(Ager et al., 2023; Asiedu et al., 2023; Barry et al., 2023; Becker-Scarpitta et al., 2023; Berthelsen, 2023; Beumer et al., 2023; Carlson et al., 2023; Christensen et al., 2023; Christin et al., 2023; Cirtwill et al., 2023; Hamm et al., 2023; Hansen & Elberling, 2023; Henson et al., 2023; Liu et al., 2023; Maselli et al., 2023; Parisy et al., 2023; Peña-Aguilera et al., 2023; Riis et al., 2023; Scheel et al., 2023; Schlegel et al., 2023; Schmidt, Kankaanpää, et al., 2023; Schmidt, Michelsen, et al., 2023; Shahi et al., 2023a, 2023b; Stuart-Lee et al., 2023; van Beest, López-Blanco, et al., 2023; van Beest, Schmidt, et al., 2023; Versluijs et al., 2023; Vonnahme et al., 2023; Watts et al., 2023; Weckström et al., 2023; Willcox et al., 2023; Zona et al., 2023)

GEM references 2023, collected by the GEM secretariat.

1. Ager, T. G., Krause-Jensen, D., Olesen, B., Carlson, D. F., Winding, M. H. S., & Sejr, M. K. (2023). Macroalgal habitats support a sustained flux of floating biomass but limited carbon export beyond a Greenland fjord. *Sci Total Environ*, *872*, 162224. <https://doi.org/10.1016/j.scitotenv.2023.162224>
2. Asiedu, D. A., Søndergaard, J., Jónasdóttir, S., Juul-Pedersen, T., & Koski, M. (2023). Concentration of mercury and other metals in an Arctic planktonic food web under a climate warming scenario. *Marine Pollution Bulletin*, *194*, 115436. [https://doi.org/https://doi.org/10.1016/j.marpolbul.2023.115436](https://doi.org/https%3A//doi.org/10.1016/j.marpolbul.2023.115436)
3. Barry, T., Christensen, T., Behe, C., Coon, C., Culp, J. M., Vongraven, D., Fletcher, S., Gill, M., Goedkoop, W., Hindrum, R., Jacobson, C., Jones, T., Lárusson, K. F., Lento, J., Marissink, M., McLennan, D., Price, C., Rönkä, M., Svoboda, M., . . . Petersen, Æ. (2023). Development of a multi-scale monitoring programme: approaches for the Arctic and lessons learned from the Circumpolar Biodiversity Monitoring Programme 2002-2022 [Review]. *Frontiers in Conservation Science*, *4*. <https://doi.org/10.3389/fcosc.2023.1220521>
4. Becker-Scarpitta, A., Antão, L. H., Schmidt, N. M., Blanchet, F. G., Kaarlejärvi, E., Raundrup, K., & Roslin, T. (2023). Diverging trends and drivers of Arctic flower production in Greenland over space and time. *Polar Biology*, *46*(9), 837-848. <https://doi.org/10.1007/s00300-023-03164-2>
5. Berthelsen, A. S. (2023). *The Importance of Habitat and Lake Morphometry for the Summer Diet Choice of Landlocked Arctic Char in Two West Greenland Lakes* (Vol. 15). Multidisciplinary Digital Publishing Institute. <https://doi.org/10.3390/w15122164>
6. Beumer, L. T., Schmidt, N. M., Pohle, J., Signer, J., Chimienti, M., Desforges, J.-P., Hansen, L. H., Højlund Pedersen, S., Rudd, D. A., Stelvig, M., & van Beest, F. M. (2023). Accounting for behaviour in fine-scale habitat selection: A case study highlighting methodological intricacies. *Journal of Animal Ecology*, *92*(10), 1937-1953. [https://doi.org/https://doi.org/10.1111/1365-2656.13984](https://doi.org/https%3A//doi.org/10.1111/1365-2656.13984)
7. Carlson, D. F., Vivo-Pons, A., Treier, U. A., Matzler, E., Meire, L., Sejr, M., & Krause-Jensen, D. (2023). Mapping intertidal macrophytes in fjords in Southwest Greenland using Sentinel-2 imagery. *Sci Total Environ*, *865*, 161213. <https://doi.org/10.1016/j.scitotenv.2022.161213>
8. Christensen, T. R., Scheller, J., Scheel, M., Rudd, D. A., Jackowicz-Korczynski, M., Mastepanov, M., & López-Blanco, E. (2023). Rapid shift in greenhouse forcing of emerging arctic peatlands. *Scientific Reports*, *13*(1), 2828. <https://doi.org/10.1038/s41598-023-29859-4>
9. Christin, S., Chicoine, C., O'Neill Sanger, T., Guigueno, M. F., Hansen, J., Lanctot, R. B., MacNearney, D., Rausch, J., Saalfeld, S. T., Schmidt, N. M., Smith, P. A., Woodard, P. F., Hervet, É., & Lecomte, N. (2023). ArcticBirdSounds: An open-access, multiyear, and detailed annotated dataset of bird songs and calls. *Ecology*, *104*(6), e4047. [https://doi.org/https://doi.org/10.1002/ecy.4047](https://doi.org/https%3A//doi.org/10.1002/ecy.4047)
10. Cirtwill, A. R., Kaartinen, R., Rasmussen, C., Redr, D., Wirta, H., Olesen, J. M., Tiusanen, M., Ballantyne, G., Cunnold, H., Stone, G. N., Schmidt, N. M., & Roslin, T. (2023). Stable pollination service in a generalist high Arctic community despite the warming climate. *Ecological Monographs*, *93*(1), e1551. [https://doi.org/https://doi.org/10.1002/ecm.1551](https://doi.org/https%3A//doi.org/10.1002/ecm.1551)
11. Hamm, A., Magnússon, R. Í., Khattak, A. J., & Frampton, A. (2023). Continentality determines warming or cooling impact of heavy rainfall events on permafrost. *Nature Communications*, *14*(1), 3578. <https://doi.org/10.1038/s41467-023-39325-4>
12. Hansen, H. F. E., & Elberling, B. (2023). Spatial Distribution of Bioavailable Inorganic Nitrogen From Thawing Permafrost. *Global Biogeochemical Cycles*, *37*(2), e2022GB007589. [https://doi.org/https://doi.org/10.1029/2022GB007589](https://doi.org/https%3A//doi.org/10.1029/2022GB007589)
13. Henson, H. C., Holding, J. M., Meire, L., Rysgaard, S., Stedmon, C. A., Stuart-Lee, A., Bendtsen, J., & Sejr, M. (2023). Coastal freshening drives acidification state in Greenland fjords. *Science of The Total Environment*, *855*, 158962. [https://doi.org/https://doi.org/10.1016/j.scitotenv.2022.158962](https://doi.org/https%3A//doi.org/10.1016/j.scitotenv.2022.158962)
14. Liu, Y., Hansen, B. U., Elberling, B., & Westergaard-Nielsen, A. (2023). Snow depth and the associated offset in ground temperatures in a landscape manipulated with snow-fences. *Geoderma*, *438*, 116632. [https://doi.org/https://doi.org/10.1016/j.geoderma.2023.116632](https://doi.org/https%3A//doi.org/10.1016/j.geoderma.2023.116632)
15. Maselli, M., Meire, L., Meire, P., & Hansen, P. J. (2023). Effects of Glacial Flour on Marine Micro-plankton: Evidences from Natural Communities of Greenlandic Fjords and Experimental Studies. *Protist*, *174*(1), 125928. <https://doi.org/10.1016/j.protis.2022.125928>
16. Parisy, B., Schmidt, N. M., Wirta, H., Stewart, L., Pellissier, L., Holben, W. E., Pannoni, S., Somervuo, P., Jones, M. M., Siren, J., Vesterinen, E., Ovaskainen, O., & Roslin, T. (2023). ﻿Ecological signals of arctic plant-microbe associations are consistent across eDNA and vegetation surveys [10.3897/mbmg.7.99979]. *Metabarcoding and Metagenomics*, *7*, e99979. <https://doi.org/10.3897/mbmg.7.99979>
17. Peña-Aguilera, P., Schmidt, N. M., Stewart, L., Parisy, B., van der Wal, R., Lindman, L., Vesterinen, E. J., Maclean, I. M. D., Kankaanpää, T., Wirta, H., & Roslin, T. (2023). Consistent imprints of elevation, soil temperature and moisture on plant and arthropod communities across two subarctic landscapes. *Insect Conservation and Diversity*, *16*(5), 684-700. [https://doi.org/https://doi.org/10.1111/icad.12667](https://doi.org/https%3A//doi.org/10.1111/icad.12667)
18. Riis, T., Tank, J. L., Holmboe, C. M. H., Giménez-Grau, P., Mastepanov, M., Catalán, N., Stott, D., Hansen, B., Kristiansen, S. M., & Pastor, A. (2023). Links Between Stream Water Nitrogen and Terrestrial Vegetation in Northeast Greenland. *Journal of Geophysical Research: Biogeosciences*, *128*(12), e2023JG007688. [https://doi.org/https://doi.org/10.1029/2023JG007688](https://doi.org/https%3A//doi.org/10.1029/2023JG007688)
19. Scheel, M., Zervas, A., Rijkers, R., Tveit, A. T., Ekelund, F., Campuzano Jiménez, F., Christensen, T. R., & Jacobsen, C. S. (2023). Abrupt permafrost thaw triggers activity of copiotrophs and microbiome predators. *FEMS Microbiology Ecology*, *99*(11). <https://doi.org/10.1093/femsec/fiad123>
20. Schlegel, R., Bartsch, I., Bischof, K., Bjørst, L. R., Dannevig, H., Diehl, N., Duarte, P., Hovelsrud, G. K., Juul-Pedersen, T., Lebrun, A., Merillet, L., Miller, C., Ren, C., Sejr, M., Søreide, J. E., Vonnahme, T. R., & Gattuso, J.-P. (2023). Drivers of change in Arctic fjord socio-ecological systems: Examples from the European Arctic. *Cambridge Prisms: Coastal Futures*, *1*, e13, Article e13. <https://doi.org/10.1017/cft.2023.1>
21. Schmidt, N. M., Kankaanpää, T., Tiusanen, M., Reneerkens, J., Versluijs, T. S. L., Hansen, L. H., Hansen, J., Gerlich, H. S., Høye, T. T., Cirtwill, A. R., Zhemchuzhnikov, M. K., Peña-Aguilera, P., & Roslin, T. (2023). Little directional change in the timing of Arctic spring phenology over the past 25 years. *Current Biology*, *33*(15), 3244-3249.e3243. [https://doi.org/https://doi.org/10.1016/j.cub.2023.06.038](https://doi.org/https%3A//doi.org/10.1016/j.cub.2023.06.038)
22. Schmidt, N. M., Michelsen, A., Hansen, L. H., Aggerbeck, M. R., Stelvig, M., Kutz, S., & Mosbacher, J. B. (2023). Sequential analysis of δ15N in guard hair suggests late gestation is the most critical period for muskox calf recruitment. *Rapid Communications in Mass Spectrometry*, *37*(6), e9470. [https://doi.org/https://doi.org/10.1002/rcm.9470](https://doi.org/https%3A//doi.org/10.1002/rcm.9470)
23. Shahi, S., Abermann, J., Silva, T., Langley, K., Larsen, S. H., Mastepanov, M., & Schöner, W. (2023a). Coastal climate variability in Northeast Greenland and the role of changing sea ice and fjord ice. *EGUsphere*, *2023*, 1-40. <https://doi.org/10.5194/egusphere-2023-105>
24. Shahi, S., Abermann, J., Silva, T., Langley, K., Larsen, S. H., Mastepanov, M., & Schöner, W. (2023b). The importance of regional sea-ice variability for the coastal climate and near-surface temperature gradients in Northeast Greenland. *Weather Clim. Dynam.*, *4*(3), 747-771. <https://doi.org/10.5194/wcd-4-747-2023>
25. Stuart-Lee, A. E., Mortensen, J., Juul-Pedersen, T., Middelburg, J. J., Soetaert, K., Hopwood, M. J., Engel, A., & Meire, L. (2023). Influence of glacier type on bloom phenology in two Southwest Greenland fjords. *Estuarine, Coastal and Shelf Science*, *284*, 108271. [https://doi.org/https://doi.org/10.1016/j.ecss.2023.108271](https://doi.org/https%3A//doi.org/10.1016/j.ecss.2023.108271)
26. van Beest, F. M., López-Blanco, E., Hansen, L. H., & Schmidt, N. M. (2023). Extreme shifts in habitat suitability under contemporary climate change for a high-Arctic herbivore. *Climatic Change*, *176*(4), 31. <https://doi.org/10.1007/s10584-023-03510-7>
27. van Beest, F. M., Schmidt, N. M., Stewart, L., Hansen, L. H., Michelsen, A., Mosbacher, J. B., Gilbert, H., Le Roux, G., & Hansson, S. V. (2023). Geochemical landscapes as drivers of wildlife reproductive success: Insights from a high-Arctic ecosystem. *Science of The Total Environment*, *903*, 166567. [https://doi.org/https://doi.org/10.1016/j.scitotenv.2023.166567](https://doi.org/https%3A//doi.org/10.1016/j.scitotenv.2023.166567)
28. Versluijs, T. S. L., Zhemchuzhnikov, M. K., Kutcherov, D., Roslin, T., Martin Schmidt, N., van Gils, J. A., & Reneerkens, J. (2023). Site-specific length-biomass relationships of arctic arthropod families are critical for accurate ecological inferences. *PeerJ*, *11*, e15943. <https://doi.org/10.7717/peerj.15943>
29. Vonnahme, T. R., Nowak, A., Hopwood, M. J., Meire, L., Søgaard, D. H., Krawczyk, D., Kalhagen, K., & Juul-Pedersen, T. (2023). Impact of winter freshwater from tidewater glaciers on fjords in Svalbard and Greenland; A review. *Progress in Oceanography*, *219*, 103144. [https://doi.org/https://doi.org/10.1016/j.pocean.2023.103144](https://doi.org/https%3A//doi.org/10.1016/j.pocean.2023.103144)
30. Watts, J. D., Farina, M., Kimball, J. S., Schiferl, L. D., Liu, Z., Arndt, K. A., Zona, D., Ballantyne, A., Euskirchen, E. S., Parmentier, F.-J. W., Helbig, M., Sonnentag, O., Tagesson, T., Rinne, J., Ikawa, H., Ueyama, M., Kobayashi, H., Sachs, T., Nadeau, D. F., . . . Oechel, W. C. (2023). Carbon uptake in Eurasian boreal forests dominates the high-latitude net ecosystem carbon budget. *Global Change Biology*, *29*(7), 1870-1889. [https://doi.org/https://doi.org/10.1111/gcb.16553](https://doi.org/https%3A//doi.org/10.1111/gcb.16553)
31. Weckström, K., Weckström, J., Wischnewski, J., Davidson, T. A., Lauridsen, T. L., Landkildehus, F., Christoffersen, K. S., & Jeppesen, E. (2023). Unlocking environmental archives in the Arctic—insights from modern diatom-environment relationships in lakes and ponds across Greenland [Original Research]. *Frontiers in Ecology and Evolution*, *11*. <https://doi.org/10.3389/fevo.2023.1177638>
32. Willcox, E. W., Bendtsen, J., Mortensen, J., Mohn, C., Lemes, M., Juul-Pedersen, T., Holding, J., Møller, E. F., Sejr, M. K., Seidenkrantz, M.-S., & Rysgaard, S. (2023). An Updated View of the Water Masses on the Northeast Greenland Shelf and Their Link to the Laptev Sea and Lena River. *Journal of Geophysical Research: Oceans*, *128*(4), e2022JC019052. [https://doi.org/https://doi.org/10.1029/2022JC019052](https://doi.org/https%3A//doi.org/10.1029/2022JC019052)
33. Zona, D., Lafleur, P. M., Hufkens, K., Gioli, B., Bailey, B., Burba, G., Euskirchen, E. S., Watts, J. D., Arndt, K. A., Farina, M., Kimball, J. S., Heimann, M., Göckede, M., Pallandt, M., Christensen, T. R., Mastepanov, M., López-Blanco, E., Dolman, A. J., Commane, R., . . . Oechel, W. C. (2023). Pan-Arctic soil moisture control on tundra carbon sequestration and plant productivity. *Global Change Biology*, *29*(5), 1267-1281. [https://doi.org/https://doi.org/10.1111/gcb.16487](https://doi.org/https%3A//doi.org/10.1111/gcb.16487)