Supplementary Materials

Table S1: Locus name and sequences of the eight microsatellite loci used for assignment analysis of five positive controls and unknown captive individual of the Military Macaw.

Locus	Sequence (5'-3')	Allelic size range (pb)	Genetic Diversity	
			N_T	A
UnaCT21	CTTTCCCATACTTAGCCATA	153-277	29	6.71*
UnaCT32	TCTTGCTTATTCTTCCCCAG	248-268	27	6.71*
UnaCT43	TCATCCTATCACCAGAAGG	184-216	14	5.14*
UnaCT74	CTGGACTGCTGCTCTTAAA	138-190	15	4.71*
UnaGT55	TCTGCCCTCTGTCTTATGCC	181-257	13	3.14*
AgGT17[º]	CCTGGATGTGCTCTGTGAG	134-242	21	6.28*
AgGT19[+]	CCTGCCTCCCAAAAGAACT	167-189	12	3.14*
AgGT32[+]	ACCCAGCTTCAGGTTTGTA	78-120	20	6.71*

Caparroz et al. 2003, [º]Russello et al. 2001, [+]Russello et al. 2005; *HWD, Bonferroni correction P < 0.0001

N_T = total number of alleles identified by each locus, A = average number of alleles per locus

Table S2: Descriptive statistics over all loci for each reference populations, controls positive, and unknown individual of Military Macaw.

Candidate locations	N	N_T	AR	PAR	H_E	H_O	HW	F_{IS}
La Sierrita, Sonora	5	27	18.1	4.7	0.60	0.51	0.4511	0.03
Nuestra Señora del Mineral, Sinaloa	23	91	18.7	6.4	0.72	0.59	0.0058*	0.15[+]
Mirador del Aguila, Nayarit	36	104	19.3	6.1	0.76	0.58	0.0157*	0.11[+]
El Tuito, Jalisco	6	38	18.1	5.0	0.60	0.66	0.5652	0.06
Santa Maria Tecomavaca, Oaxaca	6	39	18.0	4.9	0.61	0.61	0.6174	0.09
Santa Maria de Cocos, Querétaro	5	27	17.6	8.5	0.54	0.48	0.4215*	0.12[+]
El Cielo, Tamaulipas	5	31	16.1	5.7	0.54	0.69	0.0121	0.08
Positive controls	5	25	17.1	4.3	0.75	0.47	0.3509	0.05
Unknown individual	1	9	4.5	2.1	0.46	0.65	0.4321	0.00

N = Sample size (individuals), N_T = total number of alleles, AR = allelic richness, PAR = private allelic richness, H_E = expected heterozygosity, H_O = observed heterozygosity, HW = Tests for Hardy-Weinberg Equilibrium, and F_{IS} = inbreeding index. [+]Significance level P = 0.05. *HWE, Bonferroni correction P < 0.0001.

Figure S1: Ln (DK) values plotted from 1 to 10 for the genetic group of the A) Sierra Madre Occidental / Sierra Madre del Sur and B) Sierra Madre Oriental.
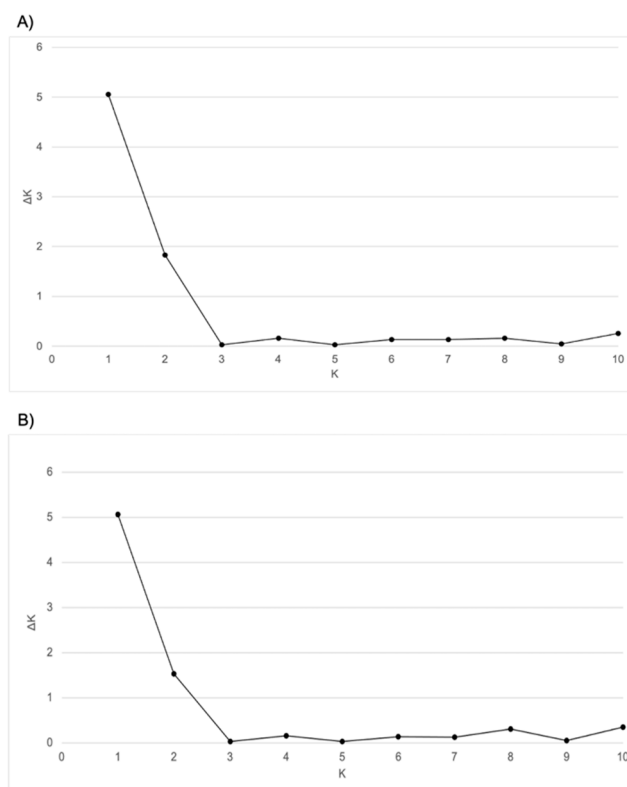

Figure S2: Changes in mean Bayesian Information Criterion (BIC) values in successive K-means clustering.