



## Supplementary Material

# Population of Asiatic Black Bear (*Ursus thibetanus*) in Kaghan and Siran Valleys, District Mansehra, Pakistan

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Supplementary Table I. Frequency of black bear signs (ER: Encounter Rate per transect) for each category of signs.

Transect code	Transect length (m)	Compart-ment Area (ha)	Dig Marks	Pug Marks	Mostly appeared signs					Rarely appeared signs					Total
					Claw Marks	Hair	Scat	Plants uprooting	Stone turning	Bark off	Livestock killing	Crop damage	Wood damage	Setting place	
K1	100	245.200	85(0.85)	2(0.02)	4(0.04)	1(0.01)	2(0.02)	1(0.01)	2(0.02)	1(0.01)	1(0.01)	1(0.01)	1(0.01)	96(0.96)	
K2	300	115.300	12(0.04)		3(0.1)	2(0.006)	1(0.003)	1(0.003)	1(0.003)	28(0.093)				74(0.245)	
K3	100	170.400	4(0.04)		2(0.02)		1(0.01)	3(0.03)		2(0.02)				12(0.12)	
K4	300	233.099	20(0.066)	1(0.003)		3(0.03)	2(0.006)	1(0.003)	1(0.003)	1(0.003)				28(0.111)	
K5	100	105.900	18(0.18)		8(0.08)	8(0.08)	4(0.04)	6(0.06)	1(0.01)					49(0.49)	
K6	100	90.244	6(0.06)		2(0.02)	1(0.01)	4(0.04)	2(0.02)						15(0.15)	
K7	100	158.000	21(0.21)		2(0.02)	1(0.01)	2(0.02)	3(0.03)	5(0.05)					32(0.32)	
K8	100	105.218	9(0.09)		8(0.08)	2(0.02)	2(0.02)	1(0.01)						25(0.25)	
K9	100	99.148	3(0.03)	1(0.01)	2(0.02)		1(0.01)							38(0.38)	
K10	300	77.699	2(0.006)	2(0.006)	8(0.026)		9(0.01)	6(0.02)	4(0.013)	1(0.003)				23(0.073)	
K11	300	141.640	16(0.533)	3(0.01)	19(0.06)	2(0.02)	7(0.023)	5(0.016)	10(0.033)	1(0.003)				205(0.67)	
K12	100	90.649	4(0.04)		2(0.02)	1(0.01)	1(0.01)	2(0.02)	1(0.01)	1(0.01)				12(0.12)	
K13	100	125.453	5(0.05)		4(0.04)	2(0.02)	4(0.04)	6(0.06)	1(0.01)	4(0.04)				19(0.19)	
K14	100	145.282	2(0.02)		1(0.01)	4(0.04)	2(0.02)	2(0.02)	5(0.05)	2(0.02)				16(0.16)	
K15	100	103.600	2(0.02)		8(0.08)	2(0.02)	5(0.05)	3(0.03)						23(0.23)	
K16	100	163.088	52(0.52)	4(0.04)	7(0.07)	1(0.01)	15(0.15)	9(0.09)						116(1.16)	
K17	100	113.312	3(0.03)		2(0.02)	7(0.07)	3(0.007)	2(0.005)	1(0.003)	1(0.003)				63(0.63)	
K18	100	140.021	16(0.16)		1(0.01)	2(0.02)	1(0.01)	2(0.02)	1(0.01)	2(0.02)				27(0.27)	
K19	400	40.468	33(0.825)		5(0.012)	2(0.005)	3(0.007)	2(0.005)	1(0.003)	2(0.005)				45(0.11)	
S20	300	75.676	28(0.093)	1(0.003)	1(0.003)	7(0.023)	1(0.003)	3(0.01)	1(0.003)	1(0.003)				46(0.151)	
S21	100	63.535	4(0.04)	2(0.02)	1(0.01)	1(0.01)	4(0.04)	2(0.02)	5(0.05)	2(0.02)				50(0.5)	
S22	100	56.656	5(0.05)		5(0.05)	4(0.04)	1(0.01)	1(0.01)	2(0.02)	1(0.01)				27(0.27)	
S23	100	74.057	11(0.11)		1(0.01)	1(0.01)	1(0.01)	1(0.01)	2(0.02)	3(0.03)				15(0.15)	
S24	100	106.432	9(0.09)		1(0.01)	2(0.02)	3(0.03)	1(0.01)	1(0.01)	2(0.02)				17(0.17)	
S25	100	89.030	11(0.11)	1(0.01)	1(0.01)	10(0.10)	1(0.01)	1(0.01)	1(0.01)	2(0.02)				29(0.29)	
S26	100	35.612	3(0.03)		1(0.01)		1(0.01)	1(0.01)	1(0.01)	4(0.04)				10(0.1)	
S27	100	49.776	5(0.05)		2(0.02)	3(0.03)	2(0.02)	1(0.01)	1(0.01)	4(0.04)				13(0.13)	
S28	100	112.503	2(0.02)		3(0.03)	2(0.02)	1(0.01)	1(0.01)	1(0.01)	1(0.01)				09(0.09)	
S29	400	94.696	>200(>0.5)	2(0.005)	2(0.005)	8(0.02)	10(0.025)	1(0.002)	3(0.0075)	1(0.0025)				139(0.59)	
S30	100	126.262	>80(>0.80)	1(0.01)	2(0.02)	3(0.03)	20(0.20)	3(0.03)	2(0.02)	1(0.0025)				116(1.16)	
S31	100	125.453	>60(>0.60)		4(0.04)	6(0.06)	7(0.07)	4(0.04)	4(0.04)	2(0.02)				87(0.87)	
S32	100	70.010	3(0.03)		2(0.02)	3(0.03)	6(0.06)	2(0.02)	2(0.02)	1(0.01)				45(0.45)	
S33	100	124.238	2(0.02)	2(0.02)	5(0.05)	1(0.01)	8(0.08)	4(0.04)						43(0.43)	
Total	4900	3667.657	1213	18	146	65	186	62	98	14	16	35	2	4	187
		(7.574)	(0.117)	(1.02)	0.514	(0.10)	(1.594)	(0.524)	(0.647)	(0.111)	(0.16)	(0.24)	(0.02)	(0.04)	(12.664)

Keys for transect code: K, Kaghan; S, Sitan; Natural No, number of transect.

**Supplementary Table II. Percentage of the standard encounter rate (SER) for highly potential site selection.**

Transect code	Dig marks (%)	Pug marks (%)	Claw marks (%)	Hairs samples (%)	Scat samples (%)	Plants uprooting (%)	Stone replacing (%)	Bark off (%)	Place of Livestock's killing (%)	Crop damages (%)	Coarse wood damages (%)	Setting place (%)	Bees nest damaging (%)
(SER) model	≥0.30	≥0.02	≥0.05	≥0.02	≥0.02	≥0.03	≥0.03	≥0.03	≥0.02	≥0.02	≥0.03	≥0.01	≥0.02
K1	11.222	17.094											
K2			9.718					14.374					
K3				5.836		1.882							
K4													
K5			7.774	15.564		2.509	7.633	9.273					
K6							7.633						
K7							5.725	4.636					
K8			7.774					7.727					
K9	3.960												
K10	8.714												
K11	7.037							5.100					
K12													
K13								6.182		25.0			
K14						2.509	11.450						
K15			7.774					7.727	18.018	12.5			
K16	6.865					30.367	9.541	4.636				50.0	
K17	3.960		6.802	3.891		9.410	17.175						
K18					19.417	4.391							
S19													
S20				4.474									
S21	5.281	17.094				2.509							
S22			4.859	7.782					18.018	62.5			
S23													
S24				3.819					27.027				
S25				19.455		1.882					16.666		
S26													
S27						1.882							
S28													
S29	6.601			3.891						12.5			
S30	10.562			5.836			5.725			12.5			50.0
S31	7.921			11.673		4.391		6.182		20.833			
S32	3.960			5.836		3.764							
S33		17.094	4.859		19.417	5.018	7.633					50.0	
Total	76.083	51.282	49.56	88.057	38.834	70.514	80.148	65.837	63.063	100.0	62.499	100.0	<b>50.0</b>

Keys for transect code: K, Kaghan; S, Siran; Natural No, number of transects; blue color represent non-significant for highly potential sites.