

Appendix S2

Sonnier, G., E.H. Boughton, and R.E. Whittington. Long-term response of wetland plant communities to management intensity, grazing abandonment, and prescribed fire. *Ecological Applications*.

Table S1. Summary of linear mixed effect models testing the effect of pasture type, grazing treatment, and burning treatment on total species richness, native species richness, non-native species richness and non-native incidence (%).

<i>Predictors</i>	Total species richness			Native richness			Non-native richness			Non-native incidence (%)		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	25.25	21.91 – 28.59	< 0.001	20.51	17.01 – 24.02	< 0.001	4.75	4.07 – 5.43	< 0.001	25.32	20.89 – 29.75	< 0.001
Pasture type [SNP]	6.78	3.62 – 9.95	< 0.001	9.08	5.76 – 12.40	< 0.001	-2.05	-2.73 – -1.38	< 0.001	-17.51	-21.84 – -13.17	< 0.001
Grazing Treatment [Grazed]	3.26	0.10 – 6.43	0.04	3.03	-0.29 – 6.35	0.07	0.23	-0.45 – 0.90	0.51	-2.69	-7.03 – 1.64	0.22
Burning Treatment [Unburn]	-1.80	-4.96 – 1.37	0.27	-1.28	-4.60 – 2.04	0.45	-0.61	-1.28 – 0.07	0.08	-0.08	-4.42 – 4.25	0.97
Observations	400			400			369			400		
Marginal R ² / Conditional R ²	0.229 / 0.633			0.314 / 0.714			0.335 / 0.644			0.515 / 0.833		

Table S2. Summary of linear mixed effect models testing the effect of pasture type, grazing treatment, and burning treatment on the exponential of Shannon diversity, Pielou index, and mean coefficient of conservatism.

<i>Predictors</i>	Shannon diversity index (H')			Pielou index			Mean coefficient of conservatism		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	17.79	15.23 – 20.36	<0.001	0.88	0.87 – 0.89	<0.001	2.59	2.26 – 2.92	<0.001
Pasture type [SNP]	5.59	3.14 – 8.03	<0.001	0.04	0.02 – 0.05	<0.001	1.34	1.01 – 1.66	<0.001
Grazing treatment [Grazed]	2.74	0.30 – 5.19	0.03	0.02	0.01 – 0.04	<0.001	0.20	-0.13 – 0.53	0.23
Burning treatment [Unburn]	-1.54	-3.99 – 0.90	0.22	0.01	-0.00 – 0.03	0.07	0.07	-0.25 – 0.40	0.66
Pasture type * Grazing treatment				-0.02	-0.04 – -0.00	0.03			
Pasture type * Burning treatment				-0.03	-0.05 – -0.01	<0.001			
Grazing treatment * Burning treatment				-0.02	-0.04 – 0.00	0.07			
Pasture type * Grazing treatment * Burning treatment				0.03	0.01 – 0.06	0.02			
Observations	400			400			400		

Marginal R^2 / Conditional
 R^2 0.259 / 0.654

0.238 / 0.399

0.574 / 0.925

Table S3. Summary of linear mixed effect models testing the effect of pasture type, grazing treatment, and burning treatment on forb incidence (%), graminoid incidence (%) and tree and shrub incidence (%).

<i>Predictors</i>	Forb incidence (%)			Graminoid incidence (%)			Tree/shrub incidence (%)		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	54.64	51.64 –	<0.001	42.03	– 44.94	<0.001	1.55	0.43 –	0.01
Pasture type [SNP]	-6.76	-9.47 – -4.04	<0.001	5.13	2.65 –	<0.001	1.69	0.58 –	<0.001
Grazing treatment [Grazed]	0.33	-2.38 – 3.05	0.81	2.23	-0.25 – 4.71	0.08	-1.07	-2.18 – 0.03	0.06
Burning treatment [Unburn]	1.86	-0.85 – 4.58	0.18	-1.79	-4.27 – 0.69	0.16	-0.07	-1.18 – 1.03	0.90
Observations	400								
Marginal R ² / Conditional R ²	0.182 / 0.478			0.140 / 0.442			0.133 / 0.523		

Table S4. Summary of linear models testing the effect of pasture type, grazing treatment, and burning treatment on rate of community change (unitless) and mean rank shift (unitless).

<i>Predictors</i>	Rate of community change			Mean rank shift		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	0.59	0.44 – 0.74	<0.001	3.05	2.54 – 3.56	<0.001
Pasture type [SNP]	-0.02	-0.18 – 0.13	0.754	1.20	0.68 – 1.71	<0.001
Grazing treatment [Grazed]	-0.37	-0.52 – -0.22	<0.001	0.53	0.01 – 1.04	0.044
Burning treatment [Unburn]	0.04	-0.11 – 0.19	0.583	-0.21	-0.73 – 0.30	0.419
Observations	40			40		
R ²	0.37			0.40		

Table S5. Summary of linear mixed effect models testing the effect of pasture type, grazing treatment, and burning treatment on functional dispersion and community weighted mean of SLA (cm²/g), LDMC (mg/g) and Plant height (cm).

<i>Predictors</i>	Functional Dispersion			SLA (cm²/g)			LDMC (mg/g)			Plant Height (cm)		
	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>	<i>Estimates</i>	<i>CI</i>	<i>p</i>
(Intercept)	1.26	1.20 – 1.32	<0.001	249.32	238.59 – 260.05	<0.001	229.62	221.74 – 237.51	<0.001	65.27	61.63 – 68.91	<0.001
Pasture type [SNP]	-0.01	-0.06 – 0.05	0.78	-34.36	-44.76 – 23.95	<0.001	10.85	3.20 – 18.50	0.005	-2.09	-5.35 – 1.16	0.21
Grazing treatment [Grazed]	0.06	-0.02 – 0.14	0.14	-0.95	-11.36 – 9.45	0.86	-2.41	-10.06 – 5.25	0.54	-7.86	-11.11 – -4.60	<0.001
Burning treatment [Unburn]	-0.10	-0.18 – -0.02	0.018	-3.01	-13.42 – 7.39	0.57	0.65	-7.00 – 8.30	0.87	-3.00	-6.26 – 0.25	0.07
Grazing treatment * Burning treatment	0.11	-0.00 – 0.22	0.05									
Observations	400			400			400			400		
Marginal R ² / Conditional R ²	0.22 / 0.58			0.40 / 0.79			0.10 / 0.60			0.27 / 0.73		