

Table S1. Basic soil physical/chemical properties for landscape patches used in this study.

<b>Landscape patch</b>	<b>pH (water)</b>			<b>Total C (mg/g)</b>			<b>Total N (mg/g)</b>			<b>C:N</b>		
	<i>0-15cm</i>	<i>15-30cm</i>	<i>30-52cm</i>	<i>0-15 cm</i>	<i>15-30 cm</i>	<i>30-52 cm</i>	<i>0-15 cm</i>	<i>15-30 cm</i>	<i>30-52 cm</i>	<i>0-15 cm</i>	<i>15-30 cm</i>	<i>30-52 cm</i>
<b>TfGr</b>	7.72	7.54	7.38	4.99	3.74	3.34	0.35	0.31	0.32	14.3	12.1	10.4
<b>PP</b>	7.83	8.01	7.65	12.92	7.45	5.01	0.92	0.51	0.37	14.0	14.6	13.5
<b>OMx</b>	7.77	7.36	7.49	15.65	4.16	12.61	0.65	0.31	0.65	24.1	13.4	19.4
<b>OGa</b>	7.49	7.82	8.08	9.44	9.57	8.81	0.53	0.51	0.70	17.8	18.8	12.6
<b>MulP</b>	6.09	7.81	7.21	21.11	9.88	7.08	0.98	0.43	0.33	21.5	23.0	21.5
<b>MulC</b>	7.62	7.27	7.22	8.89	5.66	5.81	0.48	0.39	0.40	18.5	14.5	14.5
<b>Agr</b>	6.25	6.29	6.20	7.47	11.37	8.86	0.63	0.80	0.57	11.9	11.1	15.5

Table S2. Raw data showing nitrification, mineralization, and exchangeable inorganic N for all landscape patches and soil depths. Depth 1 is 0-15cm, depth 2 is 15-30 cm, and depth 3 is 30-52 cm.

Landscape Patch	Nitrification, mg N/kg/d	Net N Mineralization mg N/kg/d	Exchangeable NO3, mg/Kg	Exchangeable NH4, mg/Kg	Soil depth
TfGr	0.49	0.48	0.43	0.81	1
TfGr	0.55	0.56	0.43	0.66	1
TfGr	0.48	0.48	0.47	0.62	1
PP	1.84	2.24	0.65	1.51	1
PP	1.83	2.22	0.69	1.39	1
PP	1.63	2.02	0.69	1.49	1
OMx	0.10	0.02	0.96	1.55	1
OMx	0.10	0.06	0.44	1.57	1
OMx	0.04	0.00	0.46	1.61	1
OGa	0.56	0.50	0.60	1.28	1
OGa	0.57	0.51	0.62	1.30	1
OGa	0.56	0.49	0.64	1.37	1
MulP	0.01	0.00	2.56	1.97	1
MulP	0.24	0.16	1.89	1.71	1
MulP	0.10	0.00	2.57	3.24	1
MulC	0.33	0.36	1.38	0.83	1
MulC	0.59	0.40	1.38	0.69	1
MulC	0.27	0.30	1.47	0.78	1
Agr	0.99	1.30	1.66	2.04	1
Agr	0.89	1.14	1.76	2.00	1
Agr	1.10	1.57	1.71	2.00	1
TfGr	0.00	0.00	6.59	0.50	2
TfGr	0.00	0.00	6.72	0.40	2
TfGr	0.00	0.00	6.83	0.32	2
PP	0.49	0.82	0.49	1.30	2
PP	0.49	0.74	0.46	1.35	2

PP	0.46	0.79	0.46	1.48	2
OMx	0.02	0.02	0.78	0.63	2
OMx	0.00	0.00	0.80	0.48	2
OMx	0.00	0.00	0.76	0.49	2
OGa	0.00	0.00	3.78	0.67	2
OGa	0.00	0.00	3.64	0.58	2
OGa	0.00	0.00	3.68	0.59	2
MulP	0.25	0.19	2.16	1.21	2
MulP	0.08	0.03	2.17	1.17	2
MulP	0.14	0.00	2.20	2.48	2
MulC	0.12	0.49	1.20	0.49	2
MulC	0.05	0.53	1.24	0.49	2
MulC	0.03	0.45	1.38	0.50	2
Agr	0.69	1.22	1.37	0.54	2
Agr	0.71	1.03	1.32	0.50	2
Agr	0.73	1.35	1.32	0.53	2
TfGr	0.00	0.00	1.86	0.31	3
TfGr	0.00	0.00	1.89	0.34	3
TfGr	0.00	0.00	1.85	0.30	3
PP	0.02	0.50	0.65	0.63	3
PP	0.02	0.51	0.62	0.59	3
PP	0.02	0.58	0.63	0.52	3
OMx	0.00	0.00	8.90	0.38	3
OMx	0.00	0.00	8.15	0.41	3
OMx	0.00	0.00	8.33	0.52	3
OGa	0.18	0.18	0.17	0.62	3
OGa	0.24	0.25	0.19	0.75	3
OGa	0.19	0.20	0.19	0.66	3
MulP	0.00	0.00	4.15	1.22	3
MulP	0.00	0.00	2.54	0.92	3

MuIP	0.00	0.28	1.77	0.74	3
MuIC	0.09	0.59	0.19	0.56	3
MuIC	0.11	0.49	0.20	0.49	3
MuIC	0.17	0.63	0.19	0.45	3
Agr	0.23	0.55	0.41	1.31	3
Agr	0.26	0.61	0.32	1.33	3
Agr	0.25	0.68	0.34	1.37	3