

Comparison of scale anomalies in populations of northern viper *Vipera berus* from habitats differing in size and degree of fragmentation

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Results of GLM analyses comparing head scale fragmentation and head scale asymmetry between three sites using the observations on vipers from a fourth site (Fackenden Down) as the baseline

Fragmentation

Site	β estimate	SE	z	P
<i>Supraoculars</i>				
Kings Wood	1.873	0.309	6.05	<0.001
Turbary Common	1.684	0.396	4.54	<0.001
Talbot Heath	0.906	0.299	3.02	0.0025
<i>Intercanths</i>				
Kings Wood	0.835	0.310	2.67	0.007
Turbary Common	0.810	0.405	2.00	0.045
Talbot Heath	1.049	0.294	3.57	<0.001
<i>Apicals</i>				
Kings Wood	1.254	1.163	1.08	0.281
Turbary Common	1.107	1.426	0.78	0.438
Talbot Heath	1.758	1.088	1.62	0.106

Asymmetry

Site	β estimate	SE	z	P
<i>Supraoculars</i>				
Kings Wood	0.704	0.274	2.56	0.010
Turbary Common	0.999	0.391	2.55	0.011
Talbot Heath	0.499	0.257	1.94	0.052
<i>Intercanths</i>				
Kings Wood	1.591	0.282	5.65	<0.001
Turbary Common	0.986	0.292	3.37	<0.001
Talbot Heath	1.689	0.392	4.31	<0.001

Apicals

Kings Wood	0.498	0.601	0.83	0.408
Turbary Common	1.182	0.857	0.21	0.832
Talbot Heath	2.302	0.495	4.64	<0.001

Associations between fragmentation and asymmetry:

Fackenden: Chi-squared = 29.29, df=1, P<0.001

Turbary Common: Chi-squared = 0.272, df=1, P=0.602

Talbot Heath: Chi-squared = 7.969, df=1, P<0.0048

Kings Wood: Chi-squared = 5.77, df=1, P=0.0163

All sites pooled: Chi-squared = 57.313, df=1, P<0.001