

Supplementary Information

Reintroduction of confiscated and displaced mammals risks outbreeding and introgression in natural populations, as evidenced by orang-utans of divergent subspecies

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Table S1 Published sequences from orang-utans of known geographic origin, by Warren *et al.*

(2001)¹. Accession codes correspond to those in GenBank. Sequences with accession codes ending in ‘2’ were updated by Arora *et al.* (2010)².

Name	Accession code	Subspecies	Geographic origin
OU-SE8	AJ391121.2	<i>P. p. pygmaeus</i>	Semenggoh, Sarawak
OU-SEAH	AJ391122.1	<i>P. p. pygmaeus</i>	Semenggoh, Sarawak
OU-DSLE1	AJ391100.2	<i>P. p. pygmaeus</i>	Danau Sentarum, Northwest Kalimantan
OU-DS29	AJ391099.1	<i>P. p. pygmaeus</i>	Danau Sentarum, Northwest Kalimantan
OU-SEBU	AJ391123.2	<i>P. p. pygmaeus</i>	Semenggoh, Sarawak
OU-DSRA	AJ391103.2	<i>P. p. pygmaeus</i>	Danau Sentarum, Northwest Kalimantan
OU-DSME1	AJ391101.2	<i>P. p. pygmaeus</i>	Danau Sentarum, Northwest Kalimantan
OU-SEUA	AJ391125.2	<i>P. p. pygmaeus</i>	Semenggoh, Sarawak
OU-GPUN	AJ391108.2	<i>P. p. wurmbii</i>	Gunung Palung, Southwest Kalimantan
OU-TP6	AJ391141.1	<i>P. p. wurmbii</i>	Tanjung Puting, Central Kalimantan
OU-TP24	AJ391140.1	<i>P. p. wurmbii</i>	Tanjung Puting, Central Kalimantan
OU-TP15	AJ391139.1	<i>P. p. wurmbii</i>	Tanjung Puting, Central Kalimantan
OU-TNK41	AJ391137.2	<i>P. p. morio</i>	Kutai National Park, East Kalimantan
OU-TNK36	AJ391133.2	<i>P. p. morio</i>	Kutai National Park, East Kalimantan
OU-SO69	AJ391126.1	<i>P. p. morio</i>	East or North Kalimantan
OU-KA1	AJ391109.2	<i>P. p. morio</i>	Sangatta, East Kalimantan
OU-SB71	AJ391120.2	<i>P. p. morio</i>	Sandakan, Sabah
OU-SB70	AJ391119.1	<i>P. p. morio</i>	Lahad Datu, Sabah
OU-SB57	AJ391117.2	<i>P. p. morio</i>	Kinabatangan, Sabah
OU-SB60	AJ391118.2	<i>P. p. morio</i>	Kinabatangan, Sabah
OU-SUUT	AJ391131.1	<i>P. abelii</i>	Sumatra
OU-SUHS	AJ391130.1	<i>P. abelii</i>	Sumatra
OU-SU76	AJ391129.2	<i>P. abelii</i>	Bohorok, North Sumatra
OU-SU45	AJ391127.2	<i>P. abelii</i>	Bohorok, North Sumatra

Table S2 Positions of nucleotide variation in a 235 bp alignment of the mitochondrial DNA control region, spanning a primary stretch of variation diagnostic of orang-utan subspecies. The alignment comprised 27 unique sequences representing 31 Bornean and 4 Sumatran orang-utans. Only variation among Bornean orang-utans is shown in this table. Highlighted positions denote those potentially useful in inferring orang-utan subspecies.

DNA sequence	Position in alignment of nucleotide variation																																												
	7	41	50	56	75	77	78	80	83	86	88	94	95	96	98	99	101	111	117	119	120	121	123	124	133	146	148	153	166	167	168	173	176	184	196	198	201	216	220	228	234				
Hap. A	T	T	C	A	C	C	C	C	A	T	C	A	T	T	A	T	A	T	C	C	-	C	C	T	C	A	A	C	C	A	C	C	C	T	T	C	T	A	C	C	C				
OU-SEAH	T
OU-DSLE1	C	A	
OU-DS29	T	C	T	.	.	A	T	
OU-SEBU	T	.
OU-DSRA	G
OU-DSME1	T	G	C
OU-SEUA	C
Hap. B	.	C	C	G	C	T	.	T	C	.	T	.	.	.	
Hap. C	.	C	C	G	.	.	C	.	.	A	.	.	C	T	.	T	C	.	T	.	.	.	
Hap. D	C	C	C	G	C	T	.	T	C	.	T	.	.	.	
Hap. E	.	C	C	T	.	.	.	G	C	T	.	T	C	.	T	.	.	.	
OU-TP6	.	C	G	C	G	C	T	.	T	C	.	T	
OU-TP24	.	C	.	.	T	T	.	.	.	C	G	C	T	.	T	C	.	T	T	.	.	.	
OU-TP15	.	C	.	.	T	.	T	.	.	C	G	C	T	.	T	C	.	T	
OU-TNK41	G	.	.	A	C	.	.	T	T	T	
OU-TNK36	G	.	.	.	A	C	.	.	T	T	T	
OU-SO69	.	.	T	A	T	.	T	C	.	.	T	T	A	.	T		
OU-KA1	A	C	.	.	T	T	
OU-SB71	A	.	C	C	.	.	T	.	.	.	T	C	G		
OU-SB70	A	.	C	.	.	.	T	-	.	.	C	.	.	T	.	.	T	C	.	T		
OU-SB57	G	.	.	.	A	.	C	.	.	.	T	-	.	.	C	.	.	T	.	G	.	T	C	.	T		
OU-SB60	A	.	C	C	.	.	T	.	.	T	C	

References

1. Warren, K. S. *et al.* Speciation and intrasubspecific variation of Bornean orangutans, *Pongo pygmaeus pygmaeus*. *Mol. Biol. Evol.* **18**, 472–480 (2001).
2. Arora, N. *et al.* Effects of Pleistocene glaciations and rivers on the population structure of Bornean orangutans (*Pongo pygmaeus*). *PNAS* **107**, 21376–21381 (2010).