```
## 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)	-4.1569467	0.0554763	-74.931961	0.0000000	NA
Forest	Forest	1.9153345	0.0493080	38.844266	0.0000000	5.352931
Lichen	Lichen	1.3722350	0.0558963	24.549648	0.0000000	4.737069
LinearDist	LinearDist	0.2157967	0.0047649	45.289132	0.0000000	1.046779
Rocky	Rocky	0.2282197	0.1133435	2.013522	0.0440597	1.315311
Ruggedness	Ruggedness	0.0098085	0.0011699	8.383807	0.0000000	1.126105
$\operatorname{Scrub}$	Scrub	0.8616274	0.0517503	16.649711	0.0000000	4.461665
WaterDist	WaterDist	-0.1653128	0.0053135	-31.112138	0.0000000	1.403569

Coefficient	Estimate	RSquared
(Intercept)	-4.157 [-4.266, -4.048]	0.0409921
Forest	1.915 [1.819, 2.012]	0.0409921
Lichen	1.372 [1.263, 1.482]	0.0409921
LinearDist	0.216 [0.206, 0.225]	0.0409921
Rocky	0.228 [0.006, 0.45]	0.0409921
Ruggedness	$0.01 \ [0.008, \ 0.012]$	0.0409921
Scrub	0.862 [0.76, 0.963]	0.0409921
WaterDist	-0.165 [-0.176, -0.155]	0.0409921

#### caribou spring

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-4.4920284	0.0421427	-106.59098	0	NA
Forest	Forest	-1.0820373	0.0337593	-32.05152	0	3.100258
Lichen	Lichen	-1.7592661	0.0396827	-44.33329	0	3.501960
LinearDist	LinearDist	0.2910990	0.0035049	83.05448	0	1.049420
Rocky	Rocky	1.6627992	0.0457903	36.31332	0	1.821341
Ruggedness	Ruggedness	-0.0987671	0.0018790	-52.56312	0	1.064496
Scrub	Scrub	-1.1401378	0.0335946	-33.93813	0	3.699324
WaterDist	WaterDist	0.0589025	0.0041710	14.12177	0	1.277991

Coefficient	Estimate	RSquared
(Intercept)	-4.492 [-4.575, -4.409]	0.0598917
Forest	-1.082 [-1.148, -1.016]	0.0598917
Lichen	-1.759 [-1.837, -1.681]	0.0598917
LinearDist	0.291 [0.284, 0.298]	0.0598917
Rocky	1.663 [1.573, 1.753]	0.0598917
Ruggedness	-0.099 [-0.102, -0.095]	0.0598917
Scrub	-1.14 [-1.206, -1.074]	0.0598917
WaterDist	$0.059 \ [0.051, \ 0.067]$	0.0598917

## caribou winter

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-3.4390593	0.0625407	-54.98912	0	NA
Forest	Forest	-7.7347012	0.1189232	-65.03949	0	1.236197
Lichen	Lichen	0.7792180	0.0460640	16.91597	0	2.993964
LinearDist	LinearDist	0.2255751	0.0057792	39.03211	0	1.010279
Rocky	Rocky	0.6339302	0.0572865	11.06596	0	1.871269
Ruggedness	Ruggedness	-0.0624995	0.0022135	-28.23505	0	1.060242
Scrub	Scrub	-3.7898083	0.0556171	-68.14105	0	2.466794
WaterDist	WaterDist	-0.1210132	0.0055277	-21.89212	0	1.201971

Coefficient	Estimate	RSquared
(Intercept)	-3.439 [-3.562, -3.316]	0.2835101
Forest	-7.735 [-7.968, -7.502]	0.2835101
Lichen	0.779 [0.689, 0.87]	0.2835101
LinearDist	$0.226 \ [0.214, \ 0.237]$	0.2835101
Rocky	$0.634 \ [0.522, \ 0.746]$	0.2835101
Ruggedness	-0.062 [-0.067, -0.058]	0.2835101
Scrub	-3.79 [-3.899, -3.681]	0.2835101
WaterDist	-0.121 [-0.132, -0.11]	0.2835101

# coyote spring

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-2.3655922	0.0823028	-28.742565	0.0000000	NA
Forest	Forest	-0.7171534	0.0809111	-8.863469	0.0000000	4.051411
Lichen	Lichen	0.8477244	0.0876340	9.673463	0.0000000	4.300153
LinearDist	LinearDist	0.0683656	0.0068735	9.946244	0.0000000	1.132954
Rocky	Rocky	-0.5415349	0.1393206	-3.886969	0.0001015	1.635791
Ruggedness	Ruggedness	-0.0485653	0.0023548	-20.624167	0.0000000	1.071592
Scrub	Scrub	0.3941034	0.0840982	4.686227	0.0000028	3.630318
WaterDist	WaterDist	-0.0707934	0.0092017	-7.693513	0.0000000	1.263448

Coefficient	Estimate	RSquared
(Intercept)	-2.366 [-2.527, -2.204]	0.0528974
Forest	-0.717 [-0.876, -0.559]	0.0528974
Lichen	0.848 [0.676, 1.019]	0.0528974
LinearDist	0.068 [0.055, 0.082]	0.0528974
Rocky	-0.542 [-0.815, -0.268]	0.0528974
Ruggedness	-0.049 [-0.053, -0.044]	0.0528974
Scrub	0.394 [0.229, 0.559]	0.0528974
WaterDist	-0.071 [-0.089, -0.053]	0.0528974

# coyote winter

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-2.1913454	0.1058015	-20.7118527	0.0000000	NA
Forest	Forest	-0.3187811	0.1087833	-2.9304235	0.0033850	4.981788
Lichen	Lichen	-0.0880794	0.1283734	-0.6861185	0.4926384	3.904992
LinearDist	LinearDist	-0.0033902	0.0092260	-0.3674630	0.7132737	1.155717
Rocky	Rocky	-2.3527863	0.2580303	-9.1182545	0.0000000	1.347592
Ruggedness	Ruggedness	-0.0158128	0.0024927	-6.3436576	0.0000000	1.095358
Scrub	Scrub	-0.3859742	0.1207763	-3.1957769	0.0013945	3.464594
WaterDist	WaterDist	-0.1086544	0.0117024	-9.2848169	0.0000000	1.294010

Coefficient	Estimate	RSquared
(Intercept)	-2.191 [-2.399, -1.984]	0.0106302
Forest	-0.319 [-0.532, -0.106]	0.0106302
Lichen	-0.088 [-0.34, 0.164]	0.0106302
LinearDist	-0.003 [-0.021, 0.015]	0.0106302
Rocky	-2.353 [-2.859, -1.847]	0.0106302
Ruggedness	-0.016 [-0.021, -0.011]	0.0106302
Scrub	-0.386 [-0.623, -0.149]	0.0106302
WaterDist	-0.109 [-0.132, -0.086]	0.0106302

# elk spring

	term	estimate	std.error	statistic	p.value	vif
	(Intercept)	-2.0462269	0.0605176	-33.81208	0	NA
$\operatorname{Bog}$	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
$\operatorname{Bog}$	$\operatorname{Bog}$	-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