

Lear's Macaw (*Anodorhynchus leari*)

International Studbook and
Population analysis

6th edition, March 2017

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Data current as of 31st December 2016

**Captive Program for the Lear's Macaw
ICMBio**



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1. Introduction

This is the 6th edition of the International Studbook for the Lear's Macaw, *Anodorhynchus leari*, current to 31 December 2016. It has been published by Jurong Bird Park/WRS in behalf of ICMBio. Studbook data was collected using SPARKS v 1.66, and the genetic and demographic analyses of the population were performed using PMx v 1.4.

Please notify the studbook keeper of any corrections or additions.

2. Description of Population Status

The Lear's Macaw captive population at the time of analyses consists of 152 animals (69 males, 74 females and 9 of unknown sex). The birds are distributed between 14 institutions and seven countries.

Table 1. Distribution of Lear's Macaw in the international captive population, current to 31st December 2016.

Instituton	Country	31 Dec 2016	
Buenos Aires Zoo	Argentina	1.0.0	1
Belo Horizonte Zoo	Brazil	2.3.0	5
Crax	Brazil	1.1.0	2
Foz Do Iguacu	Brazil	3.2.0	5
Milton	Brazil	1.1.0	2
F Cachoeira	Brazil	7.9.0	16
RioZoo	Brazil	1.3.0	4
Sao Paulo Zoo	Brazil	8.9.7	24
Passaredo	Brazil	1.1.0	2
Prague Zoo	Czech	4.1.0	5
AWWP	Qatar	15.11.2	28
Loro Parque	Spain	11.17.0	28
ACTP	Germany	10.12.0	22
Harewood Bird	UK	4.4.0	8
Total	14 inst.	69.74.9	152

2.1. Demography

To date successful reproduction has been achieved at five institutions, with a total of 90 chicks surviving to fledging age (Table 2). The first birth of Lear's Macaw occurred in 1984 when Busch Garden (USA) hatched two chicks. No further hatches occurred until 2006, and from then on the captive born population has been growing steadily with an average of eight chicks

fledge per year (Figure 1) until now, with the sex ratio is slightly skewed towards females (1:1.1, Figure 2). More than half of the current population (59%) was born in captivity (Figure 2). Based on the demographics, the population has a projected growth rate (r) of 7.8 % per year ($\lambda = 1.08$)

Table 2. Institutions that achieved the reproduction of the Lear's Macaw in captivity and number of chicks produced that survived to fledging age, current to 31st December 2016.

Institution	Country	Year	Offspring	Breeding pairs
Busch Gardens	USA	1984	2	1
AWWP	Qatar	2006-16	40	3
Loro Parque Fundacion	Spain	2007-13, 2016	35	2
Harewood B.G.	UK	2010-11	5	1
Sao Paulo Zoo	Brazil	2015-16	8	1
Total	5		90	8

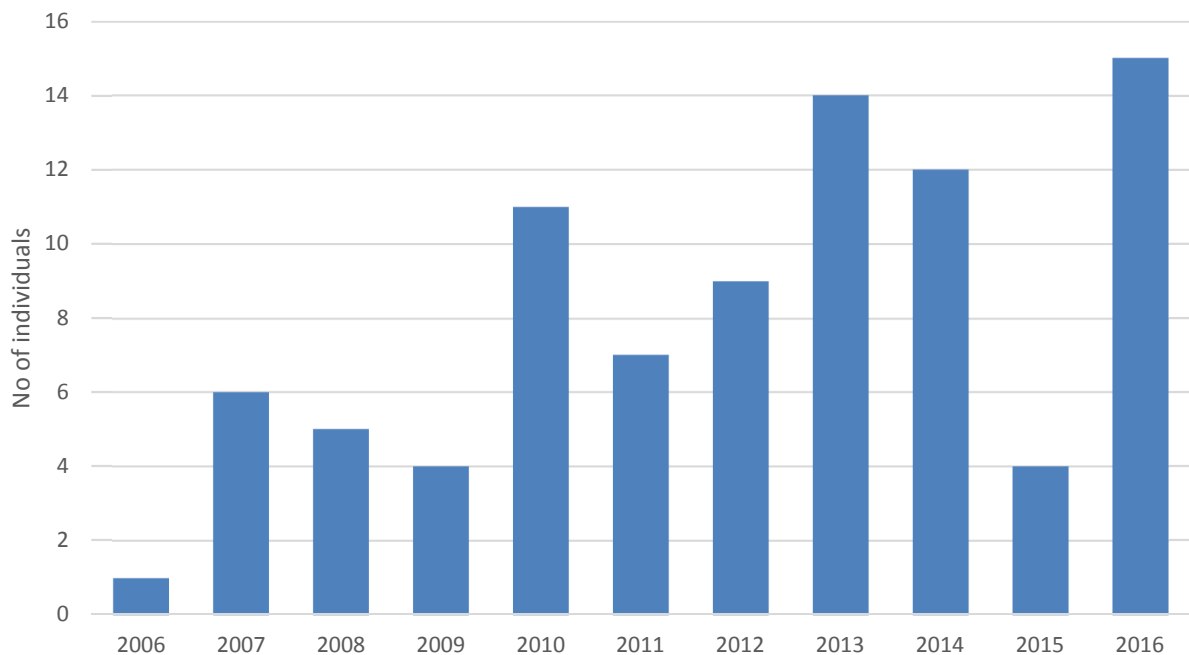


Fig. 1. Annual distribution of chicks fledged in the Lear's Macaw captive population since 2006.

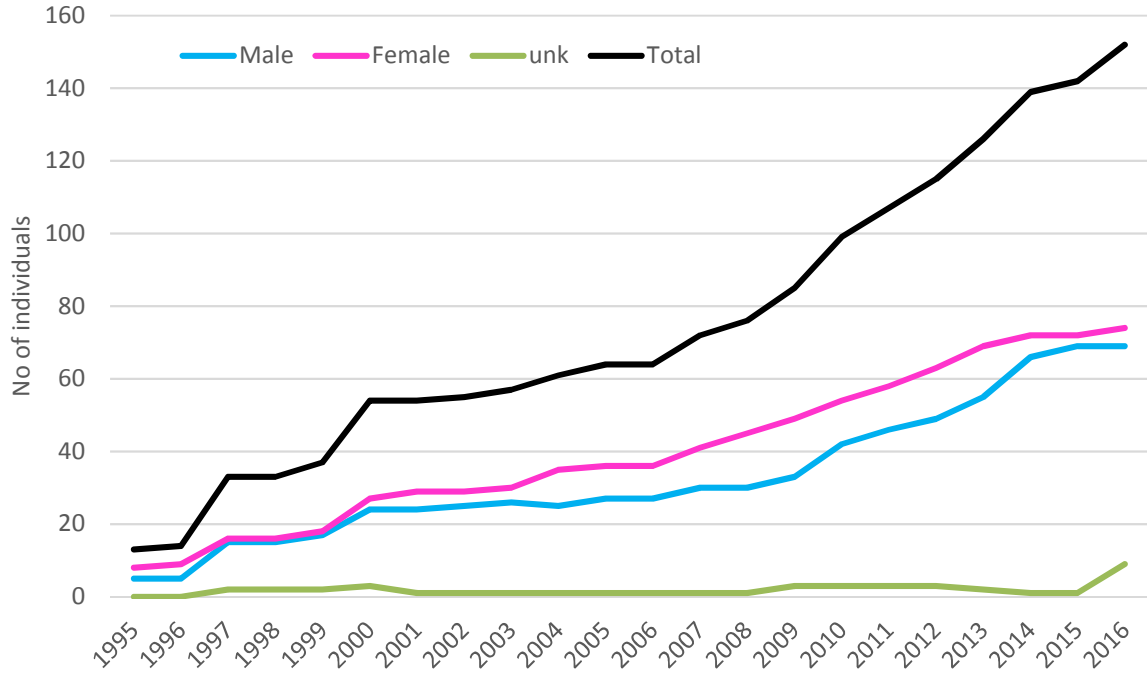


Fig. 2. Census of the Lear's Macaw captive population by gender.

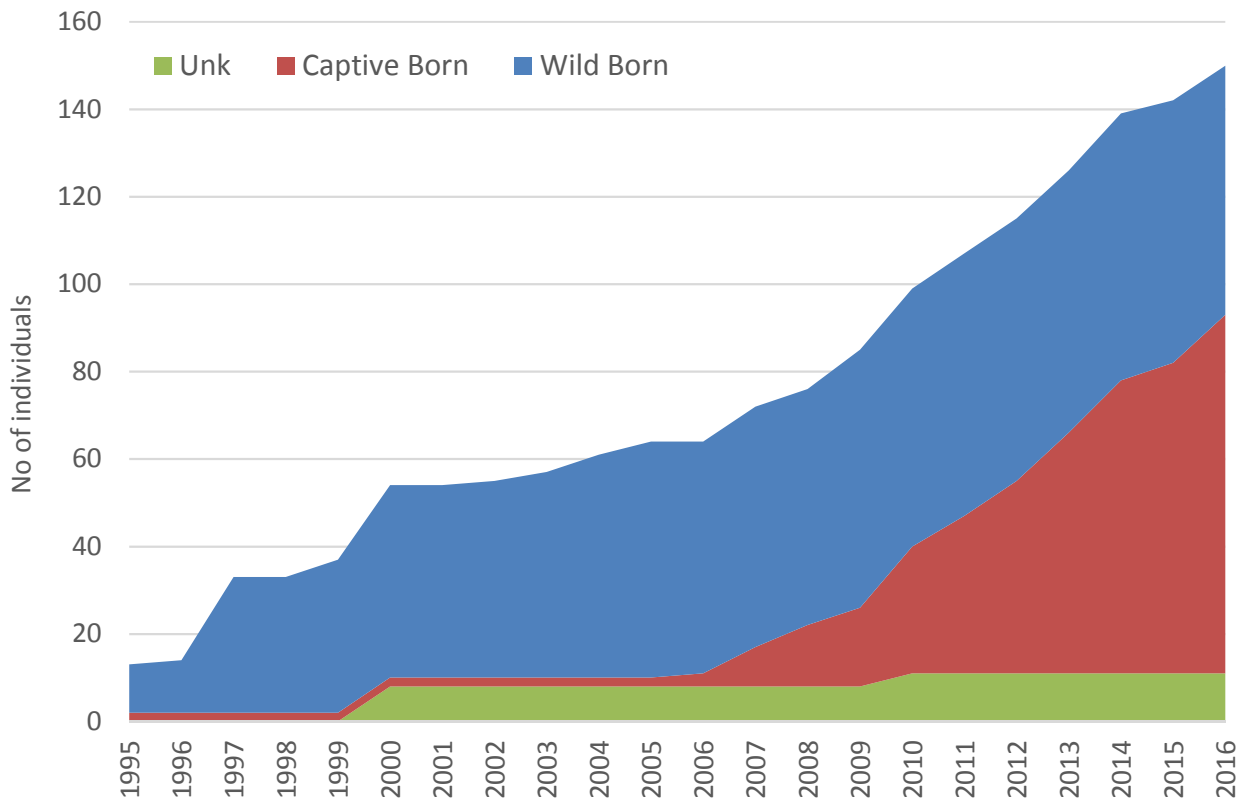


Fig. 3. Census of the Lear's Macaw captive population by origin.

The age pyramid of the population (Figure 4) shows an unbalanced age structure. The pyramid has a wide base of young birds approaching maturity, but very few adults in breeding age.

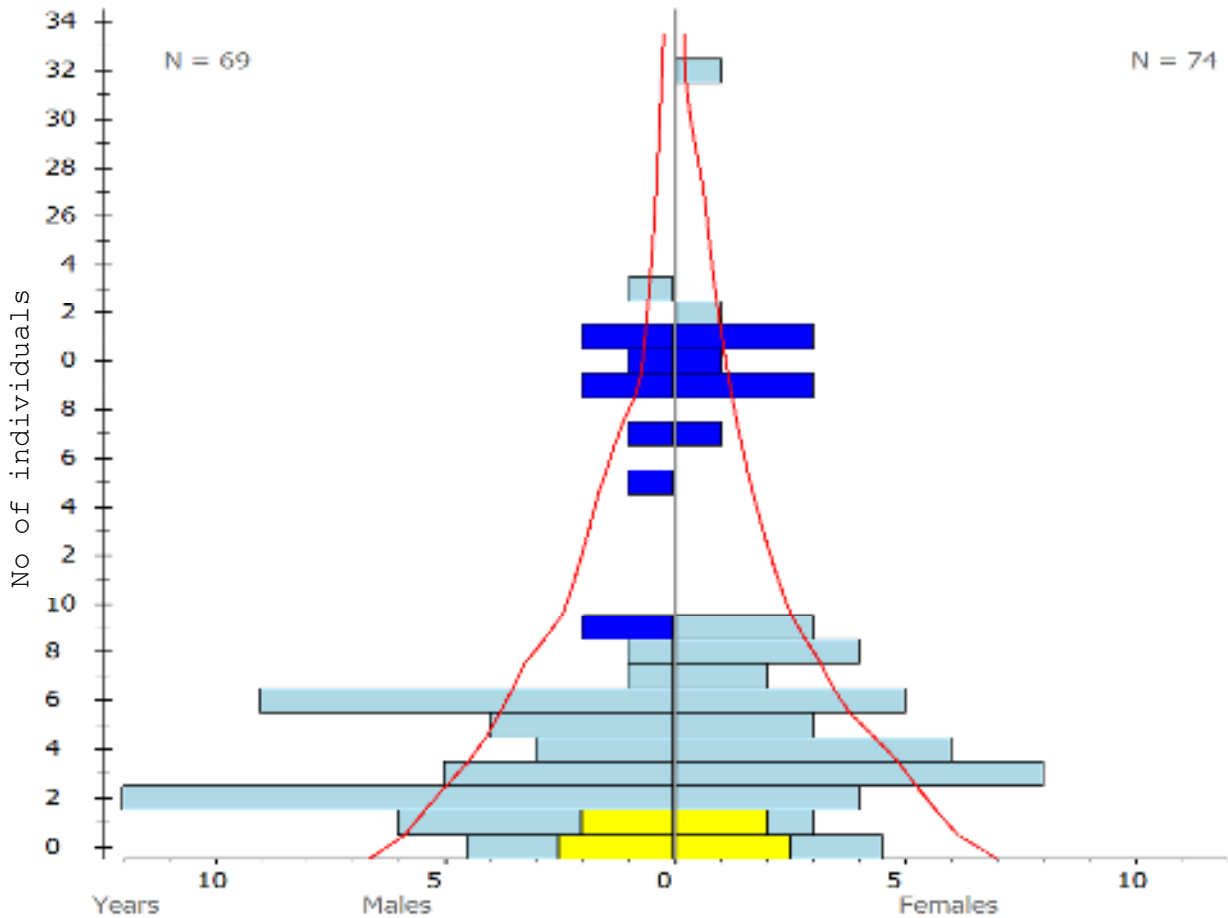


Fig. 4. Age distribution of the Lear's Macaw captive population current to 31st December 2016. Age for wild caught birds has been estimated based in their time to arrive to captivity. The nine individuals of unknown sex are represented in yellow and shared evenly between males and females. The red line shows the stable age class distribution.

There is not accurate information to estimate the life expectancy of the species in captivity; however, the oldest male on record spent 40 years in human care before dying. The oldest female on record is still alive and is 32 years old (captive born). The minimum age at first breeding recorded is 10 years for both sexes, although sexual maturity may occur earlier. The oldest breeding male and female of known age did so with 18 years.

Demographic projections estimate that an average of 3 births per year are needed to maintain the current population size, while 7 births per year are needed to reach a population size of 200 in 10 year from now.

2.2 Genetics

Typical, managed captive program goals include thresholds for tolerance of gene diversity loss over time, 90% gene diversity retention for 100 years is the most common management goal. Decreases in gene diversity below 90% of that found in the founding population have been associated with increasingly compromised reproduction.

The gene diversity of the current captive population is 96 %, which is equivalent to that found in ~11 unrelated animals (Table 3). According to projections based on the actual growth rate, the gene diversity at 100 years from present won't drop below 90% as long as the population size increases to 200 birds.

The studbook pedigree indicates that the captive population is descended from 16 founders, with 55 additional potential founders remaining (Table 3). The founder representation is highly skewed, with 60% of the birds hatched from only three pairs (Figure 5); more equal representation would allow to retain more gene diversity. The current mean kinship in the population is 0.04 (full-siblings have a kinship of 0.25).

Genetic projections show that under the current parameters the gene diversity of the population will drop below 90% after 81 years. To reach the goal of maintaining it above 90% for the next 100 years it will be needed to increase the number of pairs reproducing, increasing the effective population size (N_e/N) to 0,40.

Table 3. Genetic summary of the current captive population of Lear's Macaw, current 31st December 2016.

	Current	Potential
Founders	16	47 additional
Founder genome equivalents	11.4	62
Gene diversity retained	0,956	0,992
Population mean kinship	0,044	-----
Mean inbreeding	0,000	-----
N_e / N	0,30	-----
% of pedigree known	95%	-----

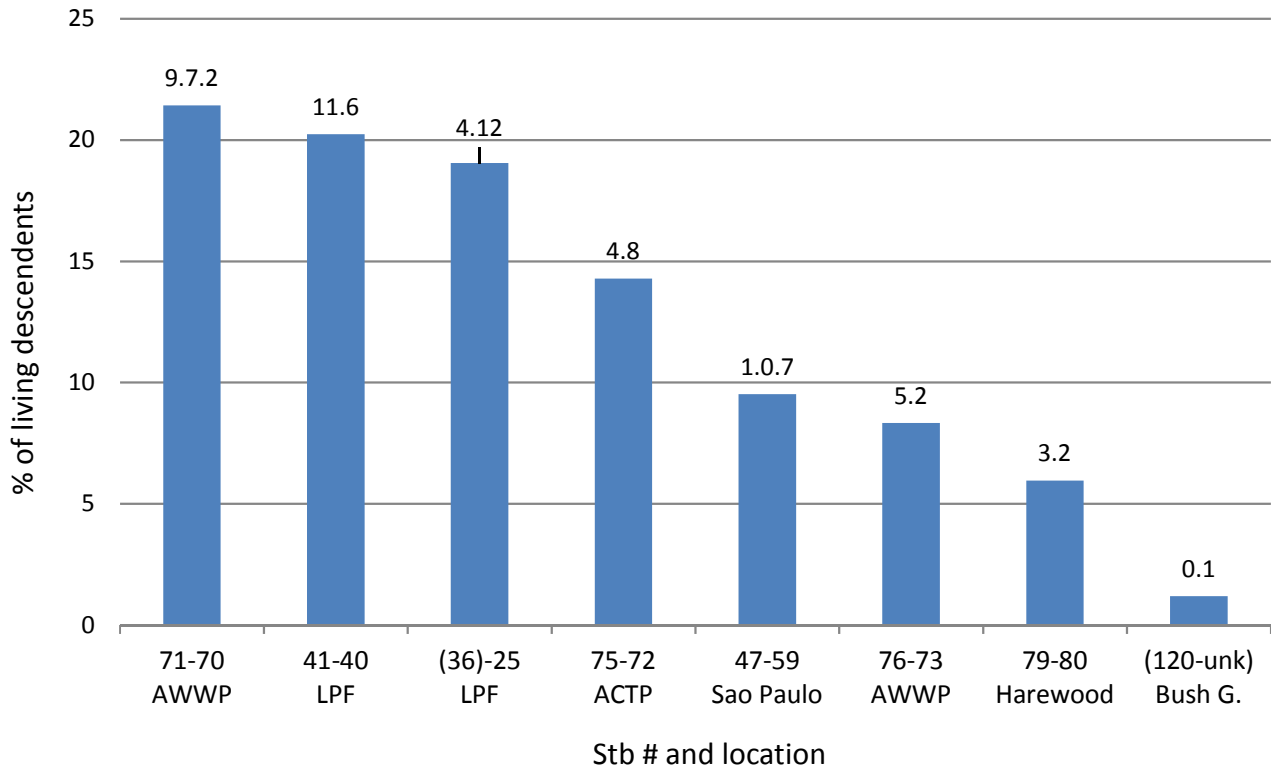


Fig. 5: Founder representation graph illustrating the founder lines of the 84 captive born individuals alive in the Lear's Macaw population by December 31st 2016. Number and sex of offspring above each bar (male.female.unk).

3. Management strategy

The goal of the Lear's Macaw Captivity Program is to maintain a viable population in the long term. To achieve this, it is necessary to conserve the genetic diversity of the population, minimize inbreeding, and sustain a demographically healthy population. Gene diversity is important, as it will provide the population with the capacity to adapt to future change; inbreeding can lead to a loss of individual fitness and even reduced survival of future generations, and a robust age and sex structure will make the population less susceptible to random events.

The captive breeding program for the Lear's macaw has the potential of being viable both genetically and demographically in the long run. However the current lack of breeding success of the majority of mature birds is an obstacle to achieve this goal.

To solve this situation the current strategy for the program is to:

- a) Reevaluate the husbandry practices and improve the conditions for breeding success. Refer to the Captive Husbandry Protocol created for this purpose.
- b) Repair as many as possible of the potential founders that have been in breeding situation for the past few year without success, as well as those that were not in breeding situation. To accomplish this with the largest probability of obtaining compatible pairs, a free-choice paring strategy has been developed. Suitable wild born birds will be flocked in a large aviary and new pairs will be selected based on behavioral observations.
- c) Limit the production of offspring from the most represented breeding pairs to ease the founder equalization.

The first generation of Lear's born in captivity is currently reaching breeding age. It is recommended to pair them up based on their mean kinship value (MK) as it has proven to be an effective method to maximize retention of gene diversity in other captive breeding programs. Pairs should be formed between individuals with as similar as possible mean kinship values, giving priority to those with lower values. No pairs should be done between captive born and wild born birds, unless their MK values are similar. Table 4 shows the Mean Kinship value of the captive born individuals in breeding age.

Refer to the report of the Lear's Macaw Captive Breeding Program annual meeting, hold in November 2016 at Sao Paulo Zoo, for the detailed breeding and transfer recommendations for 2017.

Table 4: Mean Kinship of the captive born individuals with six or more years of age. Individuals are ordered by sex and ranked by Mean Kinship value, current location and age.

Stb #	Current location	Sex	Birth Date	Sire	Dam	MK
119	LEEDS	Male	2010	79	80	0.0179
83	TENERIFE	Male	2007	36	25	0.0506
88	FCACHOEIR	Male	2007	36	25	0.0506
94	HORIZONTE	Male	2008	36	25	0.0506
134	TENERIFE	Male	2010	36	25	0.0506
101	TENERIFE	Male	2009	41	40	0.0536
131	TENERIFE	Male	2010	41	40	0.0536
132	FOZDOIGUA	Male	2010	41	40	0.0536
136	FOZDOIGUA	Male	2010	41	40	0.0536
137	FAZCACHOE	Male	2010	41	40	0.0536
98	TENERIFE	Female	1984	120	WILD1	0.0060
118	LEEDS	Female	2010	79	80	0.0179
85	FZCACHOEI	Female	2007	75	72	0.0387
86	ACTP	Female	2007	75	72	0.0387
93	AL WABRA	Female	2008	75	72	0.0387
103	AL WABRA	Female	2010	75	72	0.0387
104	FZCACHOEI	Female	2010	75	72	0.0387
87	TENERIFE	Female	2007	36	25	0.0506
90	FOZDOIGUA	Female	2008	36	25	0.0506
99	FOZDOIGUA	Female	2009	36	25	0.0506
135	TENERIFE	Female	2010	36	25	0.0506
95	HORIZONTE	Female	2008	41	40	0.0536
96	TENERIFE	Female	2008	41	40	0.0536
100	TENERIFE	Female	2009	41	40	0.0536

4. Living population by current holding

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
ACTP, Association for the Conservation of Threatened Parrots, Germany											
46	F	~ 1999	WILD	WILD	BAHIA B	~ Jun 2000	NONE	Capture	Wild Hatch	RZ09118	0001F06D5D
					JUAZEIRO	~ Jul 2000		Transfer			
					RIOJANEIR	21 Jul 2000	10855	Transfer			
					F CACHOEI	25 Jun 2015		Transfer			
					ACTP	28 Aug 2015		Transfer			
56	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ09167	936000000061145
					UNKNOWN	????		Transfer			
					RIOJANEIR	19 May 2003	12066	Transfer			
					F CACHOEI	25 Jun 2015		Transfer			
					ACTP	28 Aug 2015		Transfer			
72	F	????	WILD	WILD	BAHIA B	????	NONE	Capture	Wild Hatch		1-167-192-96A
					UNKNOWN	????		Transfer			
					AL WABRA	~ 1998	588	Transfer			
					ACTP	26 May 2016		Transfer			
75	M	????	WILD	WILD	BAHIA B	????	NONE	Capture	Wild Hatch		1-166-632-26A
					UNKNOWN	????		Transfer			
					AL WABRA	~ 1998	591	Transfer			
					ACTP	26 May 2016		Transfer			
86	F	26 Jun 2007	75	72	AL WABRA	26 Jun 2007	7235	Hatch	Captive Hatch	AWWP QA 149	276096900338192
					ACTP	13 Jul 2015		Transfer			
147	F	7 Jun 2012	71	70	AL WABRA	7 Jun 2012	10704	Hatch	Captive Hatch	awwp167	
					ACTP	13 Jul 2015	E00498	Transfer			
151	M	12 Jun 2012	71	70	AL WABRA	12 Jun 2012	10711	Hatch	Captive Hatch	awwp172	900079000036423
					ACTP	26 May 2016		Transfer			
152	F	24 Jun 2012	75	72	AL WABRA	24 Jun 2012	10718	Hatch	Captive Hatch	awwp173	900079000036408
					ACTP	26 May 2016		Transfer			
153	M	26 Jun 2012	75	72	AL WABRA	26 Jun 2012	10721	Hatch	Captive Hatch	awwp174	
					ACTP	13 Jul 2015		Transfer			
154	F	29 Jun 2012	75	72	AL WABRA	29 Jun 2012	10724	Hatch	Captive Hatch	awwp175	900079000036406
					ACTP	26 May 2016		Transfer			

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
ACTP - cont.											
173	M	30 Jul 2013	71	70	AL WABRA ACTP	30 Jul 2013 26 May 2016	B1356	Hatch Transfer	Captive Hatch	awwp 197	97227300031564
180	F	29 May 2014	75	72	AL WABRA ACTP	29 May 2014 26 May 2016	B1467	Hatch Transfer	Captive Hatch	AWWP 204	972273000052707
182	M	1 Jun 2014	76	73	AL WABRA ACTP	1 Jun 2014 26 Sep 2016	B1471	Hatch Transfer	Captive Hatch	AWWP 206	972273000053494
187	M	4 Jun 2014	71	70	AL WABRA ACTP	4 Jun 2014 26 May 2016	B1474	Hatch Transfer	Captive Hatch	awwp 211	972273000042929
213	F	????	UNK	UNK	UNKNOWN ACTP	???? 6 Jun 2016	_____	Hatch Transfer	Unk HatchType		972273000317789
214	F	10 Jun 2000	UNK	UNK	UNKNOWN ACTP	10 Jun 2000 6 Jun 2016	_____	Hatch Transfer	Unk HatchType		978000001500203
215	F	????	UNK	UNK	UNKNOWN ACTP	???? 6 Jun 2016	_____	Hatch Transfer	Unk HatchType		972273000316775
216	F	????	UNK	UNK	UNKNOWN ACTP	???? 6 Jun 2016	_____	Hatch Transfer	Unk HatchType		972273000317303
217	F	????	UNK	UNK	UNKNOWN ACTP	???? 6 Jun 2016	_____	Hatch Transfer	Unk HatchType		973237000317845
218	M	????	UNK	UNK	UNKNOWN ACTP	???? 6 Jun 2016	_____	Hatch Transfer	Unk HatchType		972273000130101
219	M	????	UNK	UNK	UNKNOWN ACTP	???? 6 Jun 2016	_____	Hatch Transfer	Unk HatchType		972273000316953
220	M	????	UNK	UNK	UNKNOWN ACTP	???? 6 Jun 2016	_____	Hatch Transfer	Unk HatchType		972273000296200

Totals: 10.12.0 (22)

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
AL WABRA, Al-Wabra Wildlife Preservation, Doha, Qatar											
52	M	????	WILD	WILD	WILD UNKNOWN PUC PASSO RIOJANEIR F CACHOEI ACTP AL WABRA	???? ???? 12 Nov 1999 15 Oct 2002 25 Jun 2015 28 Aug 2015 14 May 2016	NONE 11909 	Capture Transfer Transfer Transfer Transfer Transfer Transfer	Wild Hatch	RZ09163	96300000062152
70	F	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE 586	Capture Transfer Transfer	Wild Hatch		1-235-575-83A
71	M	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE 587	Capture Transfer Transfer	Wild Hatch		1-215-462-51A
73	F	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE 589	Capture Transfer Transfer	Wild Hatch		1-166-740-90A
76	M	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE 592	Capture Transfer Transfer	Wild Hatch		1-211-547-65A
77	F	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE 593	Capture Transfer Transfer	Wild Hatch		1-165-347-51A
93	F	17 May 2008	75	72	AL WABRA	17 May 2008	7814	Hatch	Captive Hatch	AWWPQA150	
103	F	24 May 2010	75	72	AL WABRA	24 May 2010	9495	Hatch	Captive Hatch	AWWPQA169	
149	M	11 Jun 2012	71	70	AL WABRA	11 Jun 2012	10709	Hatch	Captive Hatch	awwp168	
169	F	22 Jun 2013	71	70	AL WABRA	22 Jun 2013	B1344	Hatch	Captive Hatch	awwp 193	
171	F	25 Jul 2013	71	70	AL WABRA	25 Jul 2013	B1354	Hatch	Captive Hatch	awwp 195	
172	F	27 Jul 2013	71	70	AL WABRA	27 Jul 2013	B1355	Hatch	Captive Hatch	awwp 196	
178	M	26 May 2014	75	72	AL WABRA	26 May 2014	B1465	Hatch	Captive Hatch	AWWP 202	972273000053267

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
AL WABRA - cont.											
179	M	28 May 2014	75	72	AL WABRA	28 May 2014	B1466	Hatch	Captive Hatch	AWWP 203	972273000031583
181	M	1 Jun 2014	75	72	AL WABRA	1 Jun 2014	B1472	Hatch	Captive Hatch	AWWP 205	972273000053190
183	M	2 Jun 2014	76	73	AL WABRA	2 Jun 2014	B1473	Hatch	Captive Hatch	awwp 207	972273000043095
185	M	30 May 2014	71	70	AL WABRA	30 May 2014	B1468	Hatch	Captive Hatch	awwp 209	972273000043466
186	M	4 Jun 2014	71	70	AL WABRA	4 Jun 2014	B1470	Hatch	Captive Hatch	awwp 210	972273000052854
190	M	19 Aug 2014	71	70	AL WABRA	19 Aug 2014	B1493	Hatch	Captive Hatch	awwp 212	947000000362320
191	F	21 Aug 2014	71	70	AL WABRA	21 Aug 2014	B1494	Hatch	Captive Hatch	awwp 213	947000000404345
197	M	7 Jul 2015	76	73	AL WABRA	7 Jul 2015	B1571	Hatch	Captive Hatch	AWWPPQA217	
198	M	13 Jul 2015	76	73	AL WABRA	13 Jul 2015	B1572	Hatch	Captive Hatch	AWWPPQA218	
199	M	1 Oct 2015	76	73	AL WABRA	1 Oct 2015	B1575	Hatch	Captive Hatch	AWWPPQA214	
206	M	24 Jun 2016	71	70	AL WABRA	24 Jun 2016	B1648	Hatch	Captive Hatch	AWWPQA219	972273000340413
207	F	25 Jun 2016	71	70	AL WABRA	25 Jun 2016	B1649	Hatch	Captive Hatch	AWWPQA220	972273000337402
208	F	28 Jun 2016	71	70	AL WABRA	28 Jun 2016	B1650	Hatch	Captive Hatch	AWWPQA221	972273000339351
209	?	2 Aug 2016	71	70	AL WABRA	2 Aug 2016	B1656	Hatch	Captive Hatch	AWWPQA222	
210	?	5 Aug 2016	71	70	AL WABRA	5 Aug 2016	B1657	Hatch	Captive Hatch	AWWPQA223	

Totals: 15.11.2 (28)

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
HORIZONTE, Fundacao Zoo-Botan De Belo Horizonte, Belo Horizonte, Minas Gerais, Brazil											
24	M	~ 1995	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		977200000654386
					KUAH L	~ 1996		Transfer			
					JURONG	~ 1996		Transfer			
					SAO PAULO	23 Mar 2001	26513	Transfer			
					LYMIFOUND	3 Jun 2005		Transfer			
					SAO PAULO	30 Jul 2015		Transfer			
					HORIZONTE	26 Jun 2016		Transfer			
37	F	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch	bhzoo 323	AVID016071512
					RONDONIA	~ 1997		Transfer			
					SAO PAULO	30 May 1998	25760	Transfer			
					LYMIFOUND	3 Jun 2005		Transfer			
					HORIZONTE	~ Apr 2010	AV0392	Transfer			
					SAO PAULO	17 Jul 2015		Transfer			
					HORIZONTE	26 Jun 2016		Transfer			
89	F	????	WILD	WILD	BRAZIL	????	NONE	Capture	Wild Hatch	BHZOO 280	9630000004948260
					PRIVATE	????		Transfer			
					HORIZONTE	21 Aug 2007	AV0301	Transfer			
94	M	10 Jul 2008	36	25	TENERIFE	10 Jul 2008	20706	Hatch	Captive Hatch	LPF081400018938000000301026	
					HORIZONTE	22 Apr 2010	AV0391	Transfer			
95	F	10 Jul 2008	41	40	TENERIFE	10 Jul 2008	20699	Hatch	Captive Hatch	LPF081400017	
					FOZDOIGUA	24 Feb 2016		Transfer			
					HORIZONTE	~ 2016		Transfer			

Totals: 2.3.0 (5)

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
BUENOSAIR, Jardin Zoologico De Cdad Buenos Aires, Ciudad Autónoma DeBu, Buenos Aires, Argentina											
121	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		00012A1FBF
					BUENOSAIR	????	A1155_	Transfer			
Totals: 1.0.0 (1)											

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
CRAX, Crax-Sociedade De Pesquisa DO Manejo, Belo Horizonte, MG, Brazil											
63	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		00061C57E0
					UNKNOWN	????		Transfer			
					CRAX	16 Feb 2005		Transfer			
64	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		00061C46EA
					UNKNOWN	????		Transfer			
					CRAX	16 Feb 2005		Transfer			
Totals: 1.1.0 (2)											

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
FOZDOIGUA, Zoologico Municipal De Foz DO Iguacu, Foz DO Iguacu, Parana, Brazil											
90	F	28 Apr 2008	36	25	TENERIFE	28 Apr 2008	20260	Hatch	Captive Hatch	LPF081400007	
					FOZDOIGUA	24 Feb 2016	_____	Transfer			
99	F	7 Jul 2009	36	25	TENERIFE	7 Jul 2009	21958	Hatch	Captive Hatch	LPF09140023	
					FOZDOIGUA	24 Feb 2016	_____	Transfer			
132	M	28 Jun 2010	41	40	TENERIFE	28 Jun 2010	23284	Hatch	Captive Hatch	lpf10140021	938000000309385
					FOZDOIGUA	24 Feb 2016	_____	Transfer			
136	M	10 Aug 2010	41	40	TENERIFE	10 Aug 2010	23360	Hatch	Captive Hatch	lpf10160003	938000000291367
					FOZDOIGUA	24 Feb 2016	_____	Transfer			
140	M	12 Jun 2011	41	40	TENERIFE	12 Jun 2011	24700	Hatch	Captive Hatch	lpf11120042	938000000314891
					FOZDOIGUA	24 Feb 2014	_____	Transfer			

Totals: 3.2.0 (5)

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
F CACHOE - Fazenda Cachoeira, Brazil											
85	F	14 Jun 2007	75	72	AL WABRA	14 Jun 2007	7207	Hatch	Captive Hatch	AWWPQA147	276096900363434
					F CACHOEI	14 Jun 2016	NONE	Transfer			
88	M	23 Jul 2007	36	25	TENERIFE	23 Jul 2007	19518	Hatch	Captive Hatch	LPF07140066	938000000237787
					FOZDOIGUA	24 Feb 2016		Transfer			
					F CACHOEI	~ 2016		Transfer			
104	F	24 May 2010	75	72	AL WABRA	24 May 2010	9496	Hatch	Captive Hatch	AWWPQA170	
					F CACHOEI	14 Jun 2016	NONE	Transfer			
126	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		07600000010010
					SALVADOR	17 Oct 2012		Transfer			
					F CACHOEI	7 May 2015		Transfer			
129	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		07600000010383
					SALVADOR	15 Jul 2010		Transfer			
					F CACHOEI	7 May 2015		Transfer			
130	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		07600000010053
					SALVADOR	4 Oct 2012		Transfer			
					F CACHOEI	7 May 2015		Transfer			
137	M	10 Aug 2010	41	40	TENERIFE	10 Aug 2010	23361	Hatch	Captive Hatch	lpf10160004	938000000319123
					FOZDOIGUA	24 Feb 2016		Transfer			
					F CACHOEI	27 May 2016		Transfer			
168	F	20 Jun 2013	76	73	AL WABRA	20 Jun 2013	B1342	Hatch	Captive Hatch	awwp 192	
					F CACHOEI	14 Jun 2016	NONE	Transfer			
170	M	24 Jun 2013	71	70	AL WABRA	24 Jun 2013	B1348	Hatch	Captive Hatch	awwp 194	
					F CACHOEI	14 Jun 2016	NONE	Transfer			
174	M	????	WILD	WILD	BAHIA B	~ 2014	NONE	Capture	Wild Hatch		963008000136407
					NEST	21 Mar 2014		Transfer			
					F CACHOEI	19 Jan 2016		Transfer			
177	F	~2010 +/-2yr	WILD	WILD	BRAZIL	????	NONE	Capture	Wild Hatch		963008000394606
					F CACHOEI	12 Feb 2015		Transfer			
184	F	5 Jun 2014	76	73	AL WABRA	5 Jun 2014	B1475	Hatch	Captive Hatch	awwp 208	972273000031813
					F CACHOEI	14 Jun 2016	NONE	Transfer			

Stud# | Sex | Hatch Date | Sire | Dam | Location | Date | LocalID | Event | Hatch Origin | Tag/Band | Transponder |

F CACHOEI - cont.

193	M	~ 2014	WILD	WILD	BRAZIL	????	NONE	Capture	Wild Hatch		900182000221830
					PORTUGAL	~ Apr 2015	_____	Transfer			
					F CACHOEI	4 Dec 2015	_____	Transfer			
194	M	~ 2014	WILD	WILD	BRAZIL	????	NONE	Capture	Wild Hatch		900182000221827
					PORTUGAL	~ Apr 2015	_____	Transfer			
					F CACHOEI	4 Dec 2015	_____	Transfer			
200	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		963008000394778
					Z MONTANH	????	_____	Transfer			
					F CACHOEI	16 Dec 2015	_____	Transfer			
222	F	????	WILD	WILD	UNKNOWN	????	_____	Hatch	Wild Hatch		
					F CACHOEI	~ 2016	_____	Transfer			

Totals: 7.9.0 (16)

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
LEEDS, Harewood Bird Garden At Leeds, Leeds, West Yorkshire, England											
79	M	~ 1996	WILD	WILD	WILD LEEDS	???? 20 Jul 1998	NONE H1140_	Capture Transfer	Wild Hatch		
80	F	~1996 +/-1yr	WILD	WILD	WILD LEEDS	???? 20 Jul 1998	NONE H1141_	Capture Transfer	Wild Hatch		
81	F	~1994 +/-1yr	WILD	WILD	WILD LEEDS	???? 20 Jul 1998	NONE H1142_	Capture Transfer	Wild Hatch		
118	F	12 Aug 2010	79	80	LEEDS	12 Aug 2010	HA0123	Hatch	Captive Hatch		958000001777667
119	M	14 Aug 2010	79	80	LEEDS	14 Aug 2010	HA0124	Hatch	Captive Hatch		958000001777728
142	M	3 Jul 2011	79	80	LEEDS	3 Jul 2011	HA1090	Hatch	Captive Hatch		
143	M	4 Jul 2011	79	80	LEEDS	4 Jul 2011	HA1091	Hatch	Captive Hatch		
144	F	7 Jul 2011	79	80	LEEDS	7 Jul 2011	HA1092	Hatch	Captive Hatch		
Totals: 4.4.0 (8)											

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
MILTONSOL, Milton Soldani, Brazil											
91	F	????	WILD	WILD	BRAZIL	~ 2007	NONE	Capture	Wild Hatch		9630000000193727
					UNKNOWN	~ 2007	_____	Transfer			
					MILTONSOL	~ Dec 2007	_____	Transfer			
92	M	????	WILD	WILD	BRAZIL	~ 2007	NONE	Capture	Wild Hatch		9630000000224358
					UNKNOWN	~ 2007	_____	Transfer			
					MILTONSOL	~ Dec 2007	_____	Transfer			

Totals: 1.1.0 (2)

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
PASSAREDO, Passaredo, Brazil											
204	M	????	WILD	WILD	BRAZIL PASSAREDO	???? ~ 2015	NONE _____	Capture Transfer	Wild Hatch		963008000352849
205	F	????	WILD	WILD	BRAZIL PASSAREDO	???? ~ 2015	NONE _____	Capture Transfer	Wild Hatch		963008000352850

Totals: 1.1.0 (2)

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
PRAHA, Zoological Garden Prague, Praha, Czech Republic											
122	M	~ 2010	WILD	WILD	UNKNOWN PRAHA	~ 2010 11 Jun 2010	NONE 100522	Hatch Transfer	Unk HatchType		203098100251756
123	M	~ 2010	WILD	WILD	UNKNOWN PRAHA	~ 2010 11 Jun 2010	NONE 100523	Hatch Transfer	Unk HatchType		203098100251874
124	M	~ 2010	WILD	WILD	UNKNOWN PRAHA	~ 2010 11 Jun 2010	NONE 100524	Hatch Transfer	Unk HatchType		203098100252230
195	M	????	WILD	WILD	BRAZIL PRIVATE ZURICH PRAHA	???? ???? 29 Jan 2013 12 Feb 2015	NONE _____ _____ 150060	Capture Transfer Transfer Transfer	Wild Hatch		756098100649235
196	F	????	WILD	WILD	BRAZIL PRIVATE ZURICH PRAHA	???? ???? 29 Jan 2013 12 Feb 2015	NONE _____ _____ 150061	Capture Transfer Transfer Transfer	Wild Hatch		
Totals: 4.1.0 (5)											

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
TENERIFE, Loro Parque Fundacion, Puerto de la Cruz, Canary Islands, Spain											
25	F	~ 1995	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		977200000674312
					KUAH L	~ 1996		Transfer			
					JURONG	~ 1996		Transfer			
					SAO PAULO	23 Mar 2001	26514	Transfer			
					TENERIFE	5 Nov 2006	18482	Transfer			
40	F	~ 1995	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		AVID014364323
					RONDONIA	~ 1997		Transfer			
					SAO PAULO	30 May 1998	25767	Transfer			
					TENERIFE	5 Nov 2006	18484	Transfer			
41	M	~ 1995	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		AVID013016833
					RONDONIA	~ 1997		Transfer			
					SAO PAULO	30 May 1998	25766	Transfer			
					TENERIFE	5 Nov 2006	18485	Transfer			
83	M	14 May 2007	36	25	TENERIFE	14 May 2007	19114	Hatch	Captive Hatch	LPF07140002	938000000271219
87	F	16 Jul 2007	36	25	TENERIFE	16 Jul 2007	19481	Hatch	Captive Hatch	LPF07140025	938000000271234
96	F	12 Jul 2008	41	40	TENERIFE	12 Jul 2008	20700	Hatch	Captive Hatch	LPF081400021938000000374841	
98	F	24 Sep 1984	120	WILD1	BUSCH TAM	24 Sep 1984	52378	Hatch	Captive Hatch	BUSCH 68	
					TENERIFE	30 Aug 2009	22161	Transfer			
100	F	10 Jul 2009	41	40	TENERIFE	10 Jul 2009	22031	Hatch	Captive Hatch	LPF09140025	
101	M	11 Jul 2009	41	40	TENERIFE	11 Jul 2009	22032	Hatch	Captive Hatch	LPF09140029	
131	M	27 Jun 2010	41	40	TENERIFE	27 Jun 2010	23283	Hatch	Captive Hatch	lpf10140019	938000000320850
134	M	2 Jul 2010	36	25	TENERIFE	2 Jul 2010	23318	Hatch	Captive Hatch	lpf10140010	938000000247980
135	F	3 Jul 2010	36	25	TENERIFE	3 Jul 2010	23319	Hatch	Captive Hatch	lpf10140009	938000000295298
141	F	13 Jun 2011	41	40	TENERIFE	13 Jun 2011	24701	Hatch	Captive Hatch	lpf11120043	938000000388380
145	M	18 Jul 2011	36	25	TENERIFE	18 Jul 2011	24709	Hatch	Captive Hatch	lpf11120038	938000000358652
146	F	19 Jul 2011	36	25	TENERIFE	19 Jul 2011	24710	Hatch	Captive Hatch	lpf11120023	938000000395756
157	F	30 Aug 2012	36	25	TENERIFE	30 Aug 2012	26523	Hatch	Captive Hatch	lpf12140045	938000000394601

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
TENERIFE - cont.											
158	F	1 Sep 2012	36	25	TENERIFE	1 Sep 2012	26524	Hatch	Captive Hatch	lpf12140046	938000000326930
159	F	2 Sep 2012	36	25	TENERIFE	2 Sep 2012	26532	Hatch	Captive Hatch	lpf12140048	938000000372979
160	F	14 Jun 2013	36	25	TENERIFE	14 Jun 2013	27191	Hatch	Captive Hatch		968000003770925
161	F	6 Jul 2013	41	40	TENERIFE	6 Jul 2013	27303	Hatch	Captive Hatch		968000004184340
162	M	7 Jul 2013	41	40	TENERIFE	7 Jul 2013	27302	Hatch	Captive Hatch		968000003773991
163	M	10 Jul 2013	41	40	TENERIFE	10 Jul 2013	27300	Hatch	Captive Hatch		968000004190517
164	F	8 Aug 2013	36	25	TENERIFE	8 Aug 2013	27353	Hatch	Captive Hatch		938000000386160
165	F	9 Aug 2013	36	25	TENERIFE	9 Aug 2013	27354	Hatch	Captive Hatch		938000000394437
166	M	19 Aug 2013	41	40	TENERIFE	19 Aug 2013	27398	Hatch	Captive Hatch		938000000361139
221	M	14 Jul 2016	41	40	TENERIFE	14 Jul 2016	30186	Hatch	Captive Hatch	LPF16140023	
229	M	26 Feb 2016	41	40	TENERIFE	26 Feb 2016	29327	Hatch	Captive Hatch	LPF15120040	
230	F	26 Feb 2016	41	40	TENERIFE	26 Feb 2016	29328	Hatch	Captive Hatch	LPF15120036	

Totals: 11.17.0 (28)

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
RIOJANEIR ,Jardim Zoologico Da Rio De Janeiro, Rio De Janeiro Cep, Rio De Janeiro, Brazil											
49	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ09162	0001C5C638
					UNKNOWN	????		Transfer			
					RIOJANEIR	24 Oct 2001	11480	Transfer			
50	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ09161	00-0129985
					UNKNOWN	????		Transfer			
					RIOJANEIR	20 Dec 2001	11735	Transfer			
51	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ09117	98512000512842
					UNKNOWN	????		Transfer			
					RIOJANEIR	15 Feb 2002	11762	Transfer			
54	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		963000000061256
					UNKNOWN	????		Transfer			
					PUC PASSO	12 Nov 1999		Transfer			
					RIOJANEIR	15 Oct 2002	11911	Transfer			

Totals: 1.3.0 (4)

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
SAO PAULO, Fundacao Parque Zoologico De Sao Paulo, São Paulo, Brazil											
23	M	~ 1993	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		AVID019770332
					RJ-UNK	~ 1995		Transfer			
					FRANCE	~ Jun 1996		Transfer			
					SAO PAULO	15 Jul 1996	22831	Transfer			
32	M	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch	RZ 09168	000125DFD9
					RJ PRIVAT	~ 1998		Transfer			
						~ Apr 2001		Transfer			
					RIOJANEIR	22 Oct 2009		Transfer			
					SAO PAULO	15 Dec 2015		Transfer			
34	F	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch		AVID021047817
					RONDONIA	~ 1998		Transfer			
					SAO PAULO	30 May 1998	25763	Transfer			
38	M	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch		AVID010573564
					RONDONIA	~ 1998		Transfer			
					SAO PAULO	30 May 1998	25764	Transfer			
39	F	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch		AVID020341116
					RONDONIA	~ 1998		Transfer			
					SAO PAULO	30 May 1998	25765	Transfer			
43	F	~ 1995	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		97720000672079
					SAO PAULO	26 Jul 1999	25758	Transfer			
47	M	~ 1999	WILD	WILD	BAHIA B	~ Jul 2000	NONE	Capture	Wild Hatch		AVID 070 085 586
					JUAZEIRO	~ Jul 2000		Transfer			
					RIOJANEIR	21 Jul 2000	10854	Transfer			
					LYMIFOUND	27 Oct 2005		Transfer			
					SAO PAULO	22 Dec 2006		Transfer			
53	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ09116	936000000061619
					UNKNOWN	????		Transfer			
					PUC PASSO	12 Nov 1999		Transfer			
					RIOJANEIR	15 Oct 2002	11910	Transfer			
					SAO PAULO	15 Dec 2015		Transfer			
55	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ 09115	936000000061526
					UNKNOWN	????		Transfer			
					PUC PASSO	12 Nov 1999		Transfer			
					RIOJANEIR	15 Oct 2002	11912	Transfer			

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
SAO PAULO - cont.											
57	F	????	WILD	WILD	SAO PAULO	15 Dec 2015		Transfer			
					WILD	????	NONE	Capture	Wild Hatch	FPZSP 237	AVD069854513
					PFB	????		Transfer			
					SAO PAULO	24 May 2004	28516	Transfer			
					LYMIFOUND	3 Jun 2005		Transfer			
					SAO PAULO	3 Jun 2006	28516	Transfer			
58	F	????	WILD	WILD	SAO PAULO	24 May 2004	28517	Transfer	Wild Hatch	FPZSP 238	AVID070049341
					WILD	????	NONE	Capture	Wild Hatch		
					PFB	????		Transfer			
					SAO PAULO	24 May 2004	28517	Transfer			
59	F	????	WILD	WILD	SAO PAULO	24 May 2004	28518	Transfer	Wild Hatch	FPZSP 239	AVID070126352
					WILD	????	NONE	Capture	Wild Hatch		
					PFB	????		Transfer			
					SAO PAULO	24 May 2004	28518	Transfer			
					LYMIFOUND	3 Jun 2005		Transfer			
					SAO PAULO	22 Dec 2006	28518	Transfer			
60	F	????	WILD	WILD	SAO PAULO	24 May 2004	28519	Transfer	Wild Hatch	FPZSP 240	AVID070285859
					WILD	????	NONE	Capture	Wild Hatch		
					PFB	????		Transfer			
					SAO PAULO	24 May 2004	28519	Transfer			
					LYMIFOUND	3 Jun 2005		Transfer			
					SAO PAULO	22 Dec 2006	28519	Transfer			
61	F	????	WILD	WILD	SAO PAULO	24 May 2004	28520	Transfer	Wild Hatch	FPZSP 241	AVID070001604
					WILD	????	NONE	Capture	Wild Hatch		
					PFB	????		Transfer			
					SAO PAULO	24 May 2004	28520	Transfer			
82	M	~2001 +/-1yr	WILD	WILD	SAO PAULO	15 Dec 2015		Transfer	Wild Hatch	RZ 09111	96300000062012
					BRAZIL	????	NONE	Capture	Wild Hatch		
					PRIVATE	????		Transfer			
					RIOJANEIR	23 Feb 2006		Transfer			
					SAO PAULO	15 Dec 2015		Transfer			
175	M	????	WILD	WILD	SAO PAULO	31 Jul 2015		Transfer	Wild Hatch		963008000136411
					BAHIA B	????	NONE	Capture	Wild Hatch		
					NEST	21 Mar 2014		Transfer			
					SAO PAULO	31 Jul 2015		Transfer			
176	M	13 Apr 2015	47	59	SAO PAULO	13 Apr 2015	31395	Hatch	Captive Hatch	FPZSP 327	
202	?	22 Feb 2016	47	59	SAO PAULO	22 Feb 2016	31488	Hatch	Captive Hatch		
203	?	25 Feb 2016	47	59	SAO PAULO	25 Feb 2016	31489	Hatch	Captive Hatch		
223	?	15 Apr 2016	47	59	SAO PAULO	15 Apr 2016	31537	Hatch	Captive Hatch		

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
SAO PAULO - cont.											
224	?	17 Apr 2016	47	59	SAO PAULO	17 Apr 2016	31538	Hatch	Captive Hatch		
225	?	14 Jun 2016	47	59	SAO PAULO	14 Jun 2016	31548	Hatch	Captive Hatch		
226	?	16 Jun 2016	47	59	SAO PAULO	16 Jun 2016	31549	Hatch	Captive Hatch		
227	?	20 Jun 2016	47	59	SAO PAULO	20 Jun 2016	31550	Hatch	Captive Hatch		
Totals: 8.9.7 (24)											

TOTALS: 69.74.9 (152)

14 Institutions

5. Historic population by studbook number

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
23	M	~ 1993	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		AVID019770332
					RJ-UNK	~ 1995		Transfer			
					FRANCE	~ Jun 1996		Transfer			
					SAO PAULO	15 Jul 1996	22831	Transfer			
24	M	~ 1995	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		977200000654386
					KUAH L	~ 1996		Transfer			
					JURONG	~ 1996		Transfer			
					SAO PAULO	23 Mar 2001	26513	Transfer			
					LYMIFOUND	3 Jun 2005		Transfer			
					SAO PAULO	30 Jul 2015		Transfer			
25	F	~ 1995	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		977200000674312
					KUAH L	~ 1996		Transfer			
					JURONG	~ 1996		Transfer			
					SAO PAULO	23 Mar 2001	26514	Transfer			
					TENERIFE	5 Nov 2006	18482	Transfer			
					30	?	~ 1997	WILD	WILD	BAHIA B	~ 1997
RJ PRIVAT	~ 1998		Transfer								
RIOJANEIR	23 Sep 1999		Transfer								
RJ PRIVAT	~ Apr 2001		lft								
31	?	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch		00-0126-A761
					RJ PRIVAT	~ 1998		Transfer			
					RIOJANEIR	22 Sep 1999	10423	Transfer			
					RJ PRIVAT	~ Apr 2001		lft			
32	M	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch	RZ 09168	000125DFD9
					RJ PRIVAT	~ 1998		Transfer			
						~ Apr 2001		Transfer			
					RIOJANEIR	22 Oct 2009		Transfer			
					SAO PAULO	15 Dec 2015		Transfer			
33	M	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch	RZ 09165	000126B26C
					RJ PRIVAT	~ 1998		Transfer			
					RIOJANEIR	22 Sep 1999	10425	Transfer			
					RJ PRIVAT	~ Apr 2001		Transfer			
					RIOJANEIR	22 Oct 2009		Transfer			
					SAO PAULO	15 Dec 2015		Transfer			

29 Jan 2016

Death

[Death by: Anesth/Restraint assoc Unknown Necropsy done (no info) Unknown after necropsy Necropsy not received]

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
34	F	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch		AVID021047817
					RONDONIA	~ 1998		Transfer			
					SAO PAULO	30 May 1998	25763	Transfer			
35	M	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch		AVID018600116
					RONDONIA	~ 1998		Transfer			
					SAO PAULO	30 May 1998	25762	Transfer			
						8 Feb 2016		Death			
					[Death by: Injury from exhibit mate Unknown Necropsy done (no info) Unknown after necropsy Necropsy not received]						
36	M	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch		AVIDD017055356
					RONDONIA	~ 1997		Transfer			
					SAO PAULO	30 May 1998	25761	Transfer			
					TENERIFE	5 Nov 2006	18483	Transfer			
						14 Apr 2014		Death			
					[Death by: Environ/Behav conditions Mounted or Preserved: TENERIFE Generalized Trauma Necropsy received]						
37	F	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch	bhzoo 323	AVID016071512
					RONDONIA	~ 1997		Transfer			
					SAO PAULO	30 May 1998	25760	Transfer			
					LYMIFOUND	3 Jun 2005		Transfer			
					HORIZONTE	~ Apr 2010	AV0392	Transfer			
					SAO PAULO	17 Jul 2015		Transfer			
					HORIZONTE	26 Jun 2016		Transfer			
38	M	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch		AVID010573564
					RONDONIA	~ 1998		Transfer			
					SAO PAULO	30 May 1998	25764	Transfer			
39	F	~ 1997	WILD	WILD	BAHIA B	~ 1997	NONE	Capture	Wild Hatch		AVID020341116
					RONDONIA	~ 1998		Transfer			
					SAO PAULO	30 May 1998	25765	Transfer			
40	F	~ 1995	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		AVID014364323
					RONDONIA	~ 1997		Transfer			
					SAO PAULO	30 May 1998	25767	Transfer			
					TENERIFE	5 Nov 2006	18484	Transfer			
41	M	~ 1995	WILD	WILD	BAHIA B	~ 1995	NONE	Capture	Wild Hatch		AVID013016833
					RONDONIA	~ 1997		Transfer			
					SAO PAULO	30 May 1998	25766	Transfer			
					TENERIFE	5 Nov 2006	18485	Transfer			

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
42	M	~ 1995	WILD	WILD	BAHIA B SAO PAULO	~ 1995 ~ 1997 ~ 2004	NONE	Capture Transfer Death	Wild Hatch		
[Death by: Unknown means]											
43	F	~ 1995	WILD	WILD	BAHIA B SAO PAULO	~ 1995 26 Jul 1999	NONE 25758	Capture Transfer	Wild Hatch		97720000672079
44	F	~ 1995	WILD	WILD	BAHIA B SAO PAULO	~ 1995 26 Jul 1999 ~ 2004	NONE 25759	Capture Transfer Death	Wild Hatch		97720000669832
[Death by: Unknown means]											
46	F	~ 1999	WILD	WILD	BAHIA B JUAZEIRO RIOJANEIR F CACHOEI ACTP	~ Jun 2000 ~ Jul 2000 21 Jul 2000 25 Jun 2015 28 Aug 2015	NONE 10855	Capture Transfer Transfer Transfer Transfer	Wild Hatch	RZ09118	0001F06D5D
47	M	~ 1999	WILD	WILD	BAHIA B JUAZEIRO RIOJANEIR LYMIFOUND SAO PAULO	~ Jul 2000 ~ Jul 2000 21 Jul 2000 27 Oct 2005 22 Dec 2006	NONE 10854	Capture Transfer Transfer Transfer Transfer	Wild Hatch		AVID 070 085 586
48	M	~ 1999	WILD	WILD	BAHIA B JUAZEIRO RIOJANEIR	~ Jul 2000 ~ Jul 2000 21 Jul 2000 31 Dec 2008	NONE 10856	Capture Transfer Transfer Death	Wild Hatch		0001F07500
[Death by: Unknown means]											
49	F	????	WILD	WILD	WILD UNKNOWN RIOJANEIR	???? ???? 24 Oct 2001	NONE 11480	Capture Transfer Transfer	Wild Hatch	RZ09162	0001C5C638
50	F	????	WILD	WILD	WILD UNKNOWN RIOJANEIR	???? ???? 20 Dec 2001	NONE 11735	Capture Transfer Transfer	Wild Hatch	RZ09161	00-0129985
51	M	????	WILD	WILD	WILD UNKNOWN RIOJANEIR	???? ???? 15 Feb 2002	NONE 11762	Capture Transfer Transfer	Wild Hatch	RZ09117	98512000512842

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
52	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ09163	963000000062152
					UNKNOWN	????		Transfer			
					PUC PASSO	12 Nov 1999		Transfer			
					RIOJANEIR	15 Oct 2002	11909	Transfer			
					F CACHOEI	25 Jun 2015		Transfer			
					ACTP	28 Aug 2015		Transfer			
			AL WABRA	14 May 2016		Transfer					
53	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ09116	936000000061619
					UNKNOWN	????		Transfer			
					PUC PASSO	12 Nov 1999		Transfer			
					RIOJANEIR	15 Oct 2002	11910	Transfer			
			SAO PAULO	15 Dec 2015		Transfer					
54	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		963000000061256
					UNKNOWN	????		Transfer			
					PUC PASSO	12 Nov 1999		Transfer			
					RIOJANEIR	15 Oct 2002	11911	Transfer			
55	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ 09115	936000000061526
					UNKNOWN	????		Transfer			
					PUC PASSO	12 Nov 1999		Transfer			
					RIOJANEIR	15 Oct 2002	11912	Transfer			
			SAO PAULO	15 Dec 2015		Transfer					
56	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	RZ09167	936000000061145
					UNKNOWN	????		Transfer			
					RIOJANEIR	19 May 2003	12066	Transfer			
					F CACHOEI	25 Jun 2015		Transfer			
			ACTP	28 Aug 2015		Transfer					
57	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	FPZSP 237	AVD069854513
					PFB	????		Transfer			
					SAO PAULO	24 May 2004	28516	Transfer			
					LYMIFOUND	3 Jun 2005		Transfer			
			SAO PAULO	3 Jun 2006	28516	Transfer					
58	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	FPZSP 238	AVID070049341
					PFB	????		Transfer			
					SAO PAULO	24 May 2004	28517	Transfer			
59	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch	FPZSP 239	AVID070126352
					PFB	????		Transfer			
					SAO PAULO	24 May 2004	28518	Transfer			
					LYMIFOUND	3 Jun 2005		Transfer			
			SAO PAULO	22 Dec 2006	28518	Transfer					

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
60	F	????	WILD	WILD	WILD PFB SAO PAULO	???? ???? 24 May 2004	NONE 28519	Capture Transfer Transfer	Wild Hatch	FPZSP 240	AVID070285859
					LYMIFOUND SAO PAULO	3 Jun 2005 22 Dec 2006	 28519	Transfer Transfer			
61	F	????	WILD	WILD	WILD PFB SAO PAULO	???? ???? 24 May 2004	NONE 28520	Capture Transfer Transfer	Wild Hatch	FPZSP 241	AVID070001604
62	F	????	WILD	WILD	WILD PFB SAO PAULO LYMIFOUND	???? ???? 24 May 2005 3 Jun 2005 18 Apr 2006	NONE 28515	Capture Transfer Transfer Transfer Death	Wild Hatch	FPZSP 236	AVID069862256
					[Death by: Unknown means]						
63	F	????	WILD	WILD	WILD UNKNOWN CRAX	???? ???? 16 Feb 2005	NONE _____	Capture Transfer Transfer	Wild Hatch		00061C57E0
64	M	????	WILD	WILD	WILD UNKNOWN CRAX	???? ???? 16 Feb 2005	NONE _____	Capture Transfer Transfer	Wild Hatch		00061C46EA
70	F	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE 586	Capture Transfer Transfer	Wild Hatch		1-235-575-83A
71	M	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE 587	Capture Transfer Transfer	Wild Hatch		1-215-462-51A
72	F	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA ACTP	???? ???? ~ 1998 26 May 2016	NONE 588	Capture Transfer Transfer Transfer	Wild Hatch		1-167-192-96A
73	F	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE 589	Capture Transfer Transfer	Wild Hatch		1-166-740-90A

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
74	M	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998 2 Sep 2008	NONE <u>590</u>	Capture Transfer Transfer Death	Wild Hatch		1-166-727-62A
[Death by: Unknown means]											
75	M	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA ACTP	???? ???? ~ 1998 26 May 2016	NONE <u>591</u>	Capture Transfer Transfer Transfer	Wild Hatch		1-166-632-26A
76	M	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE <u>592</u>	Capture Transfer Transfer	Wild Hatch		1-211-547-65A
77	F	????	WILD	WILD	BAHIA B UNKNOWN AL WABRA	???? ???? ~ 1998	NONE <u>593</u>	Capture Transfer Transfer	Wild Hatch		1-165-347-51A
78	F	14 Jul 2006	75	72	AL WABRA	14 Jul 2006 3 Jan 2013	6491	Hatch Death	Captive Hatch	AWWPQA145	
[Death by: Unknown means]											
79	M	~ 1996	WILD	WILD	WILD LEEDS	???? 20 Jul 1998	NONE H1140_	Capture Transfer	Wild Hatch		
80	F	~1996 +/-1yr	WILD	WILD	WILD LEEDS	???? 20 Jul 1998	NONE H1141_	Capture Transfer	Wild Hatch		
81	F	~1994 +/-1yr	WILD	WILD	WILD LEEDS	???? 20 Jul 1998	NONE H1142_	Capture Transfer	Wild Hatch		
82	M	~2001 +/-1yr	WILD	WILD	BRAZIL PRIVATE RIOJANEIR SAO PAULO	???? ???? 23 Feb 2006 15 Dec 2015	NONE <u> </u> <u> </u> <u> </u>	Capture Transfer Transfer Transfer	Wild Hatch	RZ 09111	963000000062012
83	M	14 May 2007	36	25	TENERIFE	14 May 2007	19114	Hatch	Captive Hatch	LPF07140002	938000000271219
84	F	11 Jun 2007	75	72	AL WABRA	11 Jun 2007 14 Jan 2013	7199	Hatch Death	Captive Hatch	AWWPQA146	276096900344241
[Death by: Unknown means]											
85	F	14 Jun 2007	75	72	AL WABRA FZCACHOEI	14 Jun 2007 14 Jun 2016	7207 NONE	Hatch Transfer	Captive Hatch	AWWPQA147	276096900363434

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
86	F	26 Jun 2007	75	72	AL WABRA ACTP	26 Jun 2007 13 Jul 2015	7235	Hatch Transfer	Captive Hatch	AWWP QA 149	276096900338192
87	F	16 Jul 2007	36	25	TENERIFE	16 Jul 2007	19481	Hatch	Captive Hatch	LPF07140025	938000000271234
88	M	23 Jul 2007	36	25	TENERIFE FOZDOIGUA FCACHOEIR	23 Jul 2007 24 Feb 2016 ~ 2016	19518	Hatch Transfer Transfer	Captive Hatch	LPF07140066	938000000237787
89	F	????	WILD	WILD	BRAZIL PRIVATE HORIZONTE	???? ???? 21 Aug 2007	NONE AV0301	Capture Transfer Transfer	Wild Hatch	BHZOO 280	9630000004948260
90	F	28 Apr 2008	36	25	TENERIFE FOZDOIGUA	28 Apr 2008 24 Feb 2016	20260	Hatch Transfer	Captive Hatch	LPF081400007	
91	F	????	WILD	WILD	BRAZIL UNKNOWN MILTONSOL	~ 2007 ~ 2007 ~ Dec 2007	NONE	Capture Transfer Transfer	Wild Hatch		963000000193727
92	M	????	WILD	WILD	BRAZIL UNKNOWN MILTONSOL	~ 2007 ~ 2007 ~ Dec 2007	NONE	Capture Transfer Transfer	Wild Hatch		963000000224358
93	F	17 May 2008	75	72	AL WABRA	17 May 2008	7814	Hatch	Captive Hatch	AWWPQA150	
94	M	10 Jul 2008	36	25	TENERIFE HORIZONTE	10 Jul 2008 22 Apr 2010	20706 AV0391	Hatch Transfer	Captive Hatch	LPF081400018938000000301026	
95	F	10 Jul 2008	41	40	TENERIFE FOZDOIGUA HORIZONTE	10 Jul 2008 24 Feb 2016 ~ 2016	20699	Hatch Transfer Transfer	Captive Hatch	LPF081400017	
96	F	12 Jul 2008	41	40	TENERIFE	12 Jul 2008	20700	Hatch	Captive Hatch	LPF081400021938000000374841	
97	F	29 Jun 1984	120	WILD1	BUSCH TAM TENERIFE	29 Jun 1984 30 Aug 2009 18 Aug 2012	52377 22160	Hatch Transfer Death	Captive Hatch	BUSCH 64	
[Death by: Unknown means]											
98	F	24 Sep 1984	120	WILD1	BUSCH TAM TENERIFE	24 Sep 1984 30 Aug 2009	52378 22161	Hatch Transfer	Captive Hatch	BUSCH 68	
99	F	7 Jul 2009	36	25	TENERIFE FOZDOIGUA	7 Jul 2009 24 Feb 2016	21958	Hatch Transfer	Captive Hatch	LPF09140023	

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
100	F	10 Jul 2009	41	40	TENERIFE	10 Jul 2009	22031	Hatch	Captive Hatch	LPF09140025	
101	M	11 Jul 2009	41	40	TENERIFE	11 Jul 2009	22032	Hatch	Captive Hatch	LPF09140029	
102	M	12 Jul 2009	36	25	TENERIFE	12 Jul 2009 19 Jun 2013	21957	Hatch Death	Captive Hatch	LPF09140009	
						[Death by: Unknown means]					
103	F	24 May 2010	75	72	AL WABRA	24 May 2010	9495	Hatch	Captive Hatch	AWWPQA169	
104	F	24 May 2010	75	72	AL WABRA FZCACHOEI	24 May 2010 14 Jun 2016	9496 NONE	Hatch Transfer	Captive Hatch	AWWPQA170	
105	M	~ 1937	UNK	UNK	UNKNOWN PUBLIC CHICAGOBR	~ 1937 ???? 21 Aug 1941 10 Mar 1956	_____ _____ 25895	Hatch Transfer Transfer Death	Unk HatchType		
						[Death by: Unknown means]					
106	F	~ 1937	UNK	UNK	UNKNOWN PUBLIC CHICAGOBR	~ 1937 ???? 21 Aug 1941 ~ Jun 1959	_____ _____ 25896 25896	Hatch Transfer Transfer ltf	Unk HatchType		
107	M	~ Jan 1946	UNK	UNK	UNKNOWN BARTELS H CHICAGOBR SANDIEGOZ	~ Jan 1946 ???? ???? 12 Jun 1970	_____ _____ 25894 201263	Hatch Transfer Transfer ltf	Unk HatchType		
108	M	????	WILD	WILD	WILD MIAMI PJ	???? 1 Jan 1952 13 Aug 1992	NONE 205	Capture Transfer Death	Wild Hatch		
						[Death by: Unknown means]					
109	M	????	WILD	WILD	WILD MIAMI PJ	???? 1 Jan 1952 23 Dec 1990	NONE 218	Capture Transfer Death	Wild Hatch		
						[Death by: Infection associated Incinerate Digestive Bacterial]					
110	F	~ 1952	UNK	UNK	UNKNOWN LOSANGELE SANDIEGOZ	~ 1952 ???? 31 Aug 1971	_____ _____ 201264	Hatch Transfer ltf	Unk HatchType		

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
111	?	????	UNK	UNK	UNKNOWN	????		Hatch	Unk HatchType		
					DEALER	????	NONE	Transfer			
					ANTWERP	9 Oct 1952	1594	Transfer			
					BRAZIL	30 Apr 1986	NONE	ltf			
112	M	????	UNK	UNK	UNKNOWN	????		Hatch	Unk HatchType		
					LOSANGELE	28 Oct 1964	90483	Transfer			
						13 Mar 1985		Death			
					[Death by: Unknown means]						
113	M	~ 1967	UNK	UNK	UNKNOWN	~ 1967		Hatch	Unk HatchType		00-0009-DB3C
					PRIVATE	????	NONE	Transfer			
					PARIS ZOO	1 Jan 1975	Z75205	Transfer			
					MULHOUSE	16 Mar 1987	870071	Transfer			
					SISSSEN H	24 Feb 1992		ltf			
114	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		
					MIAMI PJ	????		Transfer			
					BUSCH TAM	4 Apr 1981	52376	Transfer			
						13 Aug 1992		Death			
					[Death by: Other/Unknown Bury Generalized Fungal]						
115	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		00-0008-B852
					BASEL	????		Transfer			
					MULHOUSE	30 Jul 1987	870072	ltf			
116	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		
					PRIVATE	????		Transfer			
					ZURICH	21 Sep 1989	890001	Transfer			
						8 May 1990		Death			
					[Death by: Infection associated Rendered Generalized Viral]						
117	F	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		
					PRIVATE	????		Transfer			
					ZURICH	21 Sep 1989	890002	Transfer			
						13 May 1990		Death			
					[Death by: Infection associated Rendered Generalized Viral]						
118	F	12 Aug 2010	79	80	LEEDS	12 Aug 2010	HA0123	Hatch	Captive Hatch		958000001777667
119	M	14 Aug 2010	79	80	LEEDS	14 Aug 2010	HA0124	Hatch	Captive Hatch		958000001777728
120	M	????	WILD	WILD	WILD	????	NONE	Capture	Wild Hatch		
					BUSCH TAM	????	52370	ltf			

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
121	M	????	WILD	WILD	WILD BUENOSAIR	???? ????	NONE A1155_	Capture Transfer	Wild Hatch		00012A1FBB
122	M	~ 2010	WILD	WILD	UNKNOWN PRAHA	~ 2010 11 Jun 2010	NONE 100522	Hatch Transfer	Unk HatchType		203098100251756
123	M	~ 2010	WILD	WILD	UNKNOWN PRAHA	~ 2010 11 Jun 2010	NONE 100523	Hatch Transfer	Unk HatchType		203098100251874
124	M	~ 2010	WILD	WILD	UNKNOWN PRAHA	~ 2010 11 Jun 2010	NONE 100524	Hatch Transfer	Unk HatchType		203098100252230
125	?	????	WILD	WILD	WILD SALVADOR	???? ~ Oct 2012 4 Aug 2014	NONE _____	Capture Transfer Death	Wild Hatch		076000000010864
					[Death by: Unknown means]						
126	F	????	WILD	WILD	WILD SALVADOR F CACHOEI	???? 17 Oct 2012 7 May 2015	NONE _____	Capture Transfer Transfer	Wild Hatch		076000000010010
127	M	????	WILD	WILD	WILD SALVADOR F CACHOEI	???? 15 Jul 2010 7 May 2015 24 Jul 2015	NONE 011038 _____	Capture Transfer Transfer Death	Wild Hatch		076000000011038
					[Death by: Unknown means]						
128	?	????	WILD	WILD	WILD SALVADOR UNKNOWN	???? ~ Jul 2010 1 Jul 2013	NONE _____	Capture Transfer Death	Wild Hatch		07600000001099
					[Death by: Unknown means]						
129	F	????	WILD	WILD	WILD SALVADOR F CACHOEI	???? 15 Jul 2010 7 May 2015	NONE _____	Capture Transfer Transfer	Wild Hatch		076000000010383
130	M	????	WILD	WILD	WILD SALVADOR F CACHOEI	???? 4 Oct 2012 7 May 2015	NONE _____	Capture Transfer Transfer	Wild Hatch		076000000010053
131	M	27 Jun 2010	41	40	TENERIFE	27 Jun 2010	23283	Hatch	Captive Hatch	lpf10140019	938000000320850
132	M	28 Jun 2010	41	40	TENERIFE FOZDOIGUA	28 Jun 2010 24 Feb 2016	23284 _____	Hatch Transfer	Captive Hatch	lpf10140021	938000000309385

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
133	F	2 Jul 2010	36	25	TENERIFE FOZDOIGUA	2 Jul 2010 24 Feb 2016 28 Mar 2016	23317	Hatch Transfer Death	Captive Hatch	lpf10140011	938000000296908
					[Death by: Unknown means]						
134	M	2 Jul 2010	36	25	TENERIFE	2 Jul 2010	23318	Hatch	Captive Hatch	lpf10140010	938000000247980
135	F	3 Jul 2010	36	25	TENERIFE	3 Jul 2010	23319	Hatch	Captive Hatch	lpf10140009	938000000295298
136	M	10 Aug 2010	41	40	TENERIFE FOZDOIGUA	10 Aug 2010 24 Feb 2016	23360	Hatch Transfer	Captive Hatch	lpf10160003	938000000291367
137	M	10 Aug 2010	41	40	TENERIFE FOZDOIGUA FAZCACHOE	10 Aug 2010 24 Feb 2016 27 May 2016	23361	Hatch Transfer Transfer	Captive Hatch	lpf10160004	938000000319123
138	?	9 Jun 2011	75	72	AL WABRA	9 Jun 2011 15 Jun 2011	10188	Hatch Death	Captive Hatch		
					[Death by: Environ/Behav conditions Unknown Necropsy done (no info) Unknown after necropsy Necropsy not received]						
139	?	11 Jun 2011	75	72	AL WABRA	11 Jun 2011 15 Jun 2011	10189	Hatch Death	Captive Hatch		
					[Death by: Environ/Behav conditions Unknown Generalized Unknown after necropsy Necropsy not received]						
140	M	12 Jun 2011	41	40	TENERIFE FOZDOIGUA	12 Jun 2011 24 Feb 2014	24700	Hatch Transfer	Captive Hatch	lpf11120042	938000000314891
141	F	13 Jun 2011	41	40	TENERIFE	13 Jun 2011	24701	Hatch	Captive Hatch	lpf11120043	938000000388380
142	M	3 Jul 2011	79	80	LEEDS	3 Jul 2011	HA1090	Hatch	Captive Hatch		
143	M	4 Jul 2011	79	80	LEEDS	4 Jul 2011	HA1091	Hatch	Captive Hatch		
144	F	7 Jul 2011	79	80	LEEDS	7 Jul 2011	HA1092	Hatch	Captive Hatch		
145	M	18 Jul 2011	36	25	TENERIFE	18 Jul 2011	24709	Hatch	Captive Hatch	lpf11120038	938000000358652
146	F	19 Jul 2011	36	25	TENERIFE	19 Jul 2011	24710	Hatch	Captive Hatch	lpf11120023	938000000395756
147	F	7 Jun 2012	71	70	AL WABRA ACTP	7 Jun 2012 13 Jul 2015	10704 E00498	Hatch Transfer	Captive Hatch	awwp167	

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
148	?	8 Jun 2012	76	73	AL WABRA	8 Jun 2012 8 Jun 2012	10705	Hatch Death	Captive Hatch		
			[Death by: Unknown means]								
149	M	11 Jun 2012	71	70	AL WABRA	11 Jun 2012	10709	Hatch	Captive Hatch	awwp168	
150	?	11 Jun 2012	76	73	AL WABRA	11 Jun 2012 11 Jun 2012	10710	Hatch Death	Captive Hatch		
			[Death by: Euthanasia (medical) Unknown Unknown (after necropsy) Necropsy not received]								
151	M	12 Jun 2012	71	70	AL WABRA ACTP	12 Jun 2012 26 May 2016	10711	Hatch Transfer	Captive Hatch	awwp172	900079000036423
152	F	24 Jun 2012	75	72	AL WABRA ACTP	24 Jun 2012 26 May 2016	10718	Hatch Transfer	Captive Hatch	awwp173	900079000036408
153	M	26 Jun 2012	75	72	AL WABRA ACTP	26 Jun 2012 13 Jul 2015	10721	Hatch Transfer	Captive Hatch	awwp174	
154	F	29 Jun 2012	75	72	AL WABRA ACTP	29 Jun 2012 26 May 2016	10724	Hatch Transfer	Captive Hatch	awwp175	900079000036406
155	?	29 Aug 2012	76	73	AL WABRA	29 Aug 2012 29 Aug 2012	10783	Hatch Death	Captive Hatch		
			[Death by: Unknown means]								
156	?	30 Aug 2012	76	73	AL WABRA	30 Aug 2012 30 Aug 2012	10784	Hatch Death	Captive Hatch		
			[Death by: Unknown means]								
157	F	30 Aug 2012	36	25	TENERIFE	30 Aug 2012	26523	Hatch	Captive Hatch	lpf12140045	938000000394601
158	F	1 Sep 2012	36	25	TENERIFE	1 Sep 2012	26524	Hatch	Captive Hatch	lpf12140046	938000000326930
159	F	2 Sep 2012	36	25	TENERIFE	2 Sep 2012	26532	Hatch	Captive Hatch	lpf12140048	938000000372979
160	F	14 Jun 2013	36	25	TENERIFE	14 Jun 2013	27191	Hatch	Captive Hatch		968000003770925
161	F	6 Jul 2013	41	40	TENERIFE	6 Jul 2013	27303	Hatch	Captive Hatch		968000004184340
162	M	7 Jul 2013	41	40	TENERIFE	7 Jul 2013	27302	Hatch	Captive Hatch		968000003773991
163	M	10 Jul 2013	41	40	TENERIFE	10 Jul 2013	27300	Hatch	Captive Hatch		968000004190517

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
164	F	8 Aug 2013	36	25	TENERIFE	8 Aug 2013	27353	Hatch	Captive Hatch		938000000386160
165	F	9 Aug 2013	36	25	TENERIFE	9 Aug 2013	27354	Hatch	Captive Hatch		938000000394437
166	M	19 Aug 2013	41	40	TENERIFE	19 Aug 2013	27398	Hatch	Captive Hatch		938000000361139
167	M	14 Jun 2013	76	73	AL WABRA	14 Jun 2013	B1341	Hatch	Captive Hatch	awwp 191	900006154168
						4 Oct 2016		Death			
					[Death by: Other/Unknown Unknown Generalized Circulatory, secondary Necropsy not received]						
168	F	20 Jun 2013	76	73	AL WABRA FZCACHOEI	20 Jun 2013 14 Jun 2016	B1342 NONE	Hatch Transfer	Captive Hatch	awwp 192	
169	F	22 Jun 2013	71	70	AL WABRA	22 Jun 2013	B1344	Hatch	Captive Hatch	awwp 193	
170	M	24 Jun 2013	71	70	AL WABRA FZCACHOEI	24 Jun 2013 14 Jun 2016	B1348 NONE	Hatch Transfer	Captive Hatch	awwp 194	
171	F	25 Jul 2013	71	70	AL WABRA	25 Jul 2013	B1354	Hatch	Captive Hatch	awwp 195	
172	F	27 Jul 2013	71	70	AL WABRA	27 Jul 2013	B1355	Hatch	Captive Hatch	awwp 196	
173	M	30 Jul 2013	71	70	AL WABRA ACTP	30 Jul 2013 26 May 2016	B1356 _____	Hatch Transfer	Captive Hatch	awwp 197	97227300031564
174	M	????	WILD	WILD	BAHIA B NEST F CACHOEI	~ 2014 21 Mar 2014 19 Jan 2016	NONE _____ _____	Capture Transfer Transfer	Wild Hatch		963008000136407
175	M	????	WILD	WILD	BAHIA B NEST SAO PAULO	???? 21 Mar 2014 31 Jul 2015	NONE _____ _____	Capture Transfer Transfer	Wild Hatch		963008000136411
176	M	13 Apr 2015	47	59	SAO PAULO	13 Apr 2015	01153_	Hatch	Captive Hatch	FPZSP 327	
177	F	~2010 +/-2yr	WILD	WILD	BRAZIL F CACHOEI	???? 12 Feb 2015	NONE _____	Capture Transfer	Wild Hatch		963008000394606
178	M	26 May 2014	75	72	AL WABRA	26 May 2014	B1465	Hatch	Captive Hatch	AWWP 202	972273000053267
179	M	28 May 2014	75	72	AL WABRA	28 May 2014	B1466	Hatch	Captive Hatch	AWWP 203	972273000031583
180	F	29 May 2014	75	72	AL WABRA ACTP	29 May 2014 26 May 2016	B1467 _____	Hatch Transfer	Captive Hatch	AWWP 204	972273000052707

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
181	M	1 Jun 2014	75	72	AL WABRA	1 Jun 2014	B1472	Hatch	Captive Hatch	AWWP 205	972273000053190
182	M	1 Jun 2014	76	73	AL WABRA ACTP	1 Jun 2014 26 Sep 2016	B1471	Hatch Transfer	Captive Hatch	AWWP 206	972273000053494
183	M	2 Jun 2014	76	73	AL WABRA	2 Jun 2014	B1473	Hatch	Captive Hatch	awwp 207	972273000043095
184	F	5 Jun 2014	76	73	AL WABRA FZACHOEIR	5 Jun 2014 14 Jun 2016	B1475	Hatch Transfer	Captive Hatch	awwp 208	972273000031813
185	M	30 May 2014	71	70	AL WABRA	30 May 2014	B1468	Hatch	Captive Hatch	awwp 209	972273000043466
186	M	4 Jun 2014	71	70	AL WABRA	4 Jun 2014	B1470	Hatch	Captive Hatch	awwp 210	972273000052854
187	M	4 Jun 2014	71	70	AL WABRA ACTP	4 Jun 2014 26 May 2016	B1474	Hatch Transfer	Captive Hatch	awwp 211	972273000042929
188	?	6 Jul 2014	75	72	AL WABRA	6 Jul 2014 8 Jul 2014	B1486	Hatch Death	Captive Hatch		
					[Death by: Environ/Behav conditions Unknown]	[Unknown (after necropsy)			Necropsy not received]		
189	?	16 Jul 2014	71	70	AL WABRA	16 Jul 2014 17 Jul 2014	B1490	Hatch Death	Captive Hatch		
					[Death by: Unknown means]						
190	M	19 Aug 2014	71	70	AL WABRA	19 Aug 2014	B1493	Hatch	Captive Hatch	awwp 212	947000000362320
191	F	21 Aug 2014	71	70	AL WABRA	21 Aug 2014	B1494	Hatch	Captive Hatch	awwp 213	947000000404345
192	?	24 Aug 2014	71	70	AL WABRA	24 Aug 2014 8 Sep 2014	B1495	Hatch Death	Captive Hatch		
					[Death by: Unknown means]						
193	M	~ 2014	WILD	WILD	BRAZIL PORTUGAL F CACHOEI	???? ~ Apr 2015 4 Dec 2015	NONE	Capture Transfer Transfer	Wild Hatch		900182000221830
194	M	~ 2014	WILD	WILD	BRAZIL PORTUGAL F CACHOEI	???? ~ Apr 2015 4 Dec 2015	NONE	Capture Transfer Transfer	Wild Hatch		900182000221827

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
195	M	????	WILD	WILD	BRAZIL PRIVATE ZURICH PRAHA	???? ???? 29 Jan 2013 12 Feb 2015	NONE _____ _____ 150060	Capture Transfer Transfer Transfer	Wild Hatch		756098100649235
196	F	????	WILD	WILD	BRAZIL PRIVATE ZURICH PRAHA	???? ???? 29 Jan 2013 12 Feb 2015	NONE _____ _____ 150061	Capture Transfer Transfer Transfer	Wild Hatch		
197	M	7 Jul 2015	76	73	AL WABRA	7 Jul 2015	B1571	Hatch	Captive Hatch	AWWPPQA217	
198	M	13 Jul 2015	76	73	AL WABRA	13 Jul 2015	B1572	Hatch	Captive Hatch	AWWPPQA218	
199	M	1 Oct 2015	76	73	AL WABRA	1 Oct 2015	B1575	Hatch	Captive Hatch	AWWPPQA214	
200	F	????	WILD	WILD	WILD Z MONTANH F CACHOEI	???? ???? 16 Dec 2015	NONE _____ _____	Capture Transfer Transfer	Wild Hatch		963008000394778
201	?	????	WILD	WILD	EUCLIDES F CACHOEI	???? 18 Feb 2016 24 Feb 2016	NONE _____ _____	Capture Transfer Death	Wild Hatch		
		[Death by: Anesth/Restraint assoc Unknown No necropsy planned Necropsy not received]									
202	?	22 Feb 2016	47	59	SAO PAULO	22 Feb 2016	31488	Hatch	Captive Hatch		
203	?	25 Feb 2016	47	59	SAO PAULO	25 Feb 2016	31489	Hatch	Captive Hatch		
204	M	????	WILD	WILD	BRAZIL PASSAREDO	???? ~ 2015	NONE _____ _____	Capture Transfer	Wild Hatch		963008000352849
205	F	????	WILD	WILD	BRAZIL PASSAREDO	???? ~ 2015	NONE _____ _____	Capture Transfer	Wild Hatch		963008000352850
206	M	24 Jun 2016	71	70	AL WABRA	24 Jun 2016	B1648	Hatch	Captive Hatch	AWWPQA219	972273000340413
207	F	25 Jun 2016	71	70	AL WABRA	25 Jun 2016	B1649	Hatch	Captive Hatch	AWWPQA220	972273000337402
208	F	28 Jun 2016	71	70	AL WABRA	28 Jun 2016	B1650	Hatch	Captive Hatch	AWWPQA221	972273000339351
209	?	2 Aug 2016	71	70	AL WABRA	2 Aug 2016	B1656	Hatch	Captive Hatch	AWWPQA222	
210	?	5 Aug 2016	71	70	AL WABRA	5 Aug 2016	B1657	Hatch	Captive Hatch	AWWPQA223	

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
211	?	8 Aug 2016	71	70	AL WABRA	8 Aug 2016 10 Aug 2016	B1658	Hatch Death	Captive Hatch		
			[Death by: Unknown means]								
212	?	17 Jul 2016	76	73	AL WABRA	17 Jul 2016 10 Aug 2016	B1651	Hatch Death	Captive Hatch		
			[Death by: Unknown means]								
213	F	????	UNK	UNK	UNKNOWN ACTP	???? 3 Jun 2016	UNK	Hatch Transfer	Unk HatchType		972273000317789
214	F	????	UNK	UNK	UNKNOWN ACTP	???? 3 Jun 2016	UNK	Hatch Transfer	Unk HatchType		978000001500203
215	F	????	UNK	UNK	UNKNOWN ACTP	???? 3 Jun 2016	UNK	Hatch Transfer	Unk HatchType		972273000316775
216	F	????	UNK	UNK	UNKNOWN ACTP	???? 3 Jun 2016	UNK	Hatch Transfer	Unk HatchType		972273000317303
217	F	????	UNK	UNK	UNKNOWN ACTP	???? 3 Jun 2016	UNK	Hatch Transfer	Unk HatchType		973237000317845
218	M	????	UNK	UNK	UNKNOWN ACTP	???? 3 Jun 2016	UNK	Hatch Transfer	Unk HatchType		972273000130101
219	M	????	UNK	UNK	UNKNOWN ACTP	???? 3 Jun 2016	UNK	Hatch Transfer	Unk HatchType		972273000316953
220	M	????	UNK	UNK	UNKNOWN ACTP	???? 3 Jun 2016	UNK	Hatch Transfer	Unk HatchType		972273000296200
221	M	14 Jul 2016	41	40	TENERIFE	14 Jul 2016	30186	Hatch	Captive Hatch	LPF16140023	
222	F	~2014 +/-1yr	WILD	WILD	UNKNOWN FCACHOEIR	~2014 +/-1yr 27 May 2016		Hatch Transfer	Captive Hatch*		963008000627363
223	?	15 Apr 2016	47	59	SAO PAULO	15 Apr 2016	31537	Hatch	Captive Hatch		
224	?	17 Apr 2016	47	59	SAO PAULO	17 Apr 2016	31538	Hatch	Captive Hatch		
225	?	14 Jun 2016	47	59	SAO PAULO	14 Jun 2016	31548	Hatch	Captive Hatch		
226	?	16 Jun 2016	47	59	SAO PAULO	16 Jun 2016	31549	Hatch	Captive Hatch		

Stud#	Sex	Hatch Date	Sire	Dam	Location	Date	LocalID	Event	Hatch Origin	Tag/Band	Transponder
227	?	20 Jun 2016	47	59	SAO PAULO	20 Jun 2016	31550	Hatch	Captive Hatch		
228	?	????	WILD	WILD	BRAZIL FCACHOEIR	???? 15 Jun 2016 17 Jun 2016	UNK UNK	Hatch Transfer Death	Captive Hatch*		
[Death by: Malicious destruction Given to an institution: UNI SAN PAULO Generalized Trauma Necropsy not received]											
229	M	26 Feb 2016	41	40	TENERIFE	26 Feb 2016	29327	Hatch	Captive Hatch	lpf15120040	
230	F	26 Feb 2016	41	40	TENERIFE	26 Feb 2016	29328	Hatch	Captive Hatch	lpf15120036	
TOTALS: 86.85.27 (198)											

Compiled by: Juan Cornejo PhD
Data current thru: 31 Dec 2016 - International

Appendix I: Location glossary

ACTP	Association for the Conservation of Threatened Parrots, Germany.
AL WABRA	Al-Wabra Wildlife Preservation PO Box 44069, Doha, Qatar
BAHIA B	BAHIA, Brazil, South America, American Region
BRAZIL	BRAZIL, South America, American Region
BUENOSAIR	Jardin Zoologico de Cdad.Buenos Aires República de la India 3000, Buenos Aires, Argentina,
BUSCH TAM	Busch Gardens Tampa Bay 3605 Bougainvillea Ave., Tampa, Florida, USA, 33612
CITES PORTUGAL	Instituto da Conservação da Natureza e das Florestas, IP Av. da Republica, 16 a 16B, 1050-191 Lisboa; Portugal
CRAX	CRAX-Sociedade de Pesquisa do Manejo Da Reproducao da Fauna Silvestre, Belo Horizonte, Mg, Brazil
F CACHOEI	Criadouro Científico Fazenda Cachoeira, Brazil.
FRANCE	FRANCE, Continental Europe, European Region
HORIZONTE	Fundacao Zoo-Botan. de Belo Horizonte Av. Otacilio Negrão De Lima, Belo Horizonte, Minas Gerais, Brazil, 31365-450
IBAMA	Inst. Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, Brasilia, Federal District, Brazil
JURONG	Jurong Birdpark, Singapore 2, Jurong Hill, Singapore, Singapore, 628925
KUAH L	Lawrence Kuah 99 Rangoon Rd., Singapore, Singapore, 0821
LEEDS	Harewood Bird Garden at Leeds Harewood House, Leeds, West Yorkshire, England (uk), LS17 9LQ
LYMIFOUND	Lymington Fundacion Caixa Postal 50 - Palmeiras, Juquitiba, Sao Paulo, Brazil
MILTONSOL	Criadouro Milton Soldani Alfonso (before Aproaves) Areal, Rio de Janerio, Brazil
NEST	Criadouro NEST, Avare, Sao Paulo, Brazil
PRAHA	Zoological Garden Prague U Trojskeho Zamku 3/120, Praha, Czech Republic, CZ-171 00
PRIVATE	Private Collection
RIOJANEIR	Jardim Zoologico da Rio de Janeiro Parque daQuinta da Boa Vista s/n, Rio De Janerio Cep, Rio De Janeiro, Brazil,

RONDONIA RONDONIA
Brazil, South America, American Region

SALVADOR Parque Zoobotânico Getulio Vargas
R. Alto da Ondina, s/n, Salvador, Bahia, Brazil

SAO PAULO Fundacao Parque Zoologico de Sao Paulo
Av. Miguel Stéfano 4241, S•o Paulo, Brazil, 04301- 905

TENERIFE Loro Parque Fundacion
Avda. Loro Parque s/n, Puerto De La Cruz, Tenerife, Spain

UNKNOWN Unknown Location

WILD Wild Population

ZURICH Zoo Zürich
Zürichbergstr. 221, Zürich, Switzerland

Appendix II: Definitions

- **Date:** The date on which the event occurred. A tilde mark, '~', before a date indicates that it is approximate. '??' indicates that the date is unknown.
- **Event:** Capture, Hatch, Transfer, Loan, Ownership change, Death or Release
- **Founder:** An individual at the top of the pedigree, assumed to be unrelated to all other founders. An individual is not yet a founder of the captive-born population until it has living descendants in the population.
- **Founder Genome Equivalents:** The number of equally represented founders with no loss of alleles (retention = 1) that would produce the same gene diversity as that observed in the living, descendant population. Equivalently, the number of animals from the source population that contain the same gene diversity as does the descendant population.
- **Gene Diversity:** The heterozygosity expected in a population if the population were in Hardy-Weinberg equilibrium. Gene diversity is calculated from allele frequencies, and is the heterozygosity expected in progeny produced by random mating.
- **Hatch Date:** Animal's hatch date. A tilde mark, '~', before a date indicates that it is approximate. '??' indicates that the date is unknown.
- **Hatch Origin:** Wild Hatch, Captive Hatch, Unknown. Captive Hatch indicates conceived in the wild
- **Identifiers:** House Name, Transponder, Tag/Band, Tattoo, Notch
- **Inbreeding:** Mating of related animals resulting in a non-zero probability that alleles at a particular locus are identical by descent. The inbreeding coefficient of an offspring is equal to the kinship between its parents.
- **Kinship:** Probability that alleles randomly selected from homologous loci in two individuals are identical by descent from a common ancestor.
- **Local ID:** The identification assigned by the specimen's location, often its ISIS number, house number, or occasionally house name.
- **Location:** The institution holding the animal at the time. If the animal is no longer traceable by the Studbook Keeper, 'ltf' (lost-to-followup) will appear to the right of the last known location.
- **Mean kinship:** The mean kinship coefficient between an animal and all animals (including itself) in the living, captive-born population. The mean kinship of a population is equal to the proportional loss of gene diversity of the descendant (captive-born) population relative to the founders and is also the mean inbreeding coefficient of progeny produced by random mating.

- Ne/N: Ratio of the Effective Population Size (Ne) to the Census Size (N). Approximately, the proportion of animals that are currently breeders.
- Rearing: Parent, Hand, Foster, Peer, Colony, Supplemental, None, Unknown
- Sex: M for male, m for castrated male, F for female, U for unknown sex
- Stud#: Animal's permanent studbook number. Studbook numbers may not always be assigned chronologically, due to animals being recorded as they become known to the Studbook Keeper.
- Sire and Dam: Studbook numbers for the animal's sire and dam. 'UNK' if unknown. 'WILD' if the sire or dam was considered to be wildcaught - this animal is a founder.