

7. Tables

Table 1. Variables Used in PERMANOVA Models.

Variable	Abbreviation	Source
Fire		
Time Since Fire	TSF	MTBS
Fire Frequency	FF	MTBS
Climate		
Maximum Vapor Pressure Deficit		
<i>Year of Fire</i>	vpdmax_during	GRIDMET
<i>Year before Fire</i>	vpdmax_before	GRIDMET
<i>Year after Fire</i>	vpdmax_after	GRIDMET
Maximum Temperature		
<i>Year of Fire</i>	tmax_during	GRIDMET
<i>Year before Fire</i>	tmax_pre	GRIDMET
<i>Year after Fire</i>	tmax_after	GRIDMET
Precipitation		
<i>Nov - May; 2 Years Before Fire</i>	ppt_2pre	GRIDMET
<i>Nov - May; 1 Year Before Fire</i>	ppt_1pre	GRIDMET
<i>Nov - May; After Fire</i>	ppt_post	GRIDMET
Other		
Folded Aspect		Field Measurements
Slope		Field Measurements
Elevation		USGS
Animal Unit Months per Hectare	AUM_ha	BLM

Table 2: Results of linear mixed models testing the relationship between diversity indexes and cheatgrass abundance, while accounting for elevation. Study block was the random effect. Partial coefficient of determination was calculated from Jeager et al. (2016)

	<i>Dependent variable:</i>			
	Shannon-Weaver	Pielou Evenness	Number of Species	Beta Diversity
Cheatgrass Cover	−0.017*** (0.003)	−0.008*** (0.002)	−0.071*** (0.027)	0.002 (0.001)
Elevation	0.189*** (0.062)	0.046 (0.029)	1.700*** (0.642)	0.065*** (0.021)
Constant	1.214*** (0.103)	0.652*** (0.052)	8.538*** (1.121)	0.288*** (0.037)
partial R ² , Cheatgrass Cover	0.65	0.51	0.24	0.08
<i>Note:</i>			*p<0.1; **p<0.05; ***p<0.01	

Table 3. PERMANOVA results for fire history and environmental factors influencing post-fire **community composition**.

	Df	SumsOfSqs	MeanSqs	F.Model	R2	Pr(>F)
TSF	1	0.1457	0.1457	2.0189	0.0713	0.0084
FF	1	0.2342	0.2342	3.2448	0.1146	0.0475
vpdmax_during	1	0.2243	0.2243	3.1081	0.1098	0.0018
tmax_during	1	0.0952	0.0952	1.3186	0.0466	0.1419
tmax_pre	1	0.0776	0.0776	1.0757	0.0380	0.1889
AUM_ha	1	0.2038	0.2038	2.8232	0.0997	0.2146
TSF:FF	1	0.1246	0.1246	1.7262	0.0610	0.0401
Residuals	13	0.9383	0.0722		0.4591	
Total	20	2.0436			1.0000	

Table 4. PERMANOVA results for fire history and environmental factors influencing post-fire **beta diversity** (Whittaker's index).

	Df	SumsOfSqs	MeanSqs	F.Model	R2	Pr(>F)
FF	1	0.2110	0.2110	2.4408	0.0783	0.0061
ppt_1pre	1	0.5236	0.5236	6.0581	0.1943	0.0009
tmax_after	1	0.1075	0.1075	1.2438	0.0399	0.0642
ppt_2pre	1	0.3993	0.3993	4.6199	0.1482	0.0112
TSF	1	0.1450	0.1450	1.6779	0.0538	0.2499
folded_aspect	1	0.1105	0.1105	1.2780	0.0410	0.4628
Elevation	1	0.0442	0.0442	0.5108	0.0164	0.9532
ppt_1pre:tmax_after	1	0.1162	0.1162	1.3447	0.0431	0.0254
Residuals	12	1.0371	0.0864		0.3849	
Total	20	2.6943			1.0000	