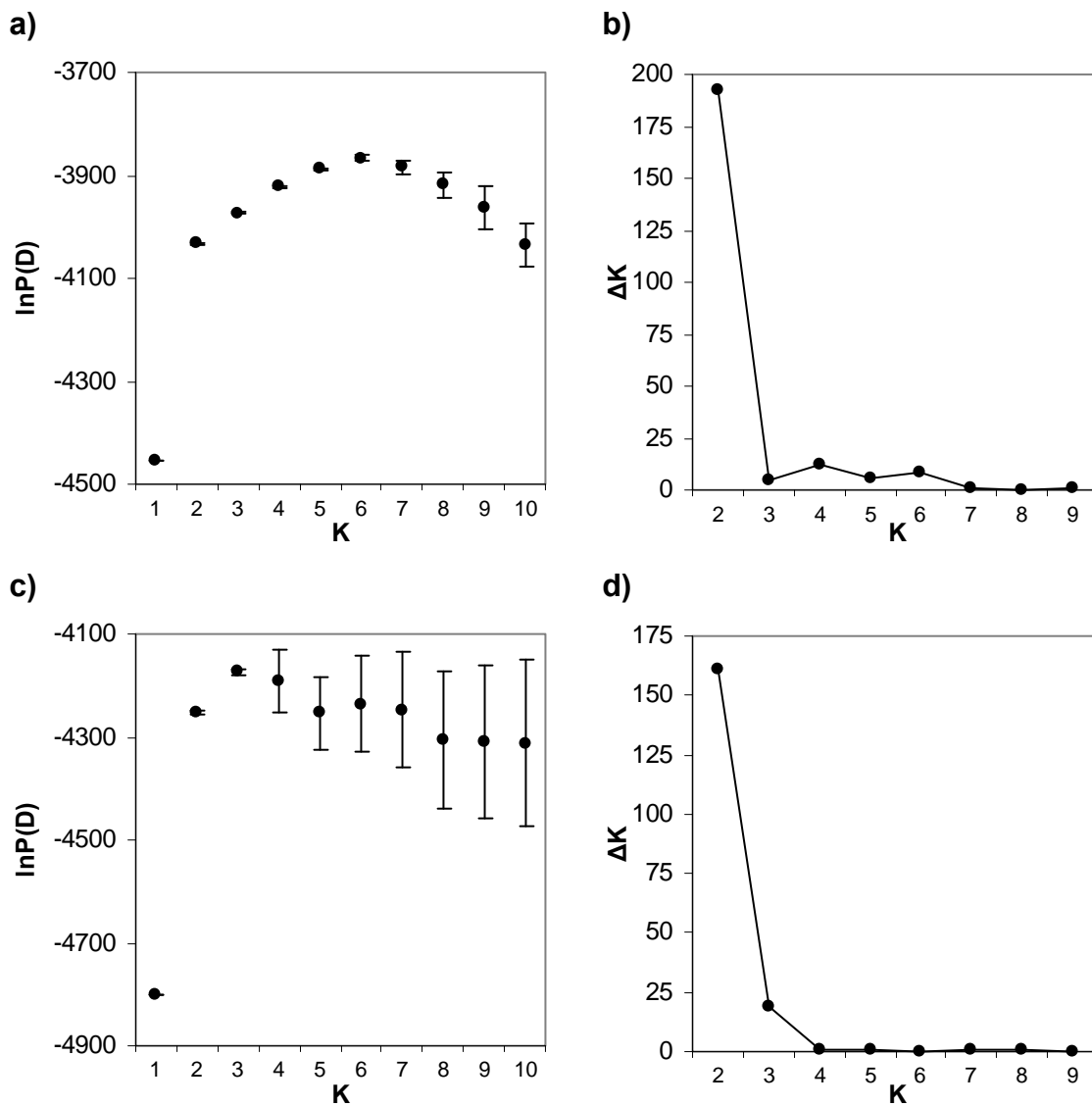
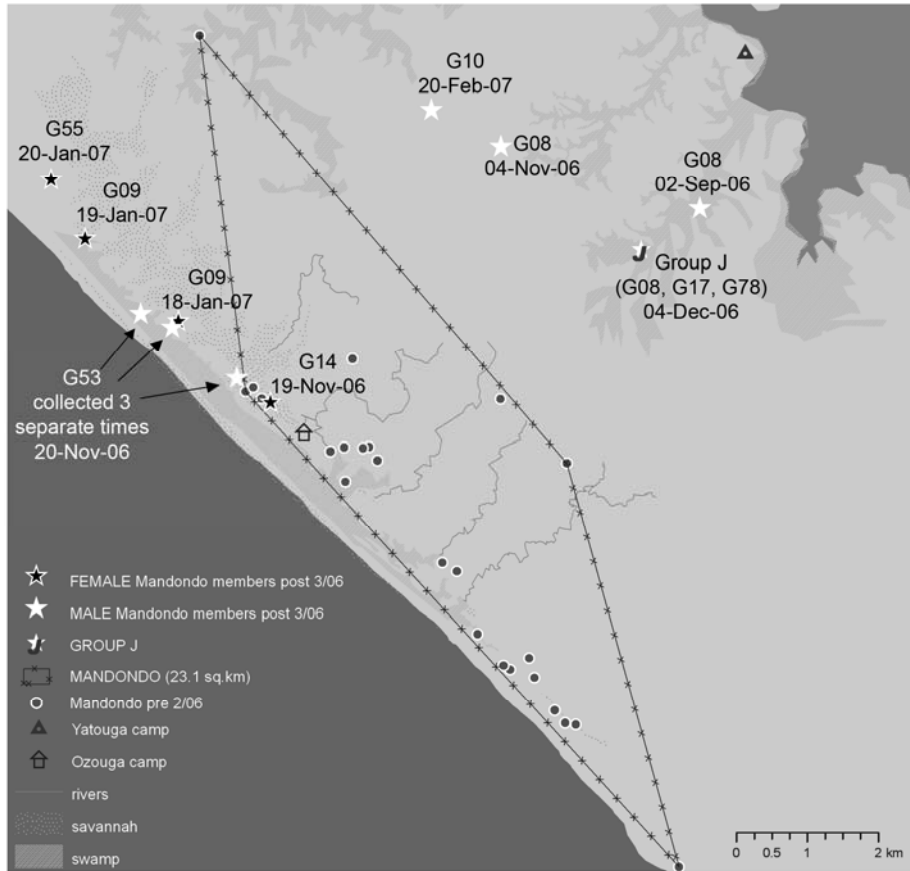


Supplemental figure 1: Plot of Structure simulations to determine the optimal number of genetic clusters for the gorilla and chimpanzee data sets. K is the number of genetic clusters evaluated ($K=1-10$). (a,b) Data set consisting of all the individuals identified as chimpanzees in the field (133 unique genotypes) and thirteen known gorilla samples from Loango. (c,d) Data set consisting of all the individuals identified as gorillas in the field (83 unique genotypes) and nine known chimpanzee samples from Loango. (a,c) Structure likelihood function ($\ln P(D)$), \pm standard deviation for each value of K across 20 independent iterations. (b,d) ΔK , the second order rate of change of the $\ln P(D)$ measure, is largest at the most supported number of genetic clusters in the data set, in both cases here, $K=2$.



Supplementary figure 2: Evidence of Mandondo group dissolution over the course of the study. Minimum convex polygon depicts the minimum homerange of the Mandondo group from February 2005 to March 2006. White stars show location of males and black stars locations of females after March 2006.



Supplemental table 1: Genotypes of 83 gorillas and 15 chimpanzee samples, samples marked with an asterisk were identified in the field as gorillas but shown to be chimpanzees using STRUCTURE. The last 9 samples were known chimpanzee samples genotyped at gorilla loci for said STRUCTURE analysis.

consensus ID	SEX	# of times captured	D7s817	D5s1470	D2s1326	D6s1056	VWF	D1s550	D4s1627	D5s1457	D3s2459	D16s2624	D1s2130	D6s474	D14s306	D10s1432	d8s1106	D7s2204
G01	F	8	134/134	172/172	214/222	231/235	149/153	180/184	220/224	116/132	151/169	138/138	255/263	141/161	192/204	147/147	141/141	
G02	F	7	130/134	152/172	214/222	223/227	149/149	168/188	211/211	116/132	165/165	138/146	251/259	141/165	192/200	131/143	141/141	
G03	M	9	134/134	152/168	222/222	227/231	157/157	176/184	212/227	116/116	169/179	134/138	259/259	165/165	192/204	139/143	137/145	
G04	F	4	130/134	168/172	222/222	227/231	149/157	168/176	212/227	116/116	165/179	138/138	259/259	141/165	200/204	143/143	141/145	
G05	F	6	126/134	172/184	214/230	223/227	141/153	184/188	216/216	116/132	165/169	138/146	255/259	157/165	192/200	131/143	137/141	
G06	F	9	130/130	172/172	174/214	227/231	149/149	184/188	215/224	116/132	151/171	138/146	255/259	141/161	192/208	147/147	137/141	166/166
G07	F	4	130/130	152/172	170/218	223/231	145/153	168/168	211/224	116/120	169/175	138/138	243/259	141/153	192/200	131/143		166/170
G08	M	12	130/130	172/176	174/174	227/231	149/149	184/188	215/215	116/116	165/171	134/146	255/255	141/157	192/208	147/147	137/141	166/166
G09	F	5	130/130	152/172	214/218	231/239	149/153	180/188	215/227	116/120	169/179	138/142	259/259	141/153	204/204	147/147		162/166
G10	M	5	130/130	152/168	214/214	227/239	141/153	180/180	224/224	112/116	165/165	134/138	255/267	157/165	204/204	151/159	141/141	166/166
G11	F	4	130/130	152/152	214/222	223/231	145/149	184/188	211/215	112/116	147/169	138/142	255/259	157/165	192/204	159/163		162/170
G12	F	2	130/134	172/172	214/222	227/231	149/149	176/184	215/224	116/132	151/169	138/138	259/263	161/165	192/200	139/147		166/170
G13	M	2	130/130	152/172	174/222	227/231	145/149	184/184	211/215	112/116	147/171	142/146	255/255	141/165	192/204	147/159		162/166
G14	F	3	130/130	152/176	174/214	227/231	149/149	188/188	215/227	116/120	165/179	142/146	255/259	153/157	192/204	147/147	137/149	166/166
G15	M	4	130/130	152/168	214/218	227/239	141/153	176/180	219/224	112/116	179/179	134/138	255/267	165/165	192/204	143/159	141/145	
G16	M	2	138/142	172/176	222/230	227/239	141/145	180/184	215/228	116/132	169/179	138/138	255/259	161/165	192/200	143/147	145/145	166/170
G17	M	5	130/138	172/176	174/214	227/231	149/149	184/184	211/215	116/116	165/171	134/142	255/255	141/165	200/208	147/147	137/145	166/166
G18	F	10	126/134	152/172	166/214	227/227	145/149	180/184	211/215	120/120	147/169	138/138	255/259	157/165	192/204	139/151	137/149	170/170
G19	M	5	130/134	152/152	170/214	227/235	149/153	180/184	220/227	116/116	169/175	138/138	255/263	141/153	204/208	147/159	141/149	166/170
G20	M	3	134/138	152/176	214/214	227/235	149/149	180/180	216/219	116/116	165/169	126/138	255/259	157/165	196/208		141/145	166/174
G21	F	2	130/138	172/172	222/234	223/231	149/157	168/184	211/224	116/120	171/191	138/138	243/255	165/165	192/196			166/166
G22	M	4	126/130	152/176	222/222	223/227	145/149	168/184	215/215	116/116	171/179	138/142	243/251	157/161	192/204	143/159	149/153	
G23	M	2	126/134	152/176	214/218	227/231	141/145	184/184	211/219	112/116	165/169	138/138	251/259	157/157	192/204	151/159	141/141	
G24	F	2	134/134	168/172	222/222	227/235	153/157	176/180	220/227	116/132	151/151	138/138	255/259	141/165	192/204	143/147		
G25	F	3	118/138	172/172	230/230	227/227	149/153	180/180	216/216	116/120	169/169	138/146	255/259	157/161	192/204	139/151	141/145	
G26	F	4	126/130	172/172	214/222	227/231	149/149	176/184	215/219	116/120	151/169	138/138	259/263	141/165	192/204	131/159	141/141	
G27	F	1	134/134	152/172	214/?	223/239	141/141	168/172	215/224	116/124	165/165	138/142	259/267	157/165	200/204	139/147	141/141	
G28	F	3	126/130	172/172	214/214	239/239	149/153	168/184	215/224	116/120	169/169	142/146	251/251	141/165	192/200	139/139		
G29	M	3	126/130	152/172	214/218	219/227	141/145	168/184	215/227	116/116	175/175	138/138	247/255	141/157	192/204	139/143	145/?	
G30	F	4	130/130	172/176	214/230	227/231	153/157	180/184	216/220	116/116	167/169	138/142	251/267	141/165	196/204	143/143	141/149	
G31	M	3	134/134	168/176	214/222	231/235	149/149	184/188	216/220	124/128	165/175	138/138		141/157	204/208	147/147	137/141	
G32	M	3	130/130	152/172	170/214	223/227	141/153	180/184	215/215	116/116	175/179	138/142	255/267	157/165	200/204	135/139	141/145	
G33	M	4	130/134	168/168	214/222	227/239	149/149	180/184	219/219	116/116	169/169	138/138	255/259	161/165	192/204	131/143	141/141	162/166
G34	M	10	130/130	156/168	214/230	227/239	149/153	168/180	211/224	112/116	165/165	138/142	267/267	157/165	192/204	135/151	141/149	
G35	M	3	130/134	152/176	214/230	223/235	145/149	176/184	211/215	112/116	165/165	134/146	259/259	157/165	192/204	139/147	141/149	
G36	F	3	126/130	168/172	214/230	223/239	149/149	184/184	211/215	116/124	167/191	138/142	243/255	145/161	204/208	139/151	145/145	
G37	M	7	130/130	168/172	214/218	227/239	153/153	168/180	219/224	116/124	165/165	134/146	267/267	157/165	200/204	135/147	149/153	
G39	M	1	134/134	172/176	214/222	235/239	145/149	172/184	216/224	128/132	165/169	138/138	243/259	157/165	204/208	147/147	141/145	
G40	F	3		152/172	174/214	227/227	141/145	180/184	215/216	116/116	167/179	138/138	255/267	161/165	192/208	139/143	141/141	
G41	F	3		172/176	214/226	223/231	141/149	176/184	219/220	116/124	167/169	142/146	243/251	161/165	192/200	143/151	141/157	
G42	F	2	126/130	172/172	214/218	227/231	141/149	168/176	219/227	116/116	169/175	138/138	247/263	141/157	192/204	131/139	141/145	
G43	F	3	130/130	152/168	214/218	239/243	157/157	168/188	215/219	116/116	165/171	138/146	259/263	141/161	192/192	131/147	141/149	
G44	F	3	130/130	152/172	218/218	227/243	141/157	168/188	215/219	116/116	165/175	138/146	247/259	157/161	192/192	131/139	145/149	
G45	F	2	126/130	172/172	218/230	227/231	153/157	176/188	216/219	116/116	165/169	138/146	251/263	165/165	192/196	147/159	141/145	
G46	F	8	126/130	152/176	218/230	223/227	149/149	168/188	215/215	116/116	165/169	134/146	251/255	141/161	192/204	139/155	141/145	
G47	F	3	126/130	168/176	214/218	227/231	149/153	180/184	216/224	116/124	165/171	142/146	251/267	157/165	192/196	135/147	141/149	
G48	F	4	130/134	172/172	214/214	227/239	149/149	176/184	219/224	116/120	167/169	138/146	251/259	141/153	192/200	139/143	141/149	
G49	F	4	130/134	172/172	214/234	227/227	149/149	176/184	211/224	120/120	169/191	138/146	251/255	153/165	192/192	143/163	141/141	
G50	F	3	126/130	152/172	222/230	227/227	153/153	184/184	215/219	116/124	169/179	138/142	255/255	157/165	204/204	135/143	141/149	
G51	F	4	130/134	152/172	214/214	219/223	141/153	180/184	211/219	116/120	147/165	138/138	255/255	165/165	204/204	139/147	141/145	
G52	F	3	130/130	156/172	230/230	227/239	153/157	180/180	216/224	112/116	165/167	142/142	267/267	141/165	192/208	143/151	141/149	
G53	M	7	130/134	172/172	214/218	223/231	157/157	168/176	215/215	116/120	165/169	138/146	255/263	141/165	192/200	131/159	141/149	162/166
G55	F	7	130/130	172/176	174/214	227/231	149/149	180/188	215/227	116/120	165/169	134/138	255/259	141/153	204/208	147/147	141/149	162/166
G56	F	2	118/130	168/172	234/?	227/239	145/153	168/180	216/224	116/116	165/179	138/142	255/259	165/165	204/?	135/?	141/153	
G57	M	1		152/172	214/230	223/239	141/149	188/188	215/219	116/116	165/167	134/138	251/263	161/165	208/?	131/147		162/166
G58	M	1	130/134	152/176	214/222	223/231	157/157	180/184	211/215	120/130	165/169	138/142		157/165	192/192			162/166
G60	F	3	130/134	152/172	170/214	231/235	149/153	180/184	219/220	116/120	169/169	134/142	259/259	141/153	204/208		141/149	162/166
G61*	M	1	122/122	152/156	182/190	219/219	121/129	140/144	212/212	104/112	139/143	118/130	247/255	149/157	216/228			166/182
G62*																		