Supplementary material

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		10 30 50		-20 20 60		1000 3000		0 10 20 30		-0.5 0.5	
	ROUG	0.73	0.09	-0.04	-0.03	0.17	-0.01	0.03	0.07	0.07	0.05
10 40		SLO	0.09	-0.06	0.03	0.14	-0.02	-0.02	0.06	0.02	0.03
			ELV	-0.41	-0.08	0.49	0.11	0.45	0.06	0.03	0.13
-20 40					0.05	-0.11	-0.06	-0.11	-0.01	-0.01	-0.07
					Dis_Road	0.23	0.11	-0.26	0.01	-0.07	0.02
1000						Dis_Set	-0.01	0.09	0.07	0.09	0.04
							CA_100	-0.09	0.05	-0.18	0.33
0 15								CA_150	-0.09	0.01	0.11
									Sin_ASP	0.05	0.04
-0.5 0.5										Cos_ASP	0.06

Fig. S1. Correlation matrix and histograms of environmental variables (CA_100 (mosaic tree and shrub (> 50%) and herbaceous cover (< 50%), CA_150 (sparse vegetation (tree, shrub, herbaceous cover) (< 15%)), PR (patch richness), SLO (percent of slope), Sin_ASP (Sine of aspect), Cos_ASP (Cosine of aspect), TOPEX (topographic exposure index), ROUG (roughness), ELV (Elevation), Dis_Road (distance to road), and Dis_Set (distance to settlements)) used for modelling the distribution of Caucasian grouse in Iran. Only ROUG showed high correlation with SLO variable (r = 0.73).



Fig. S2. Contribution of environmental variables: CA_100 (mosaic tree and shrub > 50%, and herbaceous cover < 50%), CA_150 (sparse vegetation: tree, shrub, herbaceous cover, < 15%), PR (patch richness), SLO (percent of slope), Sin_ASP (Sine of aspect), Cos_ASP (Cosine of aspect), TOPEX (topographic exposure index), ELV (Elevation), Dis_Road (distance to road), and Dis_Set (distance to settlements) in Ensemble of Small Models (ESMs).