

Roulet, Nigel

- Teklemariam, T. A., Lafleur, P. M., Moore, T. R., **Roulet, N. T.**, & Humphreys, E. R. (2010). The direct and indirect effects of inter-annual meteorological variability on ecosystem carbon dioxide exchange at a temperate ombrotrophic bog. *Agricultural and Forest Meteorology*, 150(11), 1402-1411.
- Lund, M.*, Lafleur, P. M., **Roulet, N. T.**, Lindroth, A.*, Christensen, T. R.*, Aurela, M.*, et al. (2010). Variability in exchange of CO₂ across 12 northern peatland and tundra sites. *Global Change Biology*, 16(9), 2436-2448.
- Christian, J. R., Arora, V. K., Boer, G. J., Curry, C. L., Zahariev, K., Denman, K. L., et al. (2010). The global carbon cycle in the canadian earth system model (CanESM1): Preindustrial control simulation. *Journal of Geophysical Research G: Biogeosciences*, 115(3)
- Wang, Y.*, **Roulet, N. T.**, Frolking, S.*, & **Mysak, L. A.** (2009). Erratum: "the importance of northern peatlands in global carbon systems during the holocene" (climate of the past (2009) 5 (683-693)). *Climate of the Past*, 5(4), 721-722.
- Wang, Y.*, **Roulet, N. T.**, Frolking, S.*, & **Mysak, L. A.** (2009). The importance of northern peatlands in global carbon systems during the holocene. *Climate of the Past Discussions*, 5(2), 1231-1258.
- Wang, Y.*, **Roulet, N. T.**, Frolking, S.*, & **Mysak, L. A.** (2009). The importance of northern peatlands in global carbon systems during the holocene. *Climate of the Past*, 5(4), 683-693.
- James, A. L.*, & **Roulet, N. T.** (2009). Antecedent moisture conditions and catchment morphology as controls on spatial patterns of runoff generation in small forest catchments. *Journal of Hydrology*, 377(3-4), 351-366.
- Roulet, N.**, & Frolking, S.* (2009). Peatlands and global carbon cycle modeling. *Eos*, 90(29), 251.
- Lund, M.*, **Roulet, N. T.**, Lindroth, A.*, Lafleur, P. M., Christensen, T. R.*, Aurela, M.*, et al. (2009). *Exchange of carbon dioxide across twelve northern peatland and tundra sites*
- McEnroe, N. A., **Roulet, N. T.**, **Moore, T. R.**, & Garneau, M. (2009). Do pool surface area and depth control CO₂ and CH₄ fluxes from an ombrotrophic raised bog, james bay, canada? *Journal of Geophysical Research G: Biogeosciences*, 114(1)
- Connolly, J.*, **Roulet, N. T.**, Seaquist, J. W.*, Holden, N. M.*, Lafleur, P. M., Humphreys, E. R., et al. (2009). Using MODIS derived fPAR with ground based flux tower measurements to derive the light use efficiency for two canadian peatlands. *Biogeosciences*, 6(2), 225-234.
- Sonnentag, O.*, Chen, J. M., **Roulet, N. T.**, Ju, W., & Govind, A.* (2008). Spatially explicit simulation of peatland hydrology and carbon dioxide exchange: Influence of mesoscale topography. *Journal of Geophysical Research G: Biogeosciences*, 113(2)
- St-Hilaire, F., Wu, J., **Roulet, N. T.**, Frolking, S.*, Lafleur, P. M., Humphreys, E. R., et al. (2008). McGill wetland model: Evaluation of a peatland carbon simulator developed for global assessments. *Biogeosciences Discussions*, 5(2), 1689-1725.
- Connolly, J.*, **Roulet, N. T.**, Seaquist, J. W.*, Holden, N. M.*, Lafleur, P. M., Humphreys, E. R., et al. (2008). Using MODIS derived f PAR with ground based flux tower measurements to derive the light use efficiency for two canadian peatlands. *Biogeosciences Discussions*, 5(2), 1765-1794.

- Bonneville, M. -., **Strachan, I. B.**, Humphreys, E. R., & **Roulet, N. T.** (2008). Net ecosystem CO₂ exchange in a temperate cattail marsh in relation to biophysical properties. *Agricultural and Forest Meteorology*, 148(1), 69-81.
- James, A. L.* & **Roulet, N. T.** (2007). Investigating hydrologic connectivity and its association with threshold change in runoff response in a temperate forested watershed. *Hydrological Processes*, 21(25), 3391-3408.
- Wieder, R. K.*, Canadell, J.*, Limpens, J., **Moore, T.**, **Roulet, N.**, & Schaepman-Strub, G.* (2007). Peatlands and the carbon cycle: From local processes to global implications. *Eos*, 88(29), 295.
- Sonnentag, O.*, Talbot, J., Chen, J. M., & **Roulet, N. T.** (2007). Using direct and indirect measurements of leaf area index to characterize the shrub canopy in an ombrotrophic peatland. *Agricultural and Forest Meteorology*, 144(3-4), 200-212.
- Frolking, S.* & **Roulet, N. T.** (2007). Holocene radiative forcing impact of northern peatland carbon accumulation and methane emissions. *Global Change Biology*, 13(5), 1079-1088.
- Pelletier, L., **Moore, T. R.**, **Roulet, N. T.**, Garneau, M., & Beaulieu-Audy, V. (2007). Methane fluxes from three peatlands in the la grande rivière watershed, james bay lowland, canada. *Journal of Geophysical Research G: Biogeosciences*, 112(1)
- Blodau, C.* & **Roulet, N. T.**, Heitmann, T.*, Stewart, H., Beer, J.*, Lafleur, P., et al. (2007). Belowground carbon turnover in a temperate ombrotrophic bog. *Global Biogeochemical Cycles*, 21(1)
- Roulet, N. T.**, Lafleur, P. M., **Richard, P. J. H.**, **Moore, T. R.**, Humphreys, E. R., & Bubier, J.* (2007). Contemporary carbon balance and late holocene carbon accumulation in a northern peatland. *Global Change Biology*, 13(2), 397-411.
- Moore, T. R.**, Lafleur, P. M., Poon, D. M. I., Heumann, B. W., Seaquist, J. W.* & **Roulet, N. T.** (2006). Spring photosynthesis in a cool temperate bog. *Global Change Biology*, 12(12), 2323-2335.
- Admiral, S. W., Lafleur, P. M., & **Roulet, N. T.** (2006). Controls on latent heat flux and energy partitioning at a peat bog in eastern canada. *Agricultural and Forest Meteorology*, 140(1-4), 308-321.
- Roulet, N.**, & **Moore, T. R.** (2006). Environmental chemistry: Browning the waters. *Nature*, 444(7117), 283-284.
- James, A. L.* & **Roulet, N. T.** (2006). Investigating the applicability of end-member mixing analysis (EMMA) across scale: A study of eight small, nested catchments in a temperate forested watershed. *Water Resources Research*, 42(8)
- Frolking, S.* & **Roulet, N.**, & Fuglestedt, J.* (2006). How northern peatlands influence the earth's radiative budget: Sustained methane emission versus sustained carbon sequestration. *Journal of Geophysical Research G: Biogeosciences*, 111(1)
- Coursolle, C., **Margolis, H. A.**, Barr, A. G., Black, T. A., Amiro, B. D., McCaughey, J. H., et al. (2006). Late-summer carbon fluxes from canadian forests and peatlands along an east-west continental transect. *Canadian Journal of Forest Research*, 36(3), 783-800.
- Ju, W., Chen, J. M., Black, T. A., Barr, A. G., McCaughey, H., & **Roulet, N. T.** (2006). Hydrological effects on carbon cycles of canada's forests and wetlands. *Tellus, Series B: Chemical and Physical Meteorology*, 58(1), 16-30.