- ## Warning: package 'data.table' was built under R version 3.5.3
- ## Warning: package 'piecewiseSEM' was built under R version 3.5.1
- ## Warning: package 'lme4' was built under R version 3.5.3
- ## Warning: package 'Matrix' was built under R version 3.5.3
- ## Warning: package 'car' was built under R version 3.5.1
- ## Warning: package 'carData' was built under R version 3.5.2

#### bear spring

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-4.1543455	0.0579762	-71.656108	0.0000000	NA
Anthro	Anthro	0.4026494	0.1081728	3.722281	0.0001974	1.367789
Broadleaf	Broadleaf	0.6960179	0.1394049	4.992779	0.0000006	1.242895
Conifer	Conifer	2.0837273	0.0522886	39.850533	0.0000000	4.406922
Lichen	Lichen	1.4496776	0.0578543	25.057389	0.0000000	5.137413
LinearDist	LinearDist	0.2089535	0.0048951	42.686043	0.0000000	1.162518
MixedWood	MixedWood	1.7630854	0.0651236	27.072912	0.0000000	2.468413
Rocky	Rocky	0.2645918	0.1139746	2.321498	0.0202600	1.339746
Ruggedness	Ruggedness	0.0133835	0.0012161	11.005613	0.0000000	1.217511
Scrub	Scrub	0.8800762	0.0538066	16.356276	0.0000000	4.806392
WaterDist	${\bf Water Dist}$	-0.1663650	0.0053977	-30.821434	0.0000000	1.459245

Coefficient	Estimate	RSquared
(Intercept)	-4.154 [-4.268, -4.041]	0.0450875
Anthro	0.403 [0.191, 0.615]	0.0450875
Broadleaf	0.696 [0.423, 0.969]	0.0450875
Conifer	2.084 [1.981, 2.186]	0.0450875
Lichen	1.45 [1.336, 1.563]	0.0450875
LinearDist	0.209 [0.199, 0.219]	0.0450875
MixedWood	1.763 [1.635, 1.891]	0.0450875
Rocky	0.265 [0.041, 0.488]	0.0450875
Ruggedness	0.013 [0.011, 0.016]	0.0450875
Scrub	0.88 [0.775, 0.986]	0.0450875
WaterDist	-0.166 [-0.177, -0.156]	0.0450875

## caribou spring

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-3.9207831	0.0436046	-89.91669	0	NA
Anthro	Anthro	-2.7889885	0.1035390	-26.93660	0	1.151858
Broadleaf	Broadleaf	-15.7197310	0.7340328	-21.41557	0	1.054516
Conifer	Conifer	-0.9618174	0.0348181	-27.62405	0	2.899940
Lichen	Lichen	-2.0489101	0.0407536	-50.27554	0	3.760965
LinearDist	LinearDist	0.2363903	0.0036116	65.45351	0	1.105304
MixedWood	MixedWood	-2.8899803	0.0779226	-37.08784	0	1.216039
Rocky	Rocky	1.2963744	0.0463216	27.98639	0	1.884969
Ruggedness	Ruggedness	-0.0871843	0.0018640	-46.77237	0	1.067385
$\operatorname{Scrub}$	Scrub	-1.5411937	0.0347399	-44.36376	0	3.873514
WaterDist	${\bf Water Dist}$	0.0908850	0.0043165	21.05504	0	1.313086

Coefficient	Estimate	RSquared
(Intercept)	-3.921 [-4.006, -3.835]	0.0730616
Anthro	-2.789 [-2.992, -2.586]	0.0730616
Broadleaf	-15.72 [-17.158, -14.281]	0.0730616
Conifer	-0.962 [-1.03, -0.894]	0.0730616
Lichen	-2.049 [-2.129, -1.969]	0.0730616
LinearDist	$0.236 \ [0.229, \ 0.243]$	0.0730616
MixedWood	-2.89 [-3.043, -2.737]	0.0730616
Rocky	1.296 [1.206, 1.387]	0.0730616
Ruggedness	-0.087 [-0.091, -0.084]	0.0730616
Scrub	-1.541 [-1.609, -1.473]	0.0730616
${\bf Water Dist}$	$0.091 \ [0.082, \ 0.099]$	0.0730616

### caribou winter

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-4.6877942	0.0587620	-79.77588	0	NA
Conifer	Conifer	-6.3911359	0.1281551	-49.87032	0	1.232850
Lichen	Lichen	2.0232045	0.0385940	52.42271	0	2.330424
LinearDist	LinearDist	0.2956177	0.0058361	50.65360	0	1.028449
Rocky	Rocky	1.8550741	0.0518736	35.76143	0	1.555976
Ruggedness	Ruggedness	-0.0851683	0.0022140	-38.46852	0	1.036752
Scrub	Scrub	-2.7289207	0.0496198	-54.99666	0	1.958404
WaterDist	WaterDist	-0.1808684	0.0051332	-35.23531	0	1.152373

Coefficient	Estimate	RSquared
(Intercept)	-4.688 [-4.803, -4.573]	0.269434
Conifer	-6.391 [-6.642, -6.14]	0.269434
Lichen	2.023 [1.948, 2.099]	0.269434
LinearDist	0.296 [0.284, 0.307]	0.269434
Rocky	1.855 [1.753, 1.957]	0.269434
Ruggedness	-0.085 [-0.09, -0.081]	0.269434
Scrub	-2.729 [-2.826, -2.632]	0.269434
WaterDist	-0.181 [-0.191, -0.171]	0.269434

## coyote spring

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-2.0874546	0.0881100	-23.6914596	0.0000000	NA
Anthro	Anthro	-1.3641865	0.1505535	-9.0611427	0.0000000	1.622043
Broadleaf	Broadleaf	-4.6863939	0.2479316	-18.9019653	0.0000000	1.164441
Conifer	Conifer	-1.7511743	0.0938513	-18.6590305	0.0000000	2.443639
Lichen	Lichen	0.5036853	0.0903807	5.5729308	0.0000000	4.592172
LinearDist	LinearDist	0.0613202	0.0073403	8.3539316	0.0000000	1.399171
MixedWood	MixedWood	0.4357348	0.0943564	4.6179688	0.0000039	2.741021
Rocky	Rocky	-0.9687529	0.1426044	-6.7932883	0.0000000	1.678932
Ruggedness	Ruggedness	-0.0515890	0.0023764	-21.7087280	0.0000000	1.097682
Scrub	Scrub	0.0728612	0.0874689	0.8329957	0.4048471	3.960635
WaterDist	${\bf Water Dist}$	-0.0506667	0.0093184	-5.4372543	0.0000001	1.313798

Coefficient	Estimate	RSquared
(Intercept)	-2.087 [-2.26, -1.915]	0.0726553
Anthro	-1.364 [-1.659, -1.069]	0.0726553
Broadleaf	-4.686 [-5.172, -4.2]	0.0726553
Conifer	-1.751 [-1.935, -1.567]	0.0726553
Lichen	0.504 [0.327, 0.681]	0.0726553
LinearDist	0.061 [0.047, 0.076]	0.0726553
MixedWood	0.436 [0.251, 0.621]	0.0726553
Rocky	-0.969 [-1.248, -0.689]	0.0726553
Ruggedness	-0.052 [-0.056, -0.047]	0.0726553
Scrub	0.073 [-0.099, 0.244]	0.0726553
WaterDist	-0.051 [-0.069, -0.032]	0.0726553

# coyote winter

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-2.4804547	0.1161836	-21.3494331	0.0000000	NA
Anthro	Anthro	0.6811282	0.1556063	4.3772536	0.0000120	2.828222
Broadleaf	Broadleaf	-1.0847213	0.1877073	-5.7787928	0.0000000	1.590533
Conifer	Conifer	-0.8009401	0.1258997	-6.3617301	0.0000000	3.304626
Lichen	Lichen	0.0189342	0.1350497	0.1402016	0.8885007	4.474334
LinearDist	LinearDist	0.0307010	0.0097073	3.1626720	0.0015633	1.665079
MixedWood	MixedWood	0.8102647	0.1262581	6.4175286	0.0000000	3.520946
Rocky	Rocky	-2.3070117	0.2631911	-8.7655376	0.0000000	1.396543
Ruggedness	Ruggedness	-0.0204736	0.0025095	-8.1582841	0.0000000	1.121985
Scrub	Scrub	-0.2396289	0.1287967	-1.8605207	0.0628119	4.150592
WaterDist	WaterDist	-0.1189132	0.0117743	-10.0993575	0.0000000	1.410042

Coefficient	Estimate	RSquared
(Intercept)	-2.48 [-2.708, -2.253]	0.0207518
Anthro	0.681 [0.376, 0.986]	0.0207518
Broadleaf	-1.085 [-1.453, -0.717]	0.0207518
Conifer	-0.801 [-1.048, -0.554]	0.0207518
Lichen	0.019 [-0.246, 0.284]	0.0207518
LinearDist	0.031 [0.012, 0.05]	0.0207518
MixedWood	0.81 [0.563, 1.058]	0.0207518
Rocky	-2.307 [-2.823, -1.791]	0.0207518
Ruggedness	-0.02 [-0.025, -0.016]	0.0207518
Scrub	-0.24 [-0.492, 0.013]	0.0207518
WaterDist	-0.119 [-0.142, -0.096]	0.0207518

## elk spring

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-2.0462269	0.0605176	-33.81208	0	NA
$\operatorname{Bog}$	$\operatorname{Bog}$	-4.9538701	0.3897026	-12.71193	0	1.005930
Coniferous	Coniferous	-5.5837652	0.2562539	-21.78997	0	1.049434
$LinFeat\_Dist$	$LinFeat\_Dist$	-0.1049891	0.0060998	-17.21186	0	1.039503
Marsh	Marsh	-0.6677183	0.0373731	-17.86629	0	1.098488
Mixedwood	Mixedwood	-0.3951739	0.0331439	-11.92296	0	1.107978
Opendeciduous	Opendeciduous	-1.4296556	0.0948957	-15.06554	0	1.012013
Ruggedness	Ruggedness	-0.0796622	0.0045707	-17.42906	0	1.073397
$Water\_Dist$	$Water\_Dist$	0.1643601	0.0074225	22.14348	0	1.128060

Coefficient	Estimate	RSquared
(Intercept)	-2.046 [-2.165, -1.928]	0.0565226
$\operatorname{Bog}$	-4.954 [-5.718, -4.19]	0.0565226
Coniferous	-5.584 [-6.086, -5.082]	0.0565226
$LinFeat\_Dist$	-0.105 [-0.117, -0.093]	0.0565226
Marsh	-0.668 [-0.741, -0.594]	0.0565226
Mixedwood	-0.395 [-0.46, -0.33]	0.0565226
Opendeciduous	-1.43 [-1.616, -1.244]	0.0565226
Ruggedness	-0.08 [-0.089, -0.071]	0.0565226
Water_Dist	0.164 [0.15, 0.179]	0.0565226

### elk winter

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-3.3398941	0.0650882	-51.313356	0.0000000	NA
$\operatorname{Bog}$	$\operatorname{Bog}$	-1.8285205	0.1130512	-16.174262	0.0000000	1.016326
Coniferous	Coniferous	-0.8672874	0.0774550	-11.197306	0.0000000	1.029701
$LinFeat\_Dist$	$LinFeat\_Dist$	-0.0779341	0.0053830	-14.477752	0.0000000	1.067406
Marsh	Marsh	-0.1135758	0.0317669	-3.575290	0.0003498	1.170914
Mixedwood	Mixedwood	-0.1935492	0.0276940	-6.988839	0.0000000	1.125973
Opendeciduous	Opendeciduous	1.5202210	0.0367653	41.349397	0.0000000	1.080229
Ruggedness	Ruggedness	-0.0666640	0.0038046	-17.521816	0.0000000	1.083906
$Water\_Dist$	$Water\_Dist$	0.3582001	0.0086075	41.615022	0.0000000	1.154824

Coefficient	Estimate	RSquared
(Intercept)	-3.34 [-3.467, -3.212]	0.0705193
$\operatorname{Bog}$	-1.829 [-2.05, -1.607]	0.0705193
Coniferous	-0.867 [-1.019, -0.715]	0.0705193
$LinFeat\_Dist$	-0.078 [-0.088, -0.067]	0.0705193
Marsh	-0.114 [-0.176, -0.051]	0.0705193
Mixedwood	-0.194 [-0.248, -0.139]	0.0705193
Opendeciduous	1.52 [1.448, 1.592]	0.0705193
Ruggedness	-0.067 [-0.074, -0.059]	0.0705193
$Water\_Dist$	$0.358 \ [0.341, \ 0.375]$	0.0705193

# wolf spring

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-1.9265170	0.0512545	-37.587271	0.0000000	NA
$\operatorname{Bog}$	Bog	-1.1170325	0.1494312	-7.475231	0.0000000	1.013876
Coniferous	Coniferous	-3.0121630	0.1451069	-20.758236	0.0000000	1.033491
$LinFeat\_Dist$	$LinFeat\_Dist$	-0.1758235	0.0055917	-31.443758	0.0000000	1.038630
Marsh	Marsh	1.5815661	0.0279418	56.602157	0.0000000	1.236218
Mixedwood	Mixedwood	-0.2014065	0.0312024	-6.454833	0.0000000	1.182107
Opendeciduous	Opendeciduous	-0.3712509	0.0905075	-4.101879	0.0000410	1.021663
Ruggedness	Ruggedness	0.0640292	0.0034781	18.409411	0.0000000	1.147425
$Water\_Dist$	$Water\_Dist$	-0.0189315	0.0059990	-3.155751	0.0016009	1.143012

Coefficient	Estimate	RSquared
(Intercept)	-1.927 [-2.027, -1.826]	0.0710404
$\operatorname{Bog}$	-1.117 [-1.41, -0.824]	0.0710404
Coniferous	-3.012 [-3.297, -2.728]	0.0710404
$LinFeat\_Dist$	-0.176 [-0.187, -0.165]	0.0710404
Marsh	1.582 [1.527, 1.636]	0.0710404
Mixedwood	-0.201 [-0.263, -0.14]	0.0710404
Opendeciduous	-0.371 [-0.549, -0.194]	0.0710404
Ruggedness	0.064 [0.057, 0.071]	0.0710404
Water_Dist	-0.019 [-0.031, -0.007]	0.0710404

#### wolf winter

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-2.5804866	0.0696272	-37.0614716	0.0000000	NA
$\operatorname{Bog}$	Bog	-0.5515471	0.1314485	-4.1959179	0.0000272	1.019603
Coniferous	Coniferous	-0.2270503	0.0800544	-2.8361985	0.0045654	1.028397
$LinFeat\_Dist$	$LinFeat\_Dist$	-0.2181622	0.0063369	-34.4270681	0.0000000	1.035357
Marsh	Marsh	0.0978449	0.0441596	2.2157092	0.0267114	1.164437
Mixedwood	Mixedwood	-0.1370463	0.0334351	-4.0988713	0.0000415	1.112124
Opendeciduous	Opendeciduous	0.0153167	0.0897311	0.1706953	0.8644634	1.021822
Ruggedness	Ruggedness	0.0546066	0.0038971	14.0122533	0.0000000	1.087128
$Water\_Dist$	$Water\_Dist$	0.1059910	0.0090974	11.6507063	0.0000000	1.139345

Coefficient	Estimate	RSquared
(Intercept)	-2.58 [-2.717, -2.444]	0.026874
$\operatorname{Bog}$	-0.552 [-0.809, -0.294]	0.026874
Coniferous	-0.227 [-0.384, -0.07]	0.026874
$LinFeat\_Dist$	-0.218 [-0.231, -0.206]	0.026874
Marsh	0.098 [0.011, 0.184]	0.026874
Mixedwood	-0.137 [-0.203, -0.072]	0.026874
Opendeciduous	0.015 [-0.161, 0.191]	0.026874
Ruggedness	0.055 [0.047, 0.062]	0.026874
$Water\_Dist$	0.106 [0.088, 0.124]	0.026874