

Table S1. Microsatellite marker variability for determining individual identity of grizzly (n=80) and black bears (n=85) from DNA samples collected from hair traps, bear rubs, wildlife crossing structures, and management actions in the Bow Valley of Banff National Park, Alberta, Canada between May 2006 and October 2008.

Marker	Grizzly bears					Black bears				
	H _E	H _O	A	P _{ID}	P _{SIB}	H _E	H _O	A	P _{ID}	P _{SIB}
G1A	0.70	0.69	6	0.08	0.38	0.76	0.73	12	0.04	0.33
G1D	0.82	0.85	10	0.13	0.43	0.81	0.82	9	0.09	0.39
G10B	0.83	0.81	9	0.05	0.35	0.80	0.78	7	0.07	0.37
G10H	0.80	0.80	8	0.06	0.35	0.88	0.94	10	0.06	0.36
G10J	0.79	0.80	6	0.06	0.37	0.85	0.87	14	0.02	0.32
G10M	0.75	0.78	6	0.10	0.40	0.82	0.94	11	0.06	0.36
G10P	0.70	0.65	6	0.13	0.43	0.84	0.84	9	0.05	0.34
Mean	0.77	0.77	7.3			0.82	0.85	10.3		
SE	0.02	0.03	0.6			0.02	0.03	0.9		
Overall probability										
of identity				2.30E-08	0.0013				1.00E-09	0.0007

*H_E=expected heterozygosity; H_O=observed heterozygosity; A=no. of alleles; P_{ID}=probability of identity; P_{SIB}=probability of sibling identity.