

## List of publications

### Peer-reviewed articles

**Sannel, A.B.K.**, Hempel, L., Kessler, A., Prėskienis, V., 2017: Holocene development and permafrost history in sub-arctic peatlands in Tavvavuoma, northern Sweden. *Boreas*, doi:10.1111/bor.12276.

Muster, S., Roth, K., Langer, M., Lange, S., Aleina, F.C., Bartsch, A., Morgenstern, A., Grosse, G., Jones, B., **Sannel, A.B.K.**, Sjöberg, Y., Günther, F., Andresen, C., Veremeeva, A., Lindgren, P.R., Bouchard, F., Lara, M.J., Fortier, D., Charbonneau, S., Virtanen, T.A., Hugelius, G., Palmtag, J., Siewert, M.B., Riley, W.J., Koven, C.D. & Boike, J., 2017: PeRL: a circum-Arctic Permafrost Region Pond and Lake database. *Earth System Science Data* 9, 317–348.

Gisnås K., Etzelmüller, B., Lussana, C., Hjort, J., **Sannel, A.B.K.**, Isaksen, K., Westermann, S., Kuhry, P., Christiansen, H.H., Frampton, A., Åkerman, J., 2016: Permafrost map for Norway, Sweden and Finland. *Permafrost and Periglacial Processes* 28, 359-378.

Olefeldt, D., Goswami, S., Grosse, G., Hayes, D., Hugelius, G., Kuhry, P., McGuire, A.D., Romanovsky, V.E., **Sannel, A.B.K.**, Schuur, E.A.G., Turetsky, M.R., 2016: Circumpolar distribution and carbon storage of thermokarst landscapes. *Nature Communications*, doi:10.1038/ncomms13043.

Sjöberg, Y., Coon, E., **Sannel, A.B.K.**, Pannetier, R., Harp, D., Frampton, A., Painter, S.L., Lyon, S.W., 2016: Thermal effects of groundwater flow through subarctic fens – a case study based on field observations and numerical modeling. *Water Resources Research* 52, 1591-1606, doi:10.1002/2015WR017571.

Treat, C.C., Jones, M.C., Camill, P., Gallego-Sala, A., Garneau, M., Harden, J.W., Hugelius, G., Klein, E.S., Kokfelt, U., Kuhry, P., Loisel, J., Mathijssen, P.J.H., O'Donnell, J.A., Oksanen, P.O., Ronkainen, T.M., **Sannel, A.B.K.**, Talbot, J., Tarnocai, C.M., Väliranta, M., 2016: Effects of permafrost aggradation on peat properties as determined from a pan-Arctic synthesis of plant macrofossils. *Journal of Geophysical Research – Biogeosciences* 121, doi:10.1002/2015JG003061.

**Sannel, A.B.K.**, Hugelius, G., Jansson, P., Kuhry, P., 2016: Permafrost warming in a subarctic peatland – which meteorological controls are most important? *Permafrost and Periglacial Processes*, doi:10.1002/ppp.1862.

Loisel, J., Yu, Z., Beilman, D.W., Camill, P., Alm, J., Amesbury, M.J., Anderson, D., Andersson, S., Bochicchio, C., Barber, K., Belyea, L.R., Bunbury, J., Chambers, F.M., Charman, D.J., De Vleeschouwer, F., Fiałkiewicz-Kozieł, B., Finkelstein, S.A., Gałka, M., Garneau, M., Hammarlund, D., Hinchcliffe, W., Holmquist, J., Hughes, P., Jones, M.C., Klein, E.S., Kokfelt, U., Korhola, A., Kuhry, P., Lamarre, A., Lamentowicz, M., Large, M., Lavoie, M., MacDonald, G., Magnan, G., Makila, M., Mallon, G., Mathijssen, P., Mauquoy, D., McCarroll, J., Moore, T.R., Nichols, J., O'Reilly, B., Oksanen, P., Packalen, M., Peteet, D., Richard, P.J.H., Robinson, S., Ronkainen, T., Rundgren, M., **Sannel, A.B.K.**, Tarnocai, C., Thom, T., Tuittila, E.-S., Turetsky, M., Valiranta, M., van der Linden, M., van Geel, B., van Bellen, S., Vitt, D., Zhao, Y., Zhou, W., 2014: A database and synthesis of northern peatland soil properties and Holocene carbon and nitrogen accumulation. *The Holocene*, doi:10.1177/0959683614538073.

Schuur, E.A.G., Abbott, B.W., Bowden, W.B., Brovkin, V., Camill, P., Canadell, J.G., Chanton, J.P., Chapin III, F.S., Christensen, T.R., Ciais, P., Crosby, B.T., Czimczik, C.I., Grosse, G., Harden, J., Hayes, D.J., Hugelius, G., Jastrow, J.D., Jones, J.B., Kleinen, T., Koven, C.D., Krinner, G., Kuhry, P., Lawrence, D.M., McGuire, A.D., Natali, S.M., O'Donnell, J.A., Ping, C.L., Riley, W.J., Rinke, A., Romanovsky, V.E., **Sannel, A.B.K.**, Schädel, C., Schaefer, K., Sky, J., Subin, Z.M., Tarnocai, C., Turetsky, M., Waldrop, M., Walter-Anthony, K.M., Wickland, K.P., Wilson, C.J., Zimov, S.A., 2013: Expert assessment of vulnerability of permafrost carbon to climate change. *Climatic Change*, doi:10.1007/s10584-013-0730-7.

Schuur, E.A.G., Abbott, B.W., and the Permafrost Carbon Network (Bowden, W.B., Brovkin, V., Camill, P., Canadell, J.P., Chapin III, F.S., Christensen, T.R., Chanton, J.P., Ciais, P., Crill, P.M., Crosby, B.T., Czimczik, C.I., Grosse, G., Harden, J., Hayes, D.J., Hugelius, G., Jastrow, J.D., Kleinen, T., Koven, C.D., Krinner, G., Kuhry, P., Lawrence, D.M., McGuire, A.D., Natali, S.M., O'Donnell, J.A., Ping, C.L., Rinke, A., Riley, W.J., Romanovsky, V.E., **Sannel, A.B.K.**, Schädel, C., Schaefer, K., Subin, Z.M., Tarnocai, C., Turetsky, M., Waldrop, M., Walter-Anthony, K.M., Wickland, K.P., Wilson, C.J., Zimov, S.A.), 2011: High risk of permafrost thaw. *Nature* 480, 32-33.

**Sannel, A.B.K.** and Kuhry, P., 2011: Warming-induced destabilization of peat plateau/thermokarst lake complexes. *Journal of Geophysical Research – Biogeosciences* 116, doi:10.1029/2010JG001635.

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

Kaislahti Tillman, P., Holzkämper, S., Kuhry, P., **Sannel, A.B.K.**, Loader, N.J. and Robertson, I., 2010: Stable carbon and oxygen isotopes in Sphagnum fuscum peat from subarctic Canada: implications for palaeoclimate studies. *Chemical Geology* 270, 216-226.

Kaislahti Tillman, P., Holzkämper, S., Kuhry, P., **Sannel, A.B.K.**, Loader, N.J. and Robertson, I., 2010: Long-term climate variability in continental subarctic Canada: a 6200-year record derived from stable isotopes in peat. *Palaeogeography, Palaeoclimatology, Palaeoecology* 298, 235-246.

**Sannel, A.B.K.** and Brown, I.A., 2010: High resolution remote sensing identification of thermokarst lake dynamics in a subarctic peat plateau complex. *Canadian Journal of Remote Sensing* 36, S26-S40.

**Sannel, A.B.K.** and Kuhry, P., 2009: Holocene peat growth and decay dynamics in subarctic peat plateaus, west-central Canada. *Boreas* 38, 13-24.

**Sannel, A.B.K.** and Kuhry, P., 2008: Long-term stability of permafrost in subarctic peat plateaus, west-central Canada. *The Holocene* 18, 589-601.