

Supplemental Material for:

**Reduced Snow Cover Increases Wintertime Nitrous Oxide (N₂O) Emissions from an
Agricultural Soil in the Upper U.S. Midwest**

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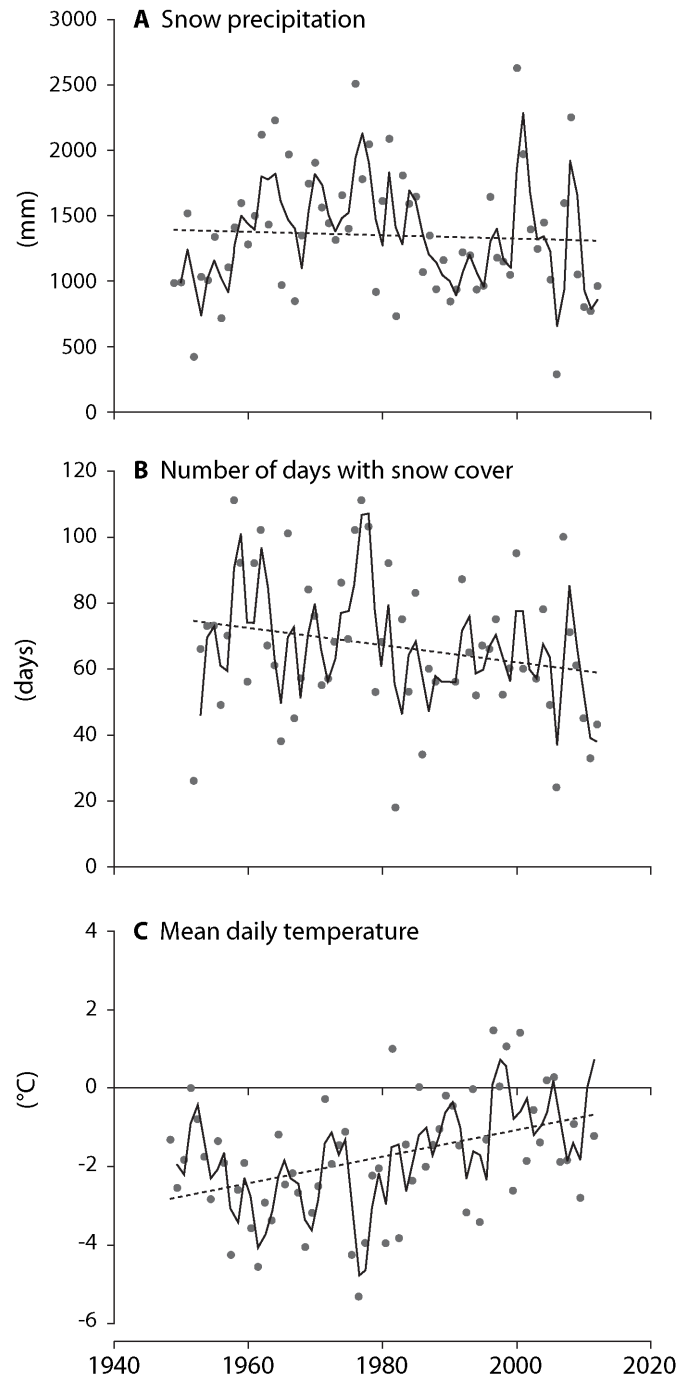


Figure S1. Wintertime weather at the Kellogg Biological Station for 1949-2013. **A** Snowfall summed from early November to late April of the following year, **B** number of days with snow cover, and **C** mean daily air temperature (December - March). Data source: Kellogg Biological Station National Weather Service Station (<http://lter.kbs.msu.edu/datatables/31>)

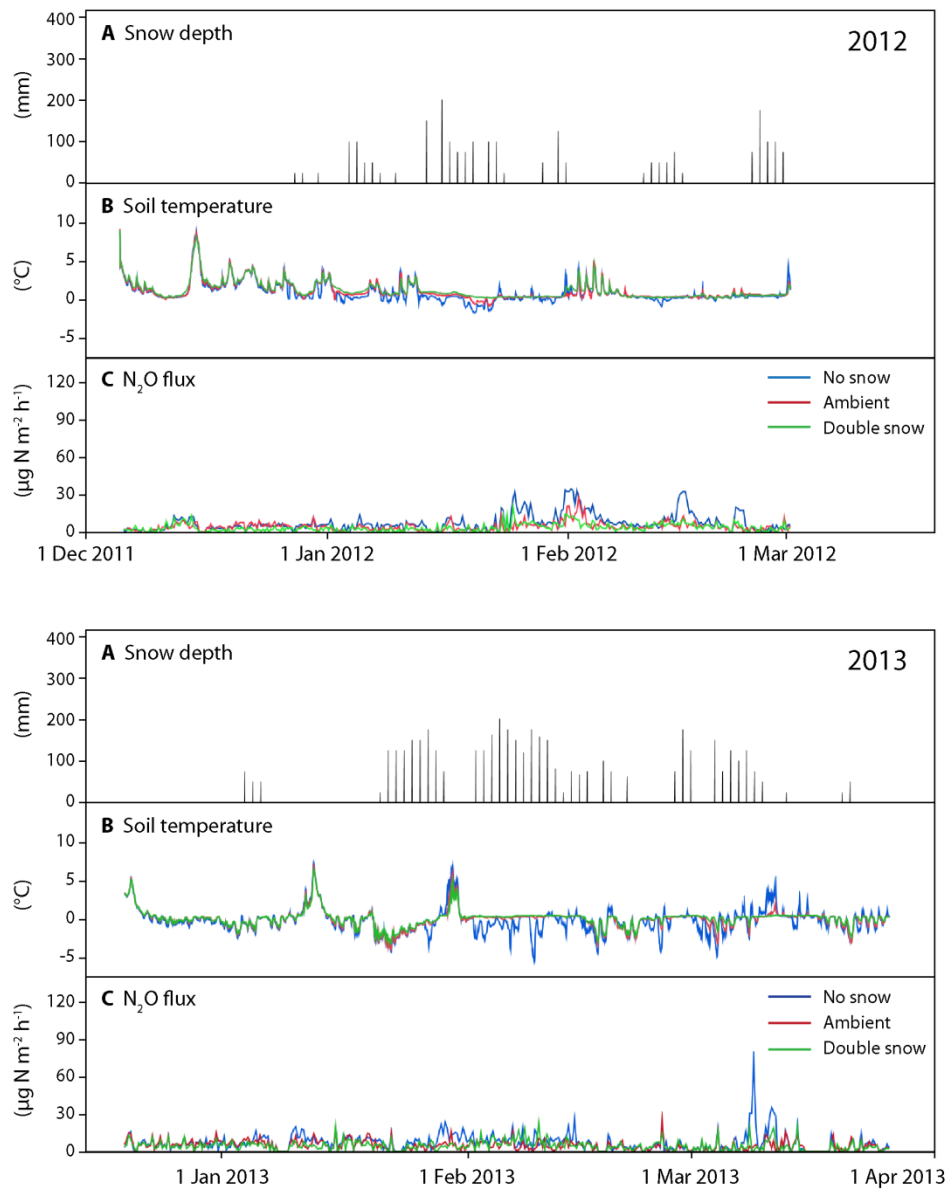


Figure S2. For Winter 2012 and 2013, **A** ambient snow depth, **B** mean soil temperature at 0-5 cm depth, and **C** daily soil N₂O fluxes for all snow treatments. Error bars for temperature and N₂O flux ($n = 4$) omitted for clarity. Winter 2011 data appear in Fig. 1.

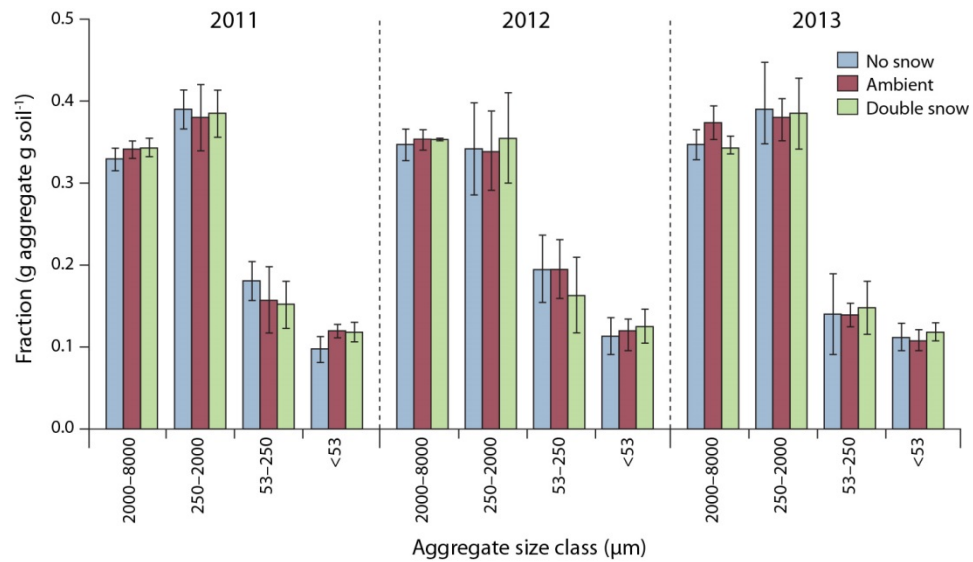


Figure S3. Distribution of pre-winter surface soil (0-10 cm depth) aggregates in four aggregate size classes for winters 2011-2013. Error bars represent standard errors based on n=4 replicate plots. There were no significant differences ($P<0.05$) among treatments within any size class, hence no letters are shown to denote significant differences.

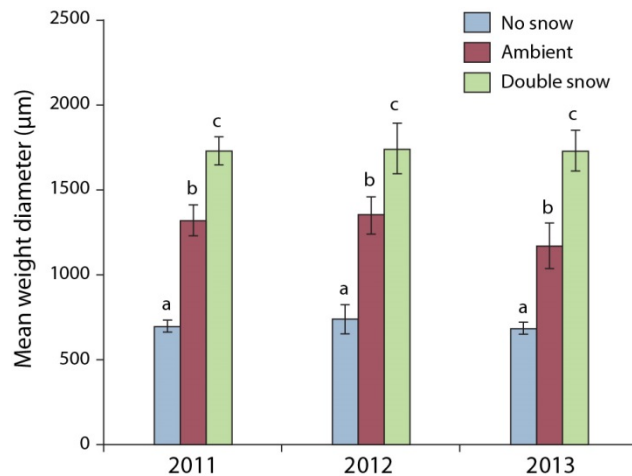


Figure S4. Mean weight diameter of sand-free surface soil aggregates (0-10 cm depth). Error bars represent standard errors based on n=4 replicate plots. Treatments within a season marked with different letters are significantly different from one another ($P<0.05$).