

Supplementary Table 1. Parentage of offspring from 3 clutches of eggs laid by two Komodo dragons (Flora and Sungai). Genotype data for 3 females and all captive males kept at Chester and London Zoos are presented as the sizes (in base pairs) of alleles at seven microsatellite loci; different alleles are highlighted contrasting colours to aid visualisation. Note that every juvenile from clutches 1 and 2 is homozygous at each locus, but that they are not identical clones within clutches. Moreover, the combined clutch genotypes reconstruct that of their mother exactly (clutch 1 with Flora, clutch 2 with Sungai). Parthenogenesis is confirmed by: (1) exclusion – clutches and potential fathers have different alleles – and (2) the significantly low probability ($P < 0.0001$) of obtaining a clutch of homozygous individuals after sexual reproduction (full details are presented as Supplementary Methods). Note that clutch 3 were laid after sexual activity between Sungai and Raja; the individual genotyped from this clutch is heterozygous at some loci and contains alleles from both parents, so is the product of sexual reproduction. (juv indicates that the individual is immature).

Clutch	Animal	Sex	Microsatellite Locus													
			K03		K05		K06		K07		K08		K09		K10	
Chester Zoo	Nessie	♀	134	136	198	201	133	141	207	213	151	154	188	200	164	164
	Flora	♀	134	136	198	201	133	133	211	216	151	154	188	200	164	164
	K09	juv	134	134	198	198	133	133	216	216	154	154	188	188	164	164
	K10	juv	136	136	198	198	133	133	216	216	151	151	200	200	164	164
	R0627	juv	134	134	201	201	133	133	211	211	154	154	188	188	164	164
	Kimaan	♂	134	136	198	198	133	141	211	213	154	154	190	190	166	166
	Regis	♂	134	136	198	201	133	133	207	213	151	154	188	200	164	166
	Raja	♂	134	136	198	198	141	141	211	216	151	154	188	206	164	166
London Zoo	Sungai	♀	134	136	198	198	137	141	211	213	154	154	190	190	166	166
	4598	juv	134	134	198	198	137	137	211	211	154	154	190	190	166	166
	4599	juv	134	134	198	198	141	141	211	211	154	154	190	190	166	166
	4600	juv	136	136	198	198	137	137	213	213	154	154	190	190	166	166
	4601	juv	136	136	198	198	141	141	213	213	154	154	190	190	166	166
	5161	juv	134	134	198	198	141	141	211	216	154	154	190	206	164	166