

Supplementary Materials

An initial genetic assessment of the emblematic pumas of the Torres del Paine UNESCO Biosphere Reserve

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Table S1. Species ID results from mtDNA analysis of 385 scat samples collected for this project. Results shown for 16s and CytB nucleotide database BLAST on GenBank. The dloop section was only used to differentiate the fox species. “Poor DNA” indicated the sequence(s) did not pass quality control measures to be used for further analysis.

Sample #	DNA Species ID 16s	DNA Species ID CytB	dloop	Final Species ID	Date Collected
Pan19-S01	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S02	Fox1			S.A. gray fox	3-Nov-19
Pan19-S03	Fox1			S.A. gray fox	3-Nov-19
Pan19-S04	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S05	Poor DNA	Fox		S.A. gray fox	3-Nov-19
Pan19-S06	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S07	Fox1			S.A. gray fox	3-Nov-19
Pan19-S08	Fox1			S.A. gray fox	3-Nov-19
Pan19-S09	Poor DNA	Fox		S.A. gray fox	3-Nov-19
Pan19-S10	Poor DNA	Fox		S.A. gray fox	3-Nov-19
Pan19-S11	Poor DNA	Fox	S.A. Gray Fox 2	S.A. gray fox	3-Nov-19
Pan19-S12	Fox1			S.A. gray fox	3-Nov-19
Pan19-S13	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S14	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S15	bacteria	Poor DNA		poor DNA	3-Nov-19
Pan19-S16	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S17	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S18	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S19	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S20	Fox1			S.A. gray fox	3-Nov-19
Pan19-S21	Fox1			S.A. gray fox	3-Nov-19

Pan19-S22	Fox1			S.A. gray fox	3-Nov-19
Pan19-S23	Poor DNA			S.A. gray fox	3-Nov-19
Pan19-S24	Poor DNA	Fox		S.A. gray fox	3-Nov-19
Pan19-S25	Poor DNA	Fox		S.A. gray fox	3-Nov-19
Pan19-S26	Poor DNA	Dog		Dog	3-Nov-19
Pan19-S27	Fox1			S.A. gray fox	3-Nov-19
Pan19-S28	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S29	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S30	Poor DNA	Poor DNA		poor DNA	3-Nov-19
Pan19-S31	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S32	Fox1			S.A. gray fox	4-Nov-19
Pan19-S33	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S34	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S35	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S36	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S37	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S38	Fox1			S.A. gray fox	4-Nov-19
Pan19-S39	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S40	Poor DNA	Fox	S.A. Gray Fox 8	S.A. gray fox	4-Nov-19
Pan19-S41	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S42	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S43	Fox2		S.A. Gray Fox 4	S.A. gray fox	4-Nov-19
Pan19-S44	Poor DNA	Fox	S.A. Gray Fox 4	S.A. gray fox	4-Nov-19
Pan19-S45	Poor DNA			Puma	4-Nov-19
Pan19-S46	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S47	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S48	Cattle	Cattle		poor DNA	4-Nov-19
Pan19-S49	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S50	Cattle	Cattle		poor DNA	4-Nov-19
Pan19-S51	Fox1			S.A. gray fox	4-Nov-19
Pan19-S52	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S53	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S54	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S55	Poor DNA	Fox	S.A. Gray Fox5	S.A. gray fox	4-Nov-19
Pan19-S56	Poor DNA	Fox	S.A. Gray Fox5	S.A. gray fox	4-Nov-19
Pan19-S57	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S58	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S59	Poor DNA			Puma	4-Nov-19
Pan19-S60	Fox1		S.A. Gray Fox 1	S.A. gray fox	4-Nov-19
Pan19-S61	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S62	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S63	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S64	Poor DNA	Poor DNA		poor DNA	4-Nov-19

Pan19-S65	Fox1			S.A. gray fox	4-Nov-19
Pan19-S66	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S67	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S68	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S69	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S70	Poor DNA			Puma	4-Nov-19
Pan19-S71	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S72	Poor DNA	Fox	S.A. Gray Fox 1	S.A. gray fox	4-Nov-19
Pan19-S73	Fox1		S.A. Gray Fox 1	S.A. gray fox	4-Nov-19
Pan19-S74	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S75	Puma			Puma	4-Nov-19
Pan19-S76	Fox1		S.A. Gray Fox 1	S.A. gray fox	4-Nov-19
Pan19-S77	Fox1		S.A. Gray Fox 1	S.A. gray fox	4-Nov-19
Pan19-S78	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S79	Fox1		S.A. Gray Fox 8	S.A. gray fox	4-Nov-19
Pan19-S80	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S81	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S82	Fox1		S.A. Gray Fox5	S.A. gray fox	4-Nov-19
Pan19-S83	Fox1			S.A. gray fox	4-Nov-19
Pan19-S84	Fox1		S.A. Gray Fox5	S.A. gray fox	4-Nov-19
Pan19-S85	Fox1		S.A. Gray Fox5	S.A. gray fox	4-Nov-19
Pan19-S86	Fox1		S.A. Gray Fox5	S.A. gray fox	4-Nov-19
Pan19-S87	Poor DNA	Fox		S.A. gray fox	4-Nov-19
Pan19-S88	Cattle	Cattle		poor DNA	4-Nov-19
Pan19-S89	Fox1		S.A. Gray Fox5	S.A. gray fox	4-Nov-19
Pan19-S90	Poor DNA	Cattle		poor DNA	4-Nov-19
Pan19-S91	Fox1			S.A. gray fox	4-Nov-19
Pan19-S92	Fox1			S.A. gray fox	4-Nov-19
Pan19-S93	Fox1			S.A. gray fox	4-Nov-19
Pan19-S94	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S95	Poor DNA	Puma		Puma	4-Nov-19
Pan19-S96	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S97	Poor DNA	Fox	S.A. Gray Fox5	S.A. gray fox	4-Nov-19
Pan19-S98	Poor DNA	Fox	S.A. Gray Fox5	S.A. gray fox	4-Nov-19
Pan19-S99	Poor DNA	Puma		Puma	4-Nov-19
Pan19-S100	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S101	Fox1			S.A. gray fox	4-Nov-19
Pan19-S102	Poor DNA	Cattle		poor DNA	4-Nov-19
Pan19-S103	Poor DNA	Poor DNA		poor DNA	4-Nov-19
Pan19-S104	Fox1			S.A. gray fox	5-Nov-19
Pan19-S105	Puma			Puma	5-Nov-19
Pan19-S106	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S107	Fox1			S.A. gray fox	5-Nov-19

Pan19-S108	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S109	Fox1		S.A. Gray Fox5	S.A. gray fox	5-Nov-19
Pan19-S110	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S111	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S112	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S113	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S114	Cattle	Cattle		poor DNA	5-Nov-19
Pan19-S115	Fox1			S.A. gray fox	5-Nov-19
Pan19-S116	Poor DNA	Cattle		poor DNA	5-Nov-19
Pan19-S117	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S118	Fox2		S.A. Gray Fox 4	S.A. gray fox	5-Nov-19
Pan19-S119	Fox1			S.A. gray fox	5-Nov-19
Pan19-S120	Fox1			S.A. gray fox	5-Nov-19
Pan19-S121	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S122	Poor DNA	Fox	S.A. Gray Fox 8	S.A. gray fox	5-Nov-19
Pan19-S123	Fox1		S.A. Gray Fox 8	S.A. gray fox	5-Nov-19
Pan19-S124	Poor DNA	Fox	S.A. Gray Fox 1	S.A. gray fox	5-Nov-19
Pan19-S125	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S126	Fox1			S.A. gray fox	5-Nov-19
Pan19-S127	Fox1			S.A. gray fox	5-Nov-19
Pan19-S128	Fox2			S.A. gray fox	5-Nov-19
Pan19-S129	Puma			Puma	5-Nov-19
Pan19-S130	Fox2			S.A. gray fox	5-Nov-19
Pan19-S131	Puma			Puma	5-Nov-19
Pan19-S132	Poor DNA	Poor DNA		poor DNA	5-Nov-19
Pan19-S133	Poor DNA	Puma		Puma	5-Nov-19
Pan19-S134	Fox1			S.A. gray fox	5-Nov-19
Pan19-S135	Puma			Puma	5-Nov-19
Pan19-S136	Fox1			S.A. gray fox	7-Nov-19
Pan19-S137	Poor DNA	Puma		Puma	7-Nov-19
Pan19-S138	Poor DNA	Fox		S.A. gray fox	7-Nov-19
Pan19-S139	Fox1			S.A. gray fox	7-Nov-19
Pan19-S140	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S141	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S142	Fox1			S.A. gray fox	7-Nov-19
Pan19-S143	Fox1			S.A. gray fox	7-Nov-19
Pan19-S144	Poor DNA	Puma		Puma	7-Nov-19
Pan19-S145	Poor DNA	Puma		Puma	7-Nov-19
Pan19-S146	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S147	Puma			Puma	7-Nov-19
Pan19-S148	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S149	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S150	Poor DNA	Poor DNA		poor DNA	7-Nov-19

Pan19-S151	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S152	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S153	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S154	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S155	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S156	Fox1		S.A. Gray Fox 1	S.A. gray fox	7-Nov-19
Pan19-S157	Puma			Puma	7-Nov-19
Pan19-S158	Poor DNA			Puma	7-Nov-19
Pan19-S159	Fox2		S.A. Gray Fox 4	S.A. gray fox	7-Nov-19
Pan19-S160	Fox1			S.A. gray fox	7-Nov-19
Pan19-S161	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S162	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S163	Fox1			S.A. gray fox	7-Nov-19
Pan19-S164	Fox1			S.A. gray fox	7-Nov-19
Pan19-S165	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S166	Fox1		S.A. Gray Fox 1	S.A. gray fox	7-Nov-19
Pan19-S167	Puma			Puma	7-Nov-19
Pan19-S168	Fox2		S.A. Gray Fox 3	S.A. gray fox	7-Nov-19
Pan19-S169	Puma			Puma	7-Nov-19
Pan19-S170	Fox2		S.A. Gray Fox 3	S.A. gray fox	7-Nov-19
Pan19-S171	Fox2		S.A. Gray Fox 3	S.A. gray fox	7-Nov-19
Pan19-S172	Puma			Puma	7-Nov-19
Pan19-S173	Fox2		S.A. Gray Fox 3	S.A. gray fox	7-Nov-19
Pan19-S174	Fox1		S.A. Gray Fox 1	S.A. gray fox	7-Nov-19
Pan19-S175	Puma			Puma	7-Nov-19
Pan19-S176	Puma			Puma	7-Nov-19
Pan19-S177	Puma			Puma	7-Nov-19
Pan19-S178	Puma			Puma	7-Nov-19
Pan19-S179	Puma			Puma	7-Nov-19
Pan19-S180	Fox1			S.A. gray fox	7-Nov-19
Pan19-S181	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S182	Puma			Puma	7-Nov-19
Pan19-S183	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S184	Fox1			S.A. gray fox	7-Nov-19
Pan19-S185	Fox1			S.A. gray fox	7-Nov-19
Pan19-S186	Puma			Puma	7-Nov-19
Pan19-S187	Fox1			S.A. gray fox	7-Nov-19
Pan19-S188	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S189	Fox1		S.A. Gray Fox 1	S.A. gray fox	7-Nov-19
Pan19-S190	Puma			Puma	7-Nov-19
Pan19-S191	Fox2		S.A. Gray Fox 3	S.A. gray fox	7-Nov-19
Pan19-S192	Fox1		S.A. Gray Fox 1	S.A. gray fox	7-Nov-19
Pan19-S193	Fox1			S.A. gray fox	7-Nov-19

Pan19-S194	Puma			Puma	7-Nov-19
Pan19-S195	Poor DNA	Poor DNA		poor DNA	7-Nov-19
Pan19-S196	Fox1		S.A. Gray Fox 1	S.A. gray fox	7-Nov-19
Pan19-S197	Fox1			S.A. gray fox	7-Nov-19
Pan19-S198	Puma			Puma	7-Nov-19
Pan19-S199	Puma			Puma	7-Nov-19
Pan19-S200	Puma			Puma	7-Nov-19
Pan19-S201	Fox1		S.A. Gray Fox 1	S.A. gray fox	7-Nov-19
Pan19-S202	Fox2		S.A. Gray Fox 4	S.A. gray fox	7-Nov-19
Pan19-S205	Fox1			S.A. gray fox	8-Nov-19
Pan19-S206	Poor DNA	Poor DNA		poor DNA	8-Nov-19
Pan19-S207	Fox1			S.A. gray fox	8-Nov-19
Pan19-S208	Poor DNA			Puma	8-Nov-19
Pan19-S209	Puma			Puma	8-Nov-19
Pan19-S210	Fox1		S.A. Gray Fox 8	S.A. gray fox	8-Nov-19
Pan19-S211	Puma			Puma	8-Nov-19
Pan19-S212	Fox1			S.A. gray fox	8-Nov-19
Pan19-S213	Puma			Puma	8-Nov-19
Pan19-S214	Fox2			S.A. gray fox	8-Nov-19
Pan19-S215	Fox2		S.A. Gray Fox 3	S.A. gray fox	8-Nov-19
Pan19-S216	Fox1			S.A. gray fox	8-Nov-19
Pan19-S217	Fox1		S.A. Gray Fox5	S.A. gray fox	8-Nov-19
Pan19-S218	Fox1		S.A. Gray Fox5	S.A. gray fox	8-Nov-19
Pan19-S219	Fox1			S.A. gray fox	8-Nov-19
Pan19-S220	Fox1		S.A. Gray Fox5	S.A. gray fox	8-Nov-19
Pan19-S221	Fox1			S.A. gray fox	8-Nov-19
Pan19-S222	Poor DNA	Poor DNA		poor DNA	8-Nov-19
Pan19-S223	Puma			Puma	8-Nov-19
Pan19-S224	Poor DNA			Puma	8-Nov-19
Pan19-S225	Puma			Puma	8-Nov-19
Pan19-S226	Poor DNA			Puma	8-Nov-19
Pan19-S227	Puma			Puma	8-Nov-19
Pan19-S228	Fox1			S.A. gray fox	8-Nov-19
Pan19-S229	Puma			Puma	8-Nov-19
Pan19-S230	Puma			Puma	8-Nov-19
Pan19-S231	Puma			Puma	8-Nov-19
Pan19-S232	Fox1			S.A. gray fox	8-Nov-19
Pan19-S233	Puma			Puma	9-Nov-19
Pan19-S234	Puma			Puma	9-Nov-19
Pan19-S235	Poor DNA	Poor DNA		poor DNA	9-Nov-19
Pan19-S236	Puma			Puma	9-Nov-19
Pan19-S237	Puma			Puma	9-Nov-19
Pan19-S238	Puma			Puma	9-Nov-19

Pan19-S239	Poor DNA	Poor DNA		poor DNA	9-Nov-19
Pan19-S240	Poor DNA			Puma	9-Nov-19
Pan19-S241	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S242	Fox2		S.A. Gray Fox 3	S.A. gray fox	11-Nov-19
Pan19-S243	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S244	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S245	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S246	Fox2		S.A. Gray Fox 3	S.A. gray fox	11-Nov-19
Pan19-S247	Fox2		S.A. Gray Fox 3	S.A. gray fox	11-Nov-19
Pan19-S248	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S249	Fox1			S.A. gray fox	11-Nov-19
Pan19-S250	Fox1			S.A. gray fox	11-Nov-19
Pan19-S251	Fox1			S.A. gray fox	11-Nov-19
Pan19-S252	Fox1			S.A. gray fox	11-Nov-19
Pan19-S253	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S254	Fox1			S.A. gray fox	11-Nov-19
Pan19-S255	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S256	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S257	Fox3		Culpeo Fox 6	Culpeo fox	11-Nov-19
Pan19-S258	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S259	Fox3		Culpeo Fox 6	Culpeo fox	11-Nov-19
Pan19-S260	Fox3		Culpeo Fox 6	Culpeo fox	11-Nov-19
Pan19-S261	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S262	Fox3		Culpeo Fox 6	Culpeo fox	11-Nov-19
Pan19-S263	Geoffroy's Cat			Geoffroy's Cat	11-Nov-19
Pan19-S264	Poor DNA	Poor DNA		poor DNA	11-Nov-19
Pan19-S265	Puma			Puma	12-Nov-19
Pan19-S266	Poor DNA	Poor DNA		poor DNA	12-Nov-19
Pan19-S267	Poor DNA	Poor DNA		poor DNA	12-Nov-19
Pan19-S268	Fox1			S.A. gray fox	12-Nov-19
Pan19-S269	Fox1			S.A. gray fox	12-Nov-19
Pan19-S270	Poor DNA	Poor DNA		poor DNA	12-Nov-19
Pan19-S271	Poor DNA	Poor DNA		poor DNA	12-Nov-19
Pan19-S272	Puma			Puma	12-Nov-19
Pan19-S273	Puma			Puma	12-Nov-19
Pan19-S274	Fox2		S.A. Gray Fox 4	S.A. gray fox	12-Nov-19
Pan19-S275	Poor DNA	Poor DNA		poor DNA	12-Nov-19
Pan19-S276	Fox1			S.A. gray fox	12-Nov-19
Pan19-S277	Fox1			S.A. gray fox	12-Nov-19
Pan19-S278	Poor DNA	Poor DNA		poor DNA	12-Nov-19
Pan19-S279	Fox1			S.A. gray fox	12-Nov-19
Pan19-S280	Poor DNA			Puma	12-Nov-19
Pan19-S281	Puma			Puma	12-Nov-19

Pan19-S282	Puma			Puma	12-Nov-19
Pan19-S283	Fox1			S.A. gray fox	12-Nov-19
Pan19-S284	Puma			Puma	12-Nov-19
Pan19-S285	Fox1			S.A. gray fox	12-Nov-19
Pan19-S286	Fox1			S.A. gray fox	12-Nov-19
Pan19-S287	Fox1			S.A. gray fox	12-Nov-19
Pan19-S288	Puma			Puma	12-Nov-19
Pan19-S289	Poor DNA			Puma	12-Nov-19
Pan19-S290	Poor DNA	Poor DNA		poor DNA	12-Nov-19
Pan19-S291	Fox1			S.A. gray fox	12-Nov-19
Pan19-S292	Puma			Puma	13-Nov-19
Pan19-S293	Fox1			S.A. gray fox	13-Nov-19
Pan19-S294	Fox1			S.A. gray fox	13-Nov-19
Pan19-S295	Puma			Puma	13-Nov-19
Pan19-S296	Poor DNA			Puma	13-Nov-19
Pan19-S297	Poor DNA	Poor DNA		poor DNA	13-Nov-19
Pan19-S298	Poor DNA	Poor DNA		poor DNA	13-Nov-19
Pan19-S299	Puma			Puma	13-Nov-19
Pan19-S300	Poor DNA	Poor DNA		poor DNA	13-Nov-19
Pan19-S301	Poor DNA	Poor DNA		poor DNA	13-Nov-19
Pan19-S302	Poor DNA	Poor DNA		poor DNA	13-Nov-19
Pan19-S303	Poor DNA	Poor DNA		poor DNA	13-Nov-19
Pan19-S304	Fox1			S.A. gray fox	13-Nov-19
Pan19-S305	Poor DNA	Poor DNA		poor DNA	13-Nov-19
Pan19-S306	Poor DNA	Poor DNA		poor DNA	13-Nov-19
Pan19-S307	Poor DNA			Puma	15-Nov-19
Pan19-S308	Puma			Puma	15-Nov-19
Pan19-S309	Poor DNA	Poor DNA		poor DNA	15-Nov-19
Pan19-S310	Fox1			S.A. gray fox	15-Nov-19
Pan19-S311	Poor DNA			Puma	15-Nov-19
Pan19-S312	Poor DNA	Poor DNA		poor DNA	15-Nov-19
Pan19-S313	Poor DNA			Puma	15-Nov-19
Pan19-S314	Poor DNA	Poor DNA		poor DNA	15-Nov-19
Pan19-S315	Puma			Puma	15-Nov-19
Pan19-S316	Fox1			S.A. gray fox	15-Nov-19
Pan19-S317	Poor DNA	Poor DNA		poor DNA	15-Nov-19
Pan19-S318	Poor DNA	Poor DNA		poor DNA	15-Nov-19
Pan19-S319	Poor DNA	Poor DNA		poor DNA	15-Nov-19
Pan19-S320	Puma			Puma	15-Nov-19
Pan19-S321	Fox2		S.A. Gray Fox 4	S.A. gray fox	15-Nov-19
Pan19-S322	Poor DNA	Poor DNA		poor DNA	15-Nov-19
Pan19-S323	Poor DNA	Poor DNA		poor DNA	15-Nov-19
Pan19-S324	Poor DNA	Poor DNA		poor DNA	15-Nov-19

Pan19-S325	Poor DNA	Poor DNA		poor DNA	15-Nov-19
Pan19-S326	Poor DNA			Puma	16-Nov-19
Pan19-S327	Geoffroy's Cat			Geoffroy's Cat	16-Nov-19
Pan19-S328	Poor DNA	Poor DNA		poor DNA	16-Nov-19
Pan19-S329	Poor DNA	Poor DNA		poor DNA	16-Nov-19
Pan19-S330	Poor DNA	Poor DNA		poor DNA	16-Nov-19
Pan19-S331	Puma			Puma	16-Nov-19
Pan19-S332	Poor DNA			Puma	16-Nov-19
Pan19-S334	Puma			Puma	16-Nov-19
Pan19-S335	Puma			Puma	16-Nov-19
Pan19-S336	Poor DNA	Poor DNA		poor DNA	16-Nov-19
Pan19-S337	Poor DNA	Poor DNA		poor DNA	16-Nov-19
Pan19-S338	Puma			Puma	16-Nov-19
Pan19-S339	Poor DNA	Poor DNA		poor DNA	18-Nov-19
Pan19-S340	Puma			Puma	18-Nov-19
Pan19-S341	Poor DNA	Poor DNA		poor DNA	18-Nov-19
Pan19-S342	Poor DNA			Puma	18-Nov-19
Pan19-S343	Poor DNA			Puma	18-Nov-19
Pan19-S344	Puma			Puma	18-Nov-19
Pan19-S345	Poor DNA	Poor DNA		poor DNA	18-Nov-19
Pan19-S346	Puma			Puma	18-Nov-19
Pan19-S347	Puma			Puma	18-Nov-19
Pan19-S348	Poor DNA	Poor DNA		poor DNA	18-Nov-19
Pan19-S349	Puma			Puma	18-Nov-19
Pan19-S350	Puma			Puma	18-Nov-19
Pan19-S351	Puma			Puma	18-Nov-19
Pan19-S352	Poor DNA			Puma	18-Nov-19
Pan19-S353	Puma			Puma	18-Nov-19
Pan19-S354	Poor DNA	Poor DNA		poor DNA	18-Nov-19
Pan19-S355	Poor DNA			Puma	18-Nov-19
Pan19-S356	Poor DNA			Puma	18-Nov-19
Pan19-S357	Poor DNA	Poor DNA		poor DNA	20-Nov-19
Pan19-S358	Fox1			S.A. gray fox	20-Nov-19
Pan19-S359	Fox1			S.A. gray fox	20-Nov-19
Pan19-S360	Poor DNA	Poor DNA		poor DNA	20-Nov-19
Pan19-S361	Puma			Puma	20-Nov-19
Pan19-S362	Poor DNA	Poor DNA		poor DNA	20-Nov-19
Pan19-S363	Poor DNA	Poor DNA		poor DNA	20-Nov-19
Pan19-S364	Geoffroy's Cat			Geoffroy's Cat	20-Nov-19
Pan19-S365	Poor DNA	Poor DNA		poor DNA	20-Nov-19
Pan19-S366	Poor DNA	Geoffroy's Cat		Geoffroy's Cat	20-Nov-19
Pan19-S367	Fox3		Culpeo Fox 7	Culpeo fox	20-Nov-19
Pan19-S368	Fox3		Culpeo Fox 7	Culpeo fox	20-Nov-19

Pan19-S369	Fox3		Culpeo Fox 7	Culpeo fox	20-Nov-19
Pan19-S370	Poor DNA	Poor DNA		poor DNA	20-Nov-19
Pan19-S371	Poor DNA	Poor DNA		poor DNA	20-Nov-19
Pan19-S372	Puma			Puma	20-Nov-19
Pan19-S373	Puma			Puma	20-Nov-19
Pan19-S374	Poor DNA	Poor DNA		poor DNA	20-Nov-19
Pan19-S375	Puma			Puma	20-Nov-19
Pan19-S376	Poor DNA	Poor DNA		poor DNA	21-Nov-19
Pan19-S377	Poor DNA	Geoffroy's Cat		Geoffroy's Cat	21-Nov-19
Pan19-S378	Poor DNA	Poor DNA		poor DNA	21-Nov-19
Pan19-S379	Poor DNA	Poor DNA		poor DNA	21-Nov-19
Pan19-S380	Poor DNA	Dog		Dog	21-Nov-19
Pan19-S381	Poor DNA	Puma		Puma	23-Nov-19
Pan19-S382	Fox1			S.A. gray fox	23-Nov-19
Pan19-S383	Poor DNA	Puma		Puma	23-Nov-19
Pan19-S384	Fox1			S.A. gray fox	23-Nov-19
Pan19-S385	Poor DNA	Puma		Puma	23-Nov-19
Pan19-S386	Poor DNA	Geoffroy's Cat		Geoffroy's Cat	23-Nov-19
Pan19-S387	Fox1			S.A. gray fox	23-Nov-19
Pan19-S388	Puma			Puma	18-Nov-19

Table S2. All puma individuals (Ind), their alternative IDs used for PCoA and STRUCTURE results (Ind Alt; Figure 3 and Table S4), and their associated genotypes across 19 microsatellite loci.

Ind	IndAlt	FCA43		FCA57		FCA77		FCA90		FCA96		FCA132		FCA559	
Pan19-S75	F01	126	140	150	150	128	140	93	93	203	203	182	182	115	131
Pan19-S105	F02	126	126	150	152	128	140	93	105	203	203	166	186	119	119
Pan19-S135	F03	126	140	150	152	128	140	93	105	203	203	178	186	0	0
Pan19-S209	F04	0	0	150	152	128	140	93	93	203	203	178	184	107	107
Pan19-S211	F05	126	140	150	152	128	128	93	93	195	197	178	186	115	115
Pan19-S223	F06	126	126	150	152	128	140	0	0	203	203	0	0	119	119
Pan19-S230	M07	126	126	152	152	128	128	93	93	203	203	178	190	119	119
Pan19-S233	M08	126	126	152	152	128	140	93	105	203	203	186	188	115	119
Pan19-S234	M09	126	126	150	152	128	140	93	93	203	203	178	186	119	119
Pan19-S236	F10	126	140	150	150	140	140	93	105	203	203	182	190	0	0
Pan19-S238	M11	126	140	150	150	140	142	93	93	203	203	178	182	0	0
Pan19-S284	F12	140	140	150	152	140	140	93	93	197	203	178	182	115	115
Pan19-S281	F13	126	126	150	152	128	140	93	93	193	195	166	166	115	119
Pan19-S299	M14	126	140	150	152	128	128	93	93	203	203	178	186	119	119
Pan19-S331	M15	126	140	150	152	128	140	93	93	203	203	186	188	111	123
Pan19-S334	F16	126	140	150	150	128	140	93	93	203	203	0	0	111	119
Pan19-S338	M17	140	140	150	152	140	142	93	93	203	203	0	0	111	123
Pan19-S344	F18	126	140	150	150	128	140	93	109	203	203	178	182	119	119
Pan19-S347	F19	126	126	150	152	128	128	93	105	203	203	178	182	119	119
Pan19-S375	F20	126	140	150	150	128	128	105	105	203	203	0	0	0	0

Ind	IndAlt	FCA176		FCA35		LC109		FCA391		FCA08		FCA82	
Pan19-S75	F01	223	255	0	0	184	194	195	203	128	148	0	0
Pan19-S105	F02	223	243	122	126	178	184	195	203	128	164	268	268
Pan19-S135	F03	223	223	122	126	0	0	195	203	128	158	0	0
Pan19-S209	F04	0	0	122	122	0	0	0	0	148	148	264	264
Pan19-S211	F05	223	223	126	126	184	194	195	203	162	164	266	266
Pan19-S223	F06	223	233	126	126	0	0	0	0	128	162	0	0
Pan19-S230	M07	223	223	126	126	184	184	203	203	158	162	266	266
Pan19-S233	M08	223	243	122	122	178	184	195	203	162	164	262	268
Pan19-S234	M09	223	243	122	126	178	184	195	203	162	164	268	268
Pan19-S236	F10	0	0	122	126	184	194	183	203	148	162	264	264
Pan19-S238	M11	223	223	122	122	180	194	183	191	148	148	264	264
Pan19-S284	F12	223	255	122	122	184	184	183	187	128	162	268	268
Pan19-S281	F13	0	0	122	122	0	0	183	191	162	162	264	266
Pan19-S299	M14	233	243	122	126	184	184	183	203	164	164	0	0
Pan19-S331	M15	223	243	122	122	178	188	189	195	164	164	0	0
Pan19-S334	F16	0	0	122	126	178	184	191	191	148	148	0	0
Pan19-S338	M17	223	247	126	126	178	178	191	195	148	160	262	262

Pan19-S344	F18	223	223	122	126	178	184	195	203	158	162	266	268
Pan19-S347	F19	235	245	122	126	184	184	0	0	128	148	0	0
Pan19-S375	F20	223	223	122	126	0	0	0	0	148	160	268	268

Ind	IndAlt	FCA149		PCOA208		PCOB10		PCOC112		PCOB210		PCOC108	
Pan19-S75	F01	141	143	185	193	0	0	161	161	154	154	121	121
Pan19-S105	F02	135	135	183	195	210	218	153	161	154	168	121	121
Pan19-S135	F03	135	135	183	195	0	0	157	157	154	168	121	121
Pan19-S209	F04	135	135	195	195	204	218	157	161	154	154	121	121
Pan19-S211	F05	135	135	187	195	218	218	157	161	154	154	121	121
Pan19-S223	F06	135	135	195	195	200	200	153	157	154	154	121	121
Pan19-S230	M07	135	135	195	197	200	218	153	161	154	154	121	121
Pan19-S233	M08	135	135	183	187	218	218	157	161	154	154	121	121
Pan19-S234	M09	135	135	183	187	200	218	153	161	154	168	121	121
Pan19-S236	F10	135	141	187	195	210	218	153	161	154	154	121	121
Pan19-S238	M11	135	143	183	195	200	210	153	161	154	154	121	121
Pan19-S284	F12	143	143	183	195	218	218	157	161	154	154	121	121
Pan19-S281	F13	135	135	195	195	0	0	161	161	154	154	121	121
Pan19-S299	M14	135	135	183	195	214	214	153	161	168	170	121	121
Pan19-S331	M15	135	143	195	195	210	218	153	157	154	154	121	121
Pan19-S334	F16	135	135	191	195	200	200	161	161	154	154	121	121
Pan19-S338	M17	135	143	183	191	200	204	161	161	154	154	115	121
Pan19-S344	F18	135	135	183	187	200	200	153	161	154	154	121	121
Pan19-S347	F19	135	135	187	195	200	214	153	161	154	170	0	0
Pan19-S375	F20	135	135	195	195	200	210	157	157	154	168	121	121

Table S3. Per locus descriptive statistics for number of individuals (N), number of alleles (Na), effective alleles (Ne), observed heterozygosity (Ho), expected heterozygosity (He), unbiased heterozygosity (uHe), fixation index (F). Tests for Hardy-Weinberg Equilibrium among 19 loci results of Chi-square test (ChiSq) with degrees of freedom (DF) and resulting p-values (Prob). Initial $\alpha = 0.01$, after Bonferroni correction $\alpha = 0.000526$.

Locus	N	Na	Ne	Ho	He	uHe	F	DF	ChiSq	Prob
FCA43	19	2.000	1.870	0.526	0.465	0.478	-0.131	1	0.326	0.56813
FCA57	20	2.000	1.923	0.600	0.480	0.492	-0.250	1	1.250	0.26355
FCA77	20	3.000	2.180	0.650	0.541	0.555	-0.201	3	3.906	0.27183
FCA90	19	3.000	1.520	0.316	0.342	0.351	0.077	3	0.501	0.91856
FCA96	20	4.000	1.297	0.150	0.229	0.235	0.344	6	29.445	0.00005
FCA132	16	7.000	4.741	0.875	0.789	0.815	-0.109	21	24.798	0.25601
FCA559	16	6.000	2.876	0.375	0.652	0.673	0.425	15	43.684	0.00012
FCA176	16	7.000	2.349	0.625	0.574	0.593	-0.088	21	35.680	0.02374
FCA35	19	2.000	1.978	0.474	0.494	0.508	0.042	1	0.034	0.85468
LC109	15	5.000	2.663	0.667	0.624	0.646	-0.068	10	11.016	0.35630
FCA391	16	6.000	4.031	0.875	0.752	0.776	-0.164	15	21.041	0.13552

FCA08	20	6.000	4.790	0.700	0.791	0.812	0.115	15	17.367	0.29743
FCA82	13	4.000	3.485	0.231	0.713	0.742	0.676	6	18.346	0.00542
FCA149	20	3.000	1.504	0.250	0.335	0.344	0.254	3	3.368	0.33828
PCOA208	20	7.000	3.053	0.750	0.673	0.690	-0.115	21	45.444	0.00151
PCOB10	17	5.000	3.546	0.588	0.718	0.740	0.181	10	11.144	0.34638
PCOC112	20	3.000	2.667	0.700	0.625	0.641	-0.120	3	4.000	0.26146
PCOB210	20	3.000	1.431	0.300	0.301	0.309	0.004	3	2.883	0.40996
PCOC108	19	2.000	1.054	0.053	0.051	0.053	-0.027	1	0.014	0.90622

Table S4. Puma individuals with original sample IDs (Sample) and alternative labels as per Figure 3. Results of our STRUCTURE analysis for $K = 2$ with mean assignments across five STRUCTURE runs at $K1$ or $K2$, and the putative ancestral group from majority assignment (i.e. >0.50).

Sample	ID	K1	K2	Group	Latitude	Longitude
Pan19-S75	F01	0.19	0.81	2	-50.9822	-72.6744
Pan19-S105	F02	0.80	0.20	1	-51.0911	-72.7897
Pan19-S135	F03	0.79	0.21	1	-51.0846	-72.8086
Pan19-S209	F04	0.20	0.80	2	-51.023	-72.8813
Pan19-S211	F05	0.62	0.38	1	-51.0242	-72.8834
Pan19-S223	F06	0.79	0.21	1	-51.0407	-72.8785
Pan19-S230	M07	0.79	0.21	1	-51.0337	-72.8961
Pan19-S233	M08	0.75	0.25	1	-51.1407	-73.064
Pan19-S234	M09	0.82	0.18	1	-51.1432	-73.0601
Pan19-S236	F10	0.23	0.77	2	-51.1237	-73.0704
Pan19-S238	M11	0.19	0.81	2	-51.1217	-73.0739
Pan19-S284	F12	0.23	0.77	2	-50.9233	-72.7878
Pan19-S281	F13	0.28	0.72	2	-50.9184	-72.7848
Pan19-S299	M14	0.77	0.23	1	-50.9474	-72.743
Pan19-S331	M15	0.30	0.70	2	-51.0888	-72.9748
Pan19-S334	F16	0.24	0.76	2	-51.2094	-72.9658
Pan19-S338	M17	0.18	0.82	2	-51.2125	-72.9761
Pan19-S344	F18	0.75	0.25	1	-51.1602	-72.9791
Pan19-S347	F19	0.64	0.36	1	-51.1531	-72.9811
Pan19-S375	F20	0.63	0.37	1	-51.136	-72.9578

Figure S1. Bayesian clustering analysis for 20 puma individuals analysed using 19 microsatellite loci. Ln probability (y-axis) of being assigned to 1 through 5 clusters (K, x-axis) indicates most probably number of distinct populations for individuals analyzed.

