

Ecography

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**Supplementary material**

## Appendix 1

Table A1 The average contents and standard errors (SE) of soil variables in 30 quadrats for each of five meadows along the successional gradient of site 1.

	3-year		5-year		7-year		11-year		Undisturbed	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
P(mg/kg)	1098.96	108.88	1038.02	48.21	856.20	62.91	1030.63	59.33	867.60	45.98
Fe(mg/kg)	29543.73	3379.46	31835.77	686.63	32017.30	1596.52	33649.23	2856.74	33690.77	1376.74
Mg(mg/kg)	11785.20	532.97	12229.40	174.66	12097.80	222.37	11326.80	266.02	12412.34	283.42
Ca(mg/kg)	22065.95	6020.71	34487.62	6160.50	24657.38	9420.30	18401.19	7255.67	20121.06	8760.69
Na(mg/kg)	13034.32	475.43	12732.85	283.98	11676.58	753.76	10879.74	708.27	12740.52	379.27
K(mg/kg)	20514.55	978.97	19620.60	373.67	18792.74	914.28	20849.51	487.93	20399.14	529.35
pH	8.06	0.05	8.21	0.05	7.86	0.10	8.56	0.10	8.04	0.19
C(mg/kg)	1355.66	847.41	987.61	1052.44	1682.70	730.52	1061.26	552.47	1061.95	467.36
N(mg/kg)	600.07	136.58	156.02	65.49	669.63	140.55	503.60	118.77	425.47	114.72
Moisture(mg/kg)	2108.41	444.89	1575.83	390.30	1696.36	408.91	1967.90	616.11	2154.86	484.93
Cu (mg/kg)	11.21	9.75	23.03	3.06	18.32	4.79	17.47	11.65	20.17	4.58
S (mg/kg)	800.53	86.82	629.33	91.12	1215.82	204.08	825.87	148.88	792.24	254.27
Mo(mg/kg)	1.03	0.13	0.98	0.12	1.19	0.10	1.11	0.09	1.00	0.11
Zn(mg/kg)	77.52	3.77	72.50	2.37	71.07	4.90	78.88	3.38	71.38	2.16
Mn(mg/kg)	583.55	57.64	611.78	17.77	608.38	39.00	671.08	46.12	654.30	26.44

Table A2 The average contents and standard errors (SE) of soil variables and standard errors in 30 quadrats for each of five meadows along the successional gradient of site 2.

	3-year		5-year		7-year		11-year		Undisturbed	
	Mean	SE	Mean	SE	Mean	SE	Mean	SE	Mean	SE
P(mg/kg)	1072.87	121.59	1103.82	88.29	982.11	33.03	908.77	28.24	859.55	64.37
Fe(mg/kg)	30472.63	3831.64	29013.13	2479.97	33546.33	813.58	27591.90	2608.68	30774.80	3630.54
Mg(mg/kg)	12017.40	392.47	12555.80	244.81	12593.60	396.23	11352.20	297.91	11768.00	694.09
Ca(mg/kg)	22226.90	6117.65	50001.67	5012.58	25089.76	4377.83	11025.24	871.91	18398.33	5847.80
Na(mg/kg)	13279.41	403.15	12575.06	347.87	12500.38	453.35	13640.73	325.12	13379.08	331.75
K(mg/kg)	20298.81	738.91	19012.09	427.10	20647.60	527.06	20791.15	217.31	19782.40	1065.55
pH	8.05	0.06	8.31	0.08	8.01	0.10	8.71	0.10	7.93	0.41
C(mg/kg)	1274.36	856.25	1303.88	1898.87	1127.90	849.72	983.22	644.29	903.02	280.73
N(mg/kg)	434.27	171.75	180.07	60.58	259.79	38.06	325.82	47.84	593.15	93.46
Moisture(mg/kg)	2442.97	349.59	1679.82	290.27	1973.79	423.67	2367.41	419.48	2514.12	428.30
Cu (mg/kg)	14.40	10.61	20.83	6.95	23.76	1.83	3.46	3.18	12.35	8.44
S (mg/kg)	757.47	93.35	711.49	115.33	703.27	90.07	610.97	63.71	777.93	93.36
Mo(mg/kg)	1.06	0.10	0.96	0.14	0.98	0.10	1.02	0.10	0.96	0.12
Zn(mg/kg)	77.52	6.15	74.03	5.01	75.76	4.66	76.22	1.43	70.44	2.48
Mn(mg/kg)	600.60	64.48	557.85	39.75	648.38	22.41	565.42	44.22	595.08	63.41