Permutational multivariate analysis of variance
adonis(TransSeedData ~ Burn*Dune, data = SeedFactors, permutations = 999)
NMDS stress: 0.1650231

	Df	SumsOfSqs	MeansSqs	F.Model (Pseudo-F)	R2	Pr(>F)
Burn	2	4.13	2.06498	6.4637	0.05195	0.001
Dune	2	3.635	1.81733	5.6885	0.04572	0.001
Burn:Dune	4	2.083	0.52069	1.6298	0.0262	0.007
Residuals	218	69.645	0.31947	0.87612		
Total	226	79.493	1			

Levene's Test for Homogeneity of Variance leveneTest(fit.SWI, center = mean)			Shapiro-Wilk normality test shapiro.test(residuals(fit.SWI))	
Df	**F value**	**Pr(>F)**	**W**	**p-value**
SWI				
8	1.5315	0.1472	0.96833	3.65E-05
SDI				
8	1.7508	0.08789	0.95413	6.95E-07
Num_Species				
8	5.4425	2.72E-06	0.97236	1.31E-04
Num_Sp_FrRoot				
8	2.015	0.04562	0.79116	< 2.20E-16
Tot_Abundance				
8	3.6192	0.0005517	0.53302	< 2.20E-16
Abun_FrRoot				
8	1.7939	0.07916	0.97746	7.45E-04

Two-way analysis of variance with type III sums of squares				
	Sum Sq	**Df**	**F value**	**Pr(>F)**
SWI fit.SWI <- lm(SWI ~ Burn*Dune, data=glm_df) Anova(fit.SWI, type ='III')				
(Intercept)	162.026	1	602.5306	< 2.20E-16
Burn	0.027	2	0.0497	0.951512
Dune	3.438	2	6.3926	0.001987
Burn:Dune	2.94	4	2.7334	0.029798
Residuals	61.849	230		
SDI				
(Intercept)	51.351	1	7.97E+02	< 2.20E-16
Burn	0.422	2	3.2774	0.039497
Dune	0.713	2	5.5297	0.004513
Burn:Dune	0.37	4	1.4367	0.222637
Residuals	14.822	230		
Num_Species				
(Intercept)	3562.7	1	586.5605	< 2.20E-16
Burn	38.6	2	3.1749	0.0436361
Dune	123.7	2	10.1796	5.81E-05
Burn:Dune	127.3	4	5.2402	0.0004672
Residuals	1397	230		
Num_Sp_FrRoot				
(Intercept)	375.76	1	3219.045	< 2.00E-16
Burn	0.53	2	2.28	0.1046

Dune	0.95	2	4.0522	0.01864
Burn:Dune	1.03	4	2.2074	0.069
Residuals	26.85	230		
Tot_Abundance				
(Intercept)	476910	1	57.0575	9.92E-13
Burn	15022	2	0.8986	0.40856
Dune	51711	2	3.0934	0.04724
Burn:Dune	86228	4	2.5791	0.03821
Residuals	1922435	230		
Abun_FrRoot				
(Intercept)	927.63	1	1208.395	< 2.20E-16
Burn	1.76	2	1.1431	0.320633
Dune	11.31	2	7.3672	0.0007921
Burn:Dune	9.05	4	2.947	0.021072
Residuals	176.56	230		

Partial eta-squared effect size				
Parameter	**Eta2 (partial)**	**90% CI**	**Eta2**	**90% CI**
SWI eta_squared(aov.SWI, partial=TRUE)				
Burn	4.32E-04	[0.00, 0.00]	3.92E-04	[0.00, 0.00]
Dune	0.05	[0.01, 0.10]	0.05	[0.01, 0.10]
Burn:Dune	0.05	[0.00, 0.08]	0.04	[0.00, 0.08]
SDI				
Burn	0.03	[0.00, 0.07]	0.03	[0.00, 0.06]
Dune	0.05	[0.01, 0.09]	0.04	[0.01, 0.09]
Burn:Dune	0.02	[0.00, 0.05]	0.02	[0.00, 0.09]
Num_Species				
Burn	0.03	[0.00, 0.07]	0.02	[0.00, 0.06]
Dune	0.08	[0.03, 0.14]	0.07	[0.02, 0.13]
Burn:Dune	0.08	[0.03, 0.13]	0.08	[0.02, 0.12]
Num_Sp_FrRoot				
Burn	0.02	[0.00, 0.05]	0.02	[0.00, 0.05]
Dune	0.03	[0.00, 0.08]	0.03	[0.00, 0.07]
Burn:Dune	0.04	[0.00, 0.07]	0.04	[0.00, 0.07]
Tot_Abundance				
Burn	7.75E-03	[0.00, 0.03]	7.24E-03	[0.00, 0.03]
Dune	0.03	[0.00, 0.06]	0.02	[0.00, 0.06]
Burn:Dune	0.04	[0.00, 0.08	0.04	[0.00, 0.08
Abun_FrRoot				

Burn	9.84E-03	[0.00, 0.04]	8.83E-03	[0.00, 0.03]
Dune	0.06	[0.02, 0.11]	0.06	[0.01, 0.11]
Burn:Dune	0.05	[0.00, 0.09]	0.05	[0.00, 0.08]

Games-Howell post-hoc test						
	diff	**ci.lo**	**ci.hi**	**t**	**df**	**p**
SWI ~ Dune oneway(glm_df$Dune, y = glm_df$SWI, posthoc = 'games-howell')						
Mid-Crest	0.17	-0.03	0.38	2	157	0.115
Swale-Crest	0.22	0.02	0.41	2.65	154.31	0.024
Swale-Mid	0.04	-0.15	0.23	0.52	155.33	0.863
SDI ~ Burn						
BU-UB	0.1	-0.01	0.22	2.1	77.85	0.097
UU-UB	0.03	-0.09	0.15	0.64	78.28	0.8
UU-BU	-0.07	-0.16	0.01	1.96	190.02	0.124
SDI ~ Dune						
Mid-Crest	0.09	-0.02	0.19	1.98	154.55	0.121
Swale-Crest	0.1	0.01	0.2	2.53	144.76	0.033
Swale-Mid	0.02	-0.07	0.11	0.45	153.53	0.897
Num_Sp_FrRoot ~ Dune						
Mid-Crest	0.09	-0.04	0.22	1.61	153.88	0.245
Swale-Crest	0.11	-0.02	0.23	2	156.84	0.115
Swale-Mid	0.02	-0.12	0.15	0.27	156.07	0.96
Abun_FrRoot ~ Dune						
Mid-Crest	0.36	0.02	0.7	2.53	149.81	0.033
Swale-Crest	0.35	0.04	0.66	2.66	155.63	0.023
Swale-Mid	-0.01	-0.36	0.34	0.07	155.45	0.998