

# Publications joint research project “Organic Soils in Emission Reporting”

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## Emissions of greenhouse gases

Beetz, S., Liebersbach, H., Glatzel, S., Jurasinski, G., Buczko, U. & H. Höper, 2013: Effects of land use intensity on the full greenhouse gas balance in an atlantic peat bog, *Biogeosciences* 10: 1067-1082.

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Beyer, C. & H. Höper, 2014: Greenhouse gas emissions from rewetted bog peat extraction sites and a Sphagnum cultivation site in Northwest Germany. *Biogeosciences* 12: 2101–2117.

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Beyer, C., Liebersbach, H., & H. Höper, 2015: Multiyear greenhouse gas flux measurements on a temperate fen soil used for cropland or grassland. *Journal of Plant Nutrition and Soil Science* 178: 99–111, 2015.

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Eickenscheidt T., Freibauer, A., Heinichen, J., Augustin, J. & M. Drösler, 2014: Short-term effects of biogas digestate and cattle slurry application on greenhouse gas emissions from high organic carbon grasslands. *Biogeosciences* 11: 6187-6207.

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Eickenscheidt, T., Heinichen, J., Augustin, J., Freibauer, A. & M. Drösler, 2014: Nitrogen mineralization and gaseous nitrogen losses from waterlogged and drained organic soils in a black alder (*Alnus glutinosa* (L.) Gaertn.) forest. *Biogeosciences* 11: 2961–2976.

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Hommeltenberg, J., Schmid, H. P., Drösler, M. & P. Werle, 2014: Can a bog drained for forestry be a stronger carbon sink than a natural bog forest? *Biogeosciences* 11: 3477–3493.

<http://www.biogeosciences.net/11/3477/2014/bg-11-3477-2014.html>

Leiber-Sauheitl, K., Fuß, R., Voigt, C. & A. Freibauer, 2014: High CO<sub>2</sub> fluxes from grassland on histic Gleysol along soil carbon and drainage gradients. *Biogeosciences* 11: 749-761.

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Leiber-Sauheitl, K., Fuß, R., Burkart, S., Buegger, F., Dänicke, S., Meyer, U., Petzke, K. J. & A. Freibauer, 2015: Sheep excreta cause no positive priming of peat-derived CO<sub>2</sub> and N<sub>2</sub>O emissions. *Soil Biology and Biochemistry* 88: 282-293.  
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## **Modelling and synthesis of greenhouse gas emissions**

Hoffmann, M., Jurisch, N., Albiac Borraz, E., Hagemann, U., Drösler, M., Sommer, M. & J. Augustin, 2015. Automated modeling of ecosystem CO<sub>2</sub> fluxes based on periodic closed chamber measurements: A standardized conceptual and practical approach. *Agricultural and Forest Meteorology* 200: 30–45.  
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## **Hydrology and Soil Physics**

Bechtold, M., Tiemeyer, B., Laggner, A., Leppelt, T., Frahm, E. & S. Belting, 2014. Large-scale regionalization of water table depth in peatlands optimized for greenhouse gas emission upscaling. *Hydrology and Earth System Sciences* 18: 3319–3339.  
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<https://dl.sciencesocieties.org/publications/vzj/articles/15/10/vzj2016.04.0029>

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## **Soil science and mapping of organic soils**

Altdorff, D., Bechtold, M., van der Kruk, J., Vereecken, H. & J.A. Huisman, 2016: Mapping peat layer properties with multi-coil offset electromagnetic induction and laser scanning elevation data. *Geoderma* 261: 178-189.

<http://www.sciencedirect.com/science/article/pii/S0016706115300252>

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