaard, H., Nordstrøm, C., Friberg, T., Hansen, B.U., Christensen, T.R. and Bay, C. 2000. Trace gas exchange in a high-arctic valley. 3. Integrating and scaling CO₂ fluxes from canopy to landscape using flux data, footprint modelling and remote sensing. *Global Biogeochemical Cycles* 14(3):725-744.

Van Kerckvoorde, A., Trappeniers, K., Nijs, I., and Beyens, L. 2000. Terrestrial soil diatom assemblages from different vegetation types in Zackenberg (Northeast Greenland). *Polar Biology* 23(6):392-400.

Van Kerckvoorde, A., Trappeniers, K., Chardez, D., Nijs, I. and Beyens, L. 2000. Testate amoebae communities from terrestrial moss habitats in the Zackenberg area (North-East Greenland). *Acta Protozoologica* 39(1):27-33.

Books and reports

Caning, K., Rasch, M. (eds.) 2000. Zackenberg Ecological Research Operations 5th Annual Report, 1999. Danish Polar Center, Ministry of Research and Information Technology. 86 pp.

Schmidt, N.M. 2000. Spatiotemporal distribution and habitat use of the collared lemming, *Dicrostonyx groenlandicus Traill*, in high arctic Northeast Greenland. Master thesis. Department of Zoology, University of Aarhus. 84 pp.

General information

Arktisk og globalt miljø. 2000. pp. 14-15. In Beretning og aktiviteter 1999-2000. Danmarks Miljøundersøgelser.

Christensen, P.B., Rysgaard, S. and Glud, R.N. 2000. Alger – en overset faktor. *Information*, 4 December.

Christensen, P.B., Rysgaard, S. and Glud, R.N. 2000. Iltfrit havs fjerner kvælstof. *Information*, 4 December.

Christensen, P.B., Rysgaard, S. and Glud, R.N. 2000. Ishavet – et varmt emne. *Information*, 4. december.

Christensen, P.B., Rysgaard, S. and Nielsen, K. 2000. Ishavet – et varmt emne. *Megafonen* 3:5.

Christensen, P.B., Rysgaard, S. and Nielsen, K. 2000. Kortsigtet klimaforskning. *Megafonen* 3:5.

Christiansen, H.H. 2000. Nivation – den geomorfologiske effekt af sne – et eksempel fra NØ Grønland. pp. 132-133. In Jakobsen, B.H. et al. (eds.). *Topografisk atlas Grønland*.

Christiansen, H.H. and Humlum, O. 2000. Permafrost. pp. 32-35. In Jakobsen, B.H. et al. (eds.). *Topografisk atlas Grønland*.

Nielsen, T.G. 2000. CO₂-pumpen i Nordatlanten. *DMUNyt* 1:2.

Rysgaard, S. and Christensen, P.B. 2000. Klimaforandringer og arktiske marine økosystemer. Kaskelot 127:28-31.

Tornbjerg, J. 2000. Arktis smelter i varmen. Politiken 17 November.

Tornbjerg, J. 2000. Opvarmning truer skrøbeligt ishav. 19 November.

1999

Peer-reviewed papers

Christensen, T.R. 1999. Potential and actual trace gas fluxes in Arctic terrestrial ecosystems. *Polar Research* 18:199-206.

Christiansen, H.H. 1999. Active layer monitoring in two Greenlandic permafrost areas: Zackenberg and Disko Island. *Geografisk Tidsskrift* 99:117-121.

Friborg, T., Hansen, B.U., Nordstrøm, C. and Soegaard, H. 1999. Controls on the greenhouse gas exchange of a high-arctic ecosystem. *Geografisk Tidsskrift* 99:19-26.

Friborg, T., Hansen, B.U., Nordstrøm, C. and Soegaard, H. 1999. Seasonal exchange of CH₄ and CO₂ during the short high arctic summer in northern Greenland. pp. 66-69. In Brønning, C. (ed.). Greenhouse gases and their role in climate change: The status of research in Europe. Conference proceedings.

Hansen, B.W., Nielsen, T.G. and Levinse, H. 1999. Plankton community structure and carbon cycling on the western coast of Greenland during the stratified summer situation. III. Mesozooplankton. *Aquatic Microbial Ecology* 16:233-249.

Jacobsen, A. and Hansen, B.U. 1999. Estimation of the soil heat flux/net radiation ratio based on spectral vegetation index in high-latitude Arctic areas. *International Journal of Remote Sensing* 20:445-461.

Joabsson, A., Christensen, T.R. and Wallén, B. 1999. Influence of vascular plant photosynthetic rate on CH₄ emission from peat monoliths. *Polar Research* 18:215-220.

Levinse, H., Nielsen, T.G. and Hansen, B.W. 1999. Plankton community structure and carbon cycling on the western coast of Greenland during the stratified summer situation. II. Heterotrophic dinoflagellates and ciliates. *Aquatic Microbial Ecology* 16:217-232.

Lloyd, C.R., Aurela, M., Hargreaves, K.J. and Nordstrøm, C. 1999. Trace gas fluxes in the Arctic. pp. 40-47. In Brønning, C. (ed.). Greenhouse gases and their role in climate change: the status of research in Europe. Conference proceedings.

Nielsen, T.G. and Hansen, B.W. 1999. Plankton community structure and carbon cycling on the western coast of Greenland during the stratified summer situation. I. Hydrography, phytoplankton and bacterioplankton. *Aquatic Microbial Ecology* 16:205-216.

Rysgaard, S., Nielsen, T.G. and Hansen, B. 1999. Seasonal variation in nutrients, pelagic primary production and grazing in a high-arctic coastal marine ecosystem, Young Sound, Northeast Greenland. *Marine Ecology Progress Series* 179:13-25.

Røjle Christensen, T. 1999. Potential and actual trace gas fluxes in Arctic terrestrial ecosystems. *Polar Research* 18(2):199-206.

Schmidt, N.M. and Jensen, T.S. 1999. The collared lemming in Northeast Greenland: Summer home range and mobility. *Apodemus Newsletter* 6:6-7.

Soegaard, H. and Nordstrøm, C. 1999. Carbon dioxide exchange in a high-arctic fen estimated by eddy covariance measurements and modelling. *Global Change Biology* 5:547-562.

Trappeniers, K., Van Kerckvoorde, A., Chardez, D., Nijs, I. and Beyens, L. 1999. Ecology of testate amoebae communities from aquatic habitats in the Zackenberg area (Northeast Greenland). *Polar Biology* 22:271-278.

Books and reports

Bøcker, C. 1999. Beregning af NDVI fra Landsat TM, Zackenberg 1999. *Asiaq Report*.

Meltofte, H. and Berg, T.B. 1999. Zackenberg Ecological Research Operations. BioBasis: Conceptual design and sampling procedures of the biological programme of Zackenberg Basic. 3rd edition. National Environmental Research Institute, Department of Arctic Environment.

Nordstrøm, C. 1999. Atmospheric exchange of greenhouse gases in arctic terrestrial ecosystems. Ph.D. Thesis. Institute of Geography, University of Copenhagen.

Rasch, M. (ed.) 1999. Zackenberg Ecological Research Operations: 4th Annual Report, 1998. Danish Polar Center, Ministry of Research and Information Technology. 62 pp.

Simonsen, J. 1999. Effekter af kantlyngbevoksning på jordbunds dannelse ved Zackenberg, Nordøstgrønland. Geografisk Institut, Københavns Universitet. 41 pp.

General information

Christensen, P.B. and Rysgaard, S. 1999. Forskere tager temperaturen på miljøet i Nordøst Grønland = Tunup Avannaarsua ilisimatuut misissuiffigaat. *Atuagagdliutit=Grønlandsposten*, 2 March.

Christensen, P.B. and Rysgaard, S. 1999. Klimaforandringer i Arktis. *Aktuel naturvidenskab* 1:4-7.

Christensen, P.B. and Rysgaard, S. 1999. Livet under havisen = Sikup ataani inuuneq. *Atuagagdliutit=Grønlandsposten*, 2 March.

Christensen, P.B. and Rysgaard, S. 1999. På vagt for hvalrossen = Aavernik paarsineq. *Atuagagdliutit=Grønlandsposten*, 16 March.

Christensen, P.B. 1999. Sommer under isen. *Jyllandsposten*, 24 July.

Christensen, P.B. 1999. Spændende resultater fra dansk polarforskning. *Midtjyllands avis*, 27 June.

Christensen, P.B. 1999. Under isen på årets længste dag. *Midtjyllands Avis*, 27 June.

Christensen, P.B. 1999. Young Sund-immi paasisat siulliit soqutiginartut. *tuagagdliutit = Grønlandsposten*, 6 July.

Elander, M. 1999. The walrus of Daneborg. *Above and beyond Winter* 1999:31-35.

From, L. 1999. Lys på hvalrossens levevilkår. *Jyllandsposten*, 13 June.

Madsen, L.P. 1999. Livet under havisen. *Berlingske Tidende*, 4. sektion, 14 December.

Nørgaard, B. 1999. I oceanernes kolde hjerte. *Midtjyllands Avis*, 10 June.

Øksnebjerg, B. 1999. De måler isalgernes skjulte liv. *Natur & videnskab* 2.

1998

Peer-reviewed papers

Christensen, T.R., Jonasson, S., Michelsen, A., Callaghan, T.V. and Havstrøm, M. 1998. Environmental controls on soil respiration in the Eurasian and Greenlandic Arctic. *Journal of geophysical Research* 103 D22: 29015-29021.

Christiansen, H.H. 1998. 'Little Ice Age' nivation activity in northeast Greenland. *The Holocene* 8(6): 719-728.

Christiansen, H.H. 1998. Nivation forms and processes in unconsolidated sediments, NE Greenland. *Earth Surface Processes and Landforms* 23: 751-760.

Elberling, B. and Jakobsen, B.H. 1998. Processes controlling soil water chemistry in the High Arctic Greenland. *Earth Cryosphere* 2: 79-85.

Fredskild, B. 1998. The vegetation types of Northeast Greenland. *Meddelelser om Grønland*. Bioscience 49. 84 pp.

Glud, R.N., Holby, O., Hoffmann, and Canfield D. 1998. Benthic mineralization and exchange in Arctic sediments (Svalbard, Norway). *Marine Ecology Progress Series* 175: 237-251.

Humlum, O. 1998. The climatic significance of Rock Glaciers. *Permafrost and periglacial processes* 9: 375-395.

Michelsen, A., Quarmby, C., Sleep, D. and Jonasson, S. 1998. Vascular plant ^{15}N natural abundance in heath and forest tundra ecosystems is closely correlated with presence and type of mycorrhizal fungi in roots. *Oecologia* 115: 406-418.

Rysgaard, S., Thamdrup, B., Risgaard-Petersen, N., Fossing, H., Berg, P., Christensen, P.B. and Dalsgaard, T. 1998. Seasonal carbon and nitrogen mineralization in a high-Arctic coastal marine sediment, Young Sound, Northeast Greenland. *Marine Ecology Progress Series* 175: 261-276.

Books and reports

Bay, C. 1998. Vegetation mapping of Zackenberg valley in Northeast Greenland. Danish Polar Center and Botanical Museum, University of Copenhagen. 29 pp.

Bøcker, C. 1998. Beregning af NDVI fra Landsat TM, Zackenberg 1998. Asiaq Report.

Meltofte, H. and Rasch, M. (eds.) 1998. Zackenberg Ecological Research Operations 3rd Annual Report, 1997. Danish Polar Center, Ministry of Research and Information Technology. 68 pp.

Meltofte, H., Berg, T.B. and Forchhammer, M.C. 1998. Zackenberg Ecological Research Operations. BioBasis: conceptual design and sampling procedures of the biological programme of Zackenberg Basic. 2nd ed. National Environmental Research Institute, Department of Arctic Environment.

General information

Christensen, P.B. and Rysgaard, S. 1998. En arktisk oase. *Jyllandsposten*, 2 November.

- Christensen, P.B. and Rysgaard, S. 1998. De tager temperaturen på isens miljø. Berlingske Tidende, 8 December.
- Christensen, P.B. and Rysgaard, S. 1998. Forskere tager temperaturen på miljøet i Nordøstgrønland. Ålborg Stiftstidende, 26 November.
- Christensen, P.B. 1998. Fra Almind Sø til Ishavet. Midtjyllands Avis, 19 November.
- Christensen, P.B. and Rysgaard, S. 1998. Klimaændringer i Grønland. Jyllandsposten, 2 November.
- Christensen, P.B. and Rysgaard, S. 1998. Livet under havisen. Berlingske Tidende, 8 December.
- Christensen, P.B. and Rysgaard, S. 1998. På vagt for hvalrossen. Berlingske Tidende, 8 December.
- Christensen, P.B. and Rysgaard, S. 1998. Ændringer spores højt mod nord. Midtjyllands Avis, 19 November.
- Christiansen, H.H. 1998. Active layer monitoring in Greenland. Danish Polar Center Newsletter 32:8.
- Göran, E. 1998. Drömjobb med världen som arbetsplats. Bohusläningen, 6 March.
- Göran, E. 1998. Walruses. Waterproof explorer collection 1998.
- Kjærgaard, J.J. 1998. Forskere møder den grønlandske sommer. Berlingske Tidende, 29 June.
- Kjærgaard, J.J. 1998. Det kolde gys. Berlingske Tidende, 4 August.
- Rysgaard, S., Christensen, P.B. 1998. Livet under havisen. DMUNyt 2(4): 3.
- Sigsgaard, J. 1998. Et vindue til Nordøstgrønland. Aalborg Zoo Info 1.

1997

Peer-reviewed papers

- Berg, P., Risgaard-Petersen, N. and Rysgaard, S. 1997. Interpretation of measured concentration profiles in sediment pore water. Limnology and Oceanography 6:1500-1510.
- Buhl, P.N. 1997. Microhymenoptera from Zackenberg, North East Greenland (Hymenoptera: Chalcidoidea, Cynipoidea et Ceraphronoidea). Entomologiske Meddelelser 65:161-164.
- Humlum, O. 1997. Active layer thermal regime at three rock glaciers in Greenland. Permafrost and Periglacial Processes 8: 383-408.
- Rysgaard, S. and Risgaard-Petersen, N. 1997. A sensitive method for determination of nitrogen-15 in Urea. Marine Biology 2:191-195.

Books and reports

- Danish Polar Center 1997. BioBasis: conceptual design and sampling procedures of the biological programme of Zackenberg Basic. Danish Polar Center, Ministry of Research and Information Technology.
- Fredskild, B. and Mogensen, G.S. 1997. ZERO line final report 1997: a description of the plant communities along the ZERO line from Young Sund to the top of Aucellabjerg and the common plant communities in the

Zackenberg valley, Northeast Greenland. Greenland Botanical Survey and Botanical Museum, University of Copenhagen.

Meltofte, H. and Thing, H. (eds.) 1997. Zackenberg Ecological Research Operations 2nd Annual Report, 1996. Danish Polar Center, Ministry of Research and Information Technology.

Tamstorf, M.P. 1997. Analyse af sne- og vegetationsdækket ved Zackenberg, NØ-Grønland, ved brug af Landsat TM og SPOT HRV images. (Geographica Hafniensia; C4).

General information

Elander, M. 1997. The hidden life of walrus on the sea floor. *Polarfronten* 4:4-5.

1996

Peer-reviewed papers

Hansen, E.S. 1996. Vertical distribution of lichens on the mountain, Aucellabjerg, Northeastern Greenland. *Arctic and Alpine Research* 28(1):111-117.

Hansen, B., Christiansen, S. and Pedersen, G. 1996. Planktonic dynamics in the marginal ice zone of the central Barents Sea during spring: carbon flow and structure of the grazer food chain. *Polar Biology* 16:115-128.

Hasholt, B. 1996. Sediment transport in Greenland: erosion and sediment yield: global and regional perspectives. *IAHS publication* 236:105-114.

Jonasson, S., Michelsen, A., Schmidt, I.K., Nielsen, E.V. and Callaghan, T.V. 1996. Microbial biomass C, N and P in two arctic soils and responses to addition of NPK fertilizer and sugar: implications for plant nutrient uptake. *Oecologia* 106:507-515.

Rasch, M., Christiansen, H.H., Hansen, B.U., Hasholt, B., Humlum, O., Jakobsen, B.H. and Nielsen, N. 1996. Greenland landscape elements as indicators of rapid environmental change. pp. 69-92. In Berger, A.R. and Iams, W.J. (eds.). *Geoindicators: assessing rapid environmental change in earth systems*.

Rysgaard, S. and Berg, P. 1996. Mineralization in north-eastern Greenland sediment: mathematical modelling, measured sediment pore water profiles and actual activities. *Aquatic Microbial Ecology* 11:297-305.

Rysgaard, S., Finster, K. and Dahlgaard, H. 1996. Primary production, nutrient dynamics and mineralisation in a northern Greenland fjord during the summer thaw. *Polar Biology* 16:497-506.

Books and reports

Christiansen, H.H. 1996. Nivation forms, processes and sediments in recent and former periglacial areas. Institute of Geography, University of Copenhagen. (Geographica Hafniensia ; A4). 185 pp.

Fredskild, B. (ed.) 1996. Grønlands Botaniske Undersøgelse 1995-1996. Rapport. Botanisk Museum. 21 pp.

Hansen, E.S. 1996. Lichenes Groenlandici exsiccati: fasc. XII (nos. 551-600). Botanisk Museum. 28 pp.

Meltofte, H. and Thing, H. 1996. Zackenberg Ecological Research Operations 1st Annual Report, 1995. Danish Polar Center. Ministry of Research and Technology, 64 pp.

General information

Hansen, E.S. 1996. Zackenbergs laver. *Naturens Verden* 1:15-19.

Ventegodt, O. 1996. Skibets sted ved middag ... : den store østkyststøjse med M/S Kista Arctica sommeren 1996. Danmarks Nationalleksikon. 59 pp.

1991-1995

Peer-reviewed papers

Christiansen, H.H. and Humlum, O. 1993. Glacial history and periglacial landforms of the Zackenberg area, Northeast Greenland: preliminary results. *Geografisk Tidsskrift* 93:19-29.

Christiansen, H.H. 1994. Thermoluminescence dating of nival sediments from Zackenberg, Northeast Greenland. *Quaternary geochronology (Quaternary science reviews)* 13:491-496.

Nielsen, T.G. and Hansen, B. 1995. Plankton community structure and carbon cycling on the western coast of Greenland during and after sedimentation of a diatom bloom. *Marine Ecology Progress Series* 125:239-257.

Wenink, P.W., Baker, A.J., Rösner, H.-U. and Tilanus, M.G.J. 1995. Global mitochondrial DNA phylogeography of Holarctic breeding Dunlins (*Calidris alpina*). pp. 67-96. In Wenink, P.W. Mitochondrial DNA sequence evolution in shorebird populations.

Books and reports

Andersson, T.I.H., Böcher, J., Fredskild, B., Jakobsen, B.H., Meltofte, H., Mogensen, G.S. and Muus, B. 1991. Rapport om muligheden for placering af en naturvidenskabelig forskningsstation ved Zackenberg, Nationalparken i Nord- og Østgrønland. University of Copenhagen and Danish Polar Center. 48 pp.

Christiansen, H.H. 1992. Geomorfologisk moniteringsmanual, Zackenberg, 1992. Institute of Geography, University of Copenhagen. 12 pp.

Christiansen, H.H. 1995. Nivation forms, processes and sediments in recent and former arctic areas. PhD. thesis. Institute of Geography, University of Copenhagen. 185 pp.

Dalsgaard, M. 1995. Spalchnacéere ved Zackenberg i Nord-Østgrønland. Unpublished biology project report. 41 pp.

Danish Polar Center 1991. Zackenberg – en forskningsstation i Grønlands nationalpark, Nordøstgrønland: fra idé til virkelighed i det højarktiske. Danish Polar Center. 12 pp.

Fredskild, B. 1993. Nordøstgrønland, Zackenberg. pp. 1-24. In: Fredskild, B and Bay, C. (eds.). Grønlands Botaniske Undersøgelse 1992.

Hansen, E.S. 1995. Greenland lichens. Rhodos and Danish Polar Center. 124 pp.

Hansen, E.S. 1995. Grønlands laver. Rhodos and Dansk Polarcenter. 127 pp.

Hansen, E.S. 1995. Lichenerne ved Zackenberg. pp. 4-16. In: Fredskild, B., Mogensen, G.S., Hansen, E.S. (eds.). Grønlands Botaniske Undersøgelse 1994.

Jacobsen, A. 1995. Overvågning af climate change variable i et vegetationsdækket arktisk miljø: Zackenberg, Nordøstgrønland : under anvendelse af klimatiske feldata and remote sensing : Master thesis. Institute of Geography, University of Copenhagen). 105 pp. (in Danish with English abstract).

Misissueqqaarnerit 1995. Klimastation Zackenberg: teknisk beskrivelse: A 1782. Misissueqqaarnerit. 8 pp. + 16 enclosures.

Mogensen, G.S. 1995. Nordøstgrønland, Zackenberg. pp. 1-4. In Fredskild, B., Mogensen, G.S. and Hansen, E.S. (eds.). Grønlands Botaniske Undersøgelse 1994.

General information

Christiansen, H.H. and Humlum, O. 1993. Geomorphology of the Zackenberg area. ZERO News 3:6-7.

Christiansen, H.H. 1994. Landskabsudvikling i tid og rum – fra Zackenberg området i Nordøstgrønland. Naturligvis: 12-16.