

Population Analysis and Breeding & Transfer Plan

Chimpanzee *Pan troglodytes* **Species Survival Plan®**



SPECIES COORDINATOR & STUDBOOK KEEPER

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PMC

American Zoo and Aquarium Association
Population Management Center

Lincoln Park
Zoo

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AQUARIUMS

Executive Summary

Chimpanzee (*Pan troglodytes*) SSP

The current population size is 279 distributed among 37 AZA institutions. The AZA Ape Taxon Advisory Group has set a target population size of 300 individuals for this species.

The standard genetic goal for AZA managed populations is 90% gene diversity for 100 years. When gene diversity falls below 90% of that in the founding population, it is expected that reproduction will be increasingly compromised by, among other factors, lower birth weights and greater neonatal mortality. Given the current gene diversity, this population is projected to remain above the 90% level for over 200 years. Genetic management strategies, including equalizing founder representation and incorporating potential founders, remain central to maintaining gene diversity for the long term.

DEMOGRAPHY

Current Population Size (N)	279
Individuals Excluded from Analyses	140
Target Population Size	300
Mean Generation Time (T, in years)	21.9
Projected Population Growth Rate (lambda)	1.00

GENETICS

	<i>Current</i>	<i>Potential</i>
Number of Founders	91	4 additional
Founder Genome Equivalents	41.02	66.61
Gene Diversity Retained (%)	98.78	99.25
Population Mean Kinship	0.0122	--
Mean Inbreeding (F)	0.0088	--
Percent known pedigree prior to exclusions	74.0	--
Percent known pedigree after exclusions	98.9	--
Effective population size to census size ratio (N_e/N)	0.2710	--
Years To 90% Gene Diversity	>275	
Gene Diversity at 100 Years From Present (%)	94.7	
Gene Diversity at 200 Years From Present (%)	92	

Although the TAG target size for this population has been set at 300, the loss of institutions in recent years and the deaths of older animals has caused the population to decrease below this target. The number of pairs recommended to breed this year is intended to increase the number of births in the population in order to compensate for natural attrition. As with most managed populations, breeding pairs are prioritized to maintain or increase gene diversity through considerations of mean kinship, avoidance of inbreeding, differences in sire and dam mean kinships, and the degree of uncertainty within a pedigree. Only animals with 100% known pedigrees were included in the potentially breeding population and given breeding recommendations. In addition to these genetic criteria, the SSP also considered other factors such as group demographics and social needs and facility characteristics when making pairs and transfers. Transfers not related to establishing new breeding pairs were generally recommended to satisfy social needs or institutional requests.

Summary Actions 2007 - 2008: The SSP will recommend 24 females for breeding situations (with 17 males) and 17 transfers for this period. Recommendations contained in this master plan supercede those made by earlier plans.

Acknowledgements

The 2007 Chimpanzee SSP breeding and transfer plan was developed at the Chimpanzee SSP master planning meeting at Knoxville Zoo. The meeting was attended by:

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Many thanks to all who participated in the population planning process.

A handwritten signature in black ink that reads "Steve Ross". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

This plan was prepared and distributed with the assistance of the AZA Population Management Center.
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Description of Population Status

Introduction: The Chimpanzee SSP was formed in 1989 and completed its first master plan in 1991. The role of this SSP, as designated by the Ape Taxon Advisory Group 2000 Regional Collection Plan, is primarily as a flagship species to support conservation efforts in the wild. The species is endangered (U.S.F.W., IUCN Red List) and is listed in Appendix I of the Convention on International Trade in Endangered Species (CITES).

Comprehensive genetic and demographic analyses of the captive Chimpanzee SSP population were performed in July & August 2007, resulting in the current breeding and transfer plan. Analyses of the North American Regional Chimpanzee Studbook (current to July 2007) were performed using SPARKS 1.52, PopLink 1.07, and PM2000 1.212 (see Appendix A for more details). Recommendations contained in this breeding and transfer plan supercede those made by any earlier plans.

Managed Population: The current population size at the time of analyses is 279 (100 males, 179 females) distributed among 37 AZA institutions. However, we included in the genetic analyses only animals that can or should one day contribute genetically to the population by breeding. 140 animals were removed from the breeding population due to sterility, age, health reasons, or less than 100% known pedigree. The SSP encourages institutions housing any of the individuals with some degree of unknownness in their pedigree to research & clarify their origins or ancestry in order to enable their inclusion in the genetic analyses.

All individuals excluded from the breeding population are listed in Appendix B. The managed population following these exclusions is 139 individuals.

Demography: Chimpanzees have been in North American zoos as early as 1902 according to studbook records. The first recorded captive birth occurred in 1927, although it has only been since the late 1960s that captive born animals have been steadily increasing in numbers in the population. With the signing of the Convention on International Trade in Endangered Species, imports of chimpanzees from the wild essentially ceased and the population became more dependent on captive births for growth and maintenance.

Annual growth rates due to captive births have varied widely ($\lambda = 0.89 - 1.50$) since the population's inception. For the last 20 years, the population has maintained an average annual growth rate at or near 0% growth (lambda of 1.00). However, annual growth rates in the past few years have started to decline slightly; in both 2005 and 2006 there was a decline of 2% (annual lambda = 0.98) due to deaths of older animals and a birth rate insufficiency to compensate for these deaths. As a result, the SSP has recommended an increased number of births to increase the growth rate and maintain the TAG target population size of 300.

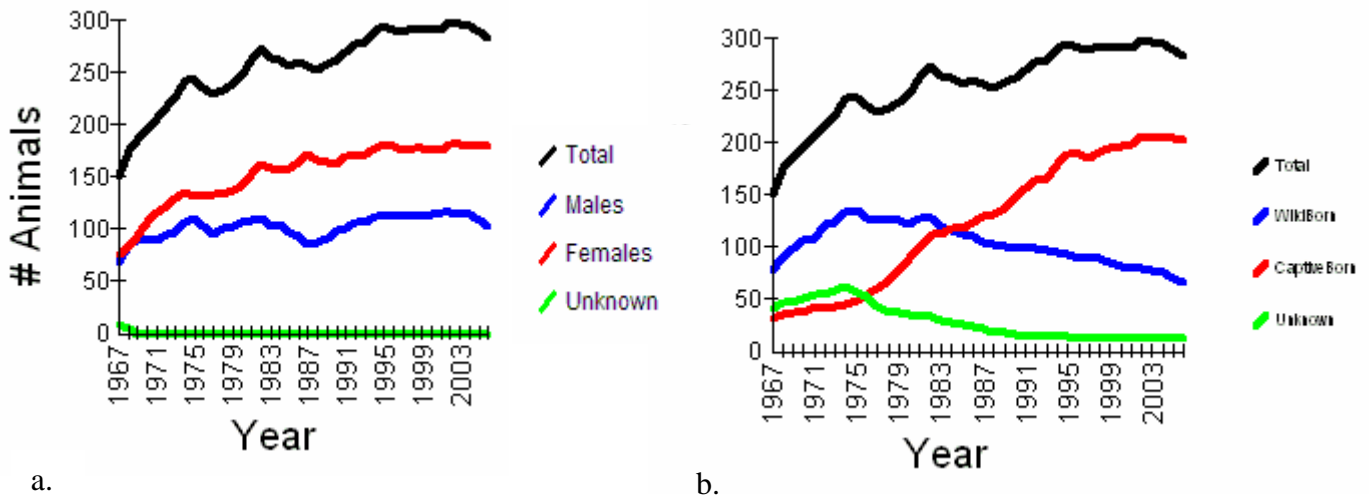


Figure 1a. Census of chimpanzees in AZA institutions (1967 – 31 Dec 2006) by sex.
Figure 1b. Census of chimpanzees in AZA institutions (1967 – 31 Dec 2006) by birth origin.
 From North American Regional Chimpanzee Studbook current to July 2007.

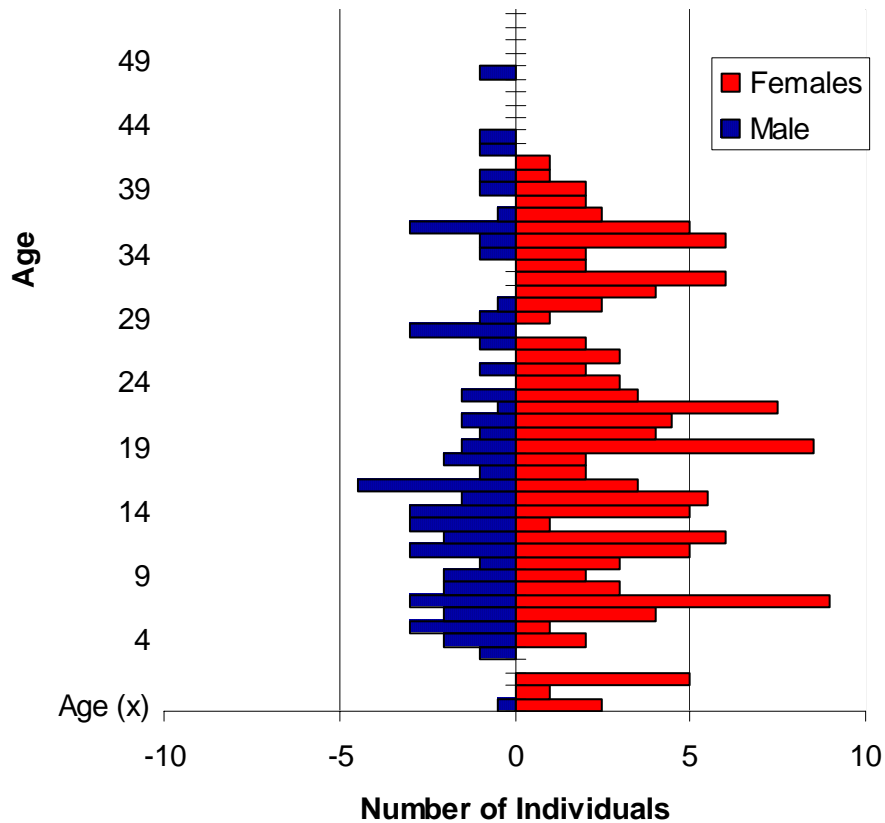


Figure 2. Age structure of potentially breeding Chimpanzee SSP population (i.e., after exclusions for sterility, unknown pedigree, etc). From North American Regional Studbook, current to July 2007.

The age structure of the population does not approximate a stable distribution due to a low number of individuals in the juvenile age classes and a female-biased sex ratio (Figure 2). This female bias is also apparent in the census graph (Figure 1a). With a long-lived species such as chimpanzees that exhibits little or no reproductive senescence, a slight departure from a stable age distribution in terms of sex ratio is not a concern. However, a small number of juvenile and a decreasing number of reproductive animals may be a concern in a social species for which group structure can complicate breeding recommendations.

According to studbook data from 1975 to present, the age at which males and females reach sexual maturity is approximately 5 years of age; males appear to be reproductive into their 50s and females into their 60s. The maximum lifespan of chimpanzees in zoos is 60 for males and 69 for females (based on some estimated birthdates of wild animals). Infant mortality of males is 31% and 25% for females (Appendix C).

Genetics: The potential breeding portion of the chimpanzee population is descended from 102 founders with 4 additional potential founders remaining. Genetic diversity in the population (98.78%) is very high relative to the average mammal SSP (93%). New pedigree information has increased the number of founders known to have contributed genetically to the living population. Due to the broad founder base of this population, gene diversity is projected to remain at or above 90% for at least 200 years based on current conditions and assuming random breeding. When gene diversity falls below 90% of that in the founding population, it is expected that reproduction will be increasingly compromised by, among other factors, lower birth weights and greater neonatal mortality.

GENETICS SUMMARY

	2003	2004	2005	2006	2007	Potential
Number of Founders	85	85	85	89	91	4 additional
Founder Genome Equivalents	36.61	36.61	37.66	39.35	41.02	66.61
Gene Diversity Retained (%)	98.63	98.62	98.67	98.73	98.78	99.25
Population Mean Kinship	0.0137	0.0138	0.0133	0.0129	0.0122	--
Mean Inbreeding (F)	0.0083	0.0083	0.0106	0.0093	0.0088	--
Percent known pedigree prior to exclusions	69.1		71.6	72.1	74.0	
Percent known pedigree after exclusions	100	100	100	100	98.9	--
Effective population size to census size ratio (N_e/N)	0.285	0.284	0.31	0.3055	0.2710	--
Years To 90% Gene Diversity	≥ 250	≥ 250	≥ 200	>275	>275	--
Gene Diversity at 100 Years From Present (%)	$\geq 90\%$	$\geq 90\%$	$\geq 90\%$	$\geq 90\%$	$\geq 90\%$	--

Potential gene diversity is also very high (99.25%) and could be exploited by breeding animals with low mean kinship values in order to equalize founder representation (Figure 3). In addition, at least four currently unrepresented founders in the population may contribute to gene diversity maintenance in the coming years through recommended breedings.

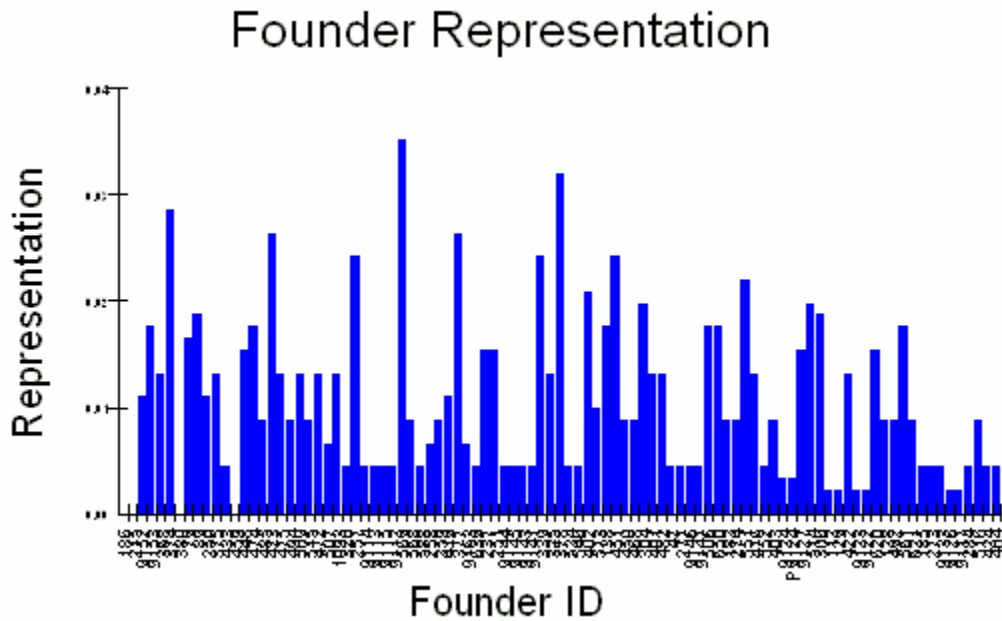


Figure 3. Founder representation of chimpanzees illustrating inequality of representation, or proportion of each founder's genes in the living descendant population. Additional potential founders not expected to reproduce have been excluded from the genetic analyses.

Management Strategy: The current SSP population is 279 individuals, with a TAG target size of 300. Demographic analyses indicate that to maintain at least the current population size (0% growth or $\lambda = 1.00$) approximately 8 births per year are necessary. Assuming that approximately 50% of pairs will produce offspring, 24 females and 17 males were selected as recommended breeders from the known-pedigreed portion of the population to offset deaths, maintain a stable age structure, and increase the population to its target size. As with most managed populations, breeding pairs are prioritized to maintain or increase gene diversity through considerations of mean kinship, avoidance of inbreeding, differences in sire and dam mean kinships, and the degree of uncertainty within a pedigree. In addition to these genetic criteria and the previously mentioned demographic goals, the Chimpanzee SSP also considered a broader set of criteria when making breeding pairs (in no particular order):

- ❖ location (to avoid unnecessary transfers)
- ❖ social group
- ❖ facility capacity
- ❖ facility quality/limitations/characteristics
- ❖ institutional needs
- ❖ mother rearing
- ❖ ability to hold offspring
- ❖ disease issues
- ❖ transfers/introductions
- ❖ individual behavior
- ❖ keeping natal/compatible males together
- ❖ forming male cohorts
- ❖ probability of success of producing offspring
- ❖ age of animals
- ❖ demographic structure of institutional groups
- ❖ data quality

Of these criteria, the SSP agreed that priority should be placed on:

- ❖ genetic & demographic considerations
- ❖ social group need
- ❖ facility characteristics, including carrying capacity and limitations

Finally, it is important to note that currently the Chimpanzee SSP population is a closed population. No individual chimpanzee is considered “surplus” and all institutions are collectively committed to providing lifetime care for every chimpanzee. In some rare circumstances, the program may accept a chimpanzee for inclusion into the SSP population but under no circumstances will individuals transfer from an SSP institution to a non-SSP institution.

Management Strategy Summary:

1. Recommend 24 females for breeding situations with 17 males.
2. Recommend 17 transfers, some for non-breeding purposes, and to meet institutional needs including three institutions phasing out of chimps.

Summary Breeding and Transfer Plan 2007

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

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ASHEBORO

North Carolina Zoological Park

Asheboro, NC

Institutional contact/representative: Lorraine Smith (336-879-7603)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
449	143	S	37	Terry	HOLD	ASHEBORO	DO NOT BREED		excluded
507	1201	F	35	Tammy	HOLD	ASHEBORO	DO NOT BREED		
516	162	S	35	Ruthie	HOLD	ASHEBORO	DO NOT BREED		excluded
571	155	F	33	Maggie	HOLD	ASHEBORO	DO NOT BREED		excluded
588	116	F	32	Betty	HOLD	ASHEBORO	DO NOT BREED		
622	48	M	31	Hondo	HOLD	ASHEBORO	DO NOT BREED		excluded
785	407	F	23	Amy	HOLD	ASHEBORO	DO NOT BREED		
876	899	F	19	Bea	SEND TO	SEDGWICK	DO NOT BREED		excluded
1019	1289	F	12	Maki	HOLD	ASHEBORO	DO NOT BREED		
1050	1401	F	10	Ruby	HOLD	ASHEBORO	DO NOT BREED		
1077	1404	M	10	Jonathan	HOLD	ASHEBORO	DO NOT BREED		excluded
1083	Y1M020	M	5	Sokoto	HOLD	ASHEBORO	DO NOT BREED		
1084	Y1M038	M	5	Lance	HOLD	ASHEBORO	DO NOT BREED		
1166	1754	M	8	Kendell	HOLS	ASHEBORO	DO NOT BREED		

Summary:

Before transfers: 5 males, 9 females

After transfers: 5 males, 8 females

Notes:

- Transfer adult female Bea (876) to Sedgwick
- Maintain birth control and continue integrations with the goal of a final group of 5.8

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

BALTIMORE

Baltimore Zoo

Baltimore, MD

Institutional contact/representative: Rebecca Gullott, (410-396-7102)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
721	3900	s	26	Charley	HOLD	BALTIMORE	DO NOT BREED		excluded
1022	95052	F	34	Joice	HOLD	BALTIMORE	DO NOT BREED		
1023	95053	F	21	Rustie	HOLD	BALTIMORE	BREED WITH	1073	
1024	95054	F	18	Carole	HOLD	BALTIMORE	BREED WITH	1073	
1025	95055	F	16	Bunny	HOLD	BALTIMORE	DO NOT BREED		excluded
1026	95056	F	14	Renee	HOLD	BALTIMORE	BREED WITH	1073	
1027	95059	F	11	Raven	HOLD	BALTIMORE	DO NOT BREED		excluded
1154	4919	F	1	Asali	HOLD	BALTIMORE	DO NOT BREED		excluded
1155	4896	F	1	Rozi	HOLD	BALTIMORE	DO NOT BREED		
1158	4948	F	0	Jambo	HOLD	BALTIMORE	DO NOT BREED		
1073	5509	M	9	Kasoje	RECEIVE FROM	LITTLE ROCK	BREED WITH	1023, 1024, 1026	

Summary:

Before transfers: 1 males, 9 females

After transfers: 2 males, 9 females

Notes:

- Receive young male Kasoje (1073) from Little Rock to return the group to multimale status
- Kasoje (1073) may breed with Rustie (1023), Carole (1024), and/or Renee (1026) but all other females must be contracepted
- The breeding recommendation for Rustie (1023) can be delayed as Maryland Zoo investigates medical options for her skin condition.
- The SSP is available for guidance on introduction planning.

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BROWNSVIL

Gladys Porter Zoo

Brownsville, TX

Institutional contact/representative: Jerry Stones (956-546-7187)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
473	1616	M	36	Doyle	TRANSFER TO	DALLAS	DO NOT BREED		
506	1420	s	34	Rusty	HOLD	BROWNSVIL	DO NOT BREED		excluded
617	1421	s	32	Shaba	HOLD	BROWNSVIL	DO NOT BREED		excluded
638	2150	M	30	Sancho	HOLD	BROWNSVIL	DO NOT BREED		excluded
784	2043	s	23	Camille	HOLD	BROWNSVIL	DO NOT BREED		
808	2149	s	22	J.k.	HOLD	BROWNSVIL	DO NOT BREED		
890	3375	s	19	Arby	HOLD	BROWNSVIL	DO NOT BREED		
970	4306	s	17	J.B.	HOLD	BROWNSVIL	DO NOT BREED		
1009	5048	s	15	Fiona	HOLD	BROWNSVIL	DO NOT BREED		

Summary:

Before transfers: 2 males, 7 females

After transfers: 1 males, 7 females

Notes:

- Transfer Doyle (473) to Dallas and proceed with integration into a single group.
- All females should be contracepted

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

BUSCH TAM

Busch Gardens

Tampa, FL

Institutional contact/representative: Lisa Harris (813-987-5250)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
258	15142	F	44	Smokey	HOLD	BUSCH TAM	DO NOT BREED		excluded
259	15143	F	44	Patsy	HOLD	BUSCH TAM	DO NOT BREED		excluded
545	15147	F	35	Sally	HOLD	BUSCH TAM	DO NOT BREED		
613	15154	F	32	Samantha	SEND TO	DALLAS	DO NOT BREED		
629	15153	F	31	Penny	SEND TO	DALLAS	DO NOT BREED		
993	53982	s	15	Mtoto	HOLD	BUSCH TAM	DO NOT BREED		excluded
1079	61088	M	6	Mwanzi	HOLD	BUSCH TAM	DO NOT BREED		

Summary:

Before transfers: 2 males, 5 females

After transfers: 2 males, 3 females

Notes:

- Transfer two adult females, Penny (629) and Samantha (613) to Dallas for breeding and to create a new social group dynamic at Busch Gardens.
- Following the transfer of 629 and 613 to Dallas, evaluation of new group dynamics should begin immediately. While the timeline for further transfers will depend on the progress of the group, the SSP will work with the institution to determine next steps for group growth within 6 months of the transfer
- All females should be contracepted at this time.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

CHATTANOOG

Warner Park Zoo

Chattanooga, TN

Institutional contact/representative: Dardenelle Long (423-697-1319)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
634	997	F	31	Josie	HOLD	CHATTANOOG	DO NOT BREED		excluded
649	998	s	30	Goliath	HOLD	CHATTANOOG	DO NOT BREED		excluded
831	999	F	21	Randi	HOLD	CHATTANOOG	DO NOT BREED		
857	1000	F	20	Ann	HOLD	CHATTANOOG	DO NOT BREED		excluded
1107	1001	s	38	Hank	HOLD	CHATTANOOG	DO NOT BREED		excluded

Summary:

Before transfers: 2 males, 3 females

After transfers: 2 males, 3 females

Notes:

- The SSP encourages Chattanooga to proceed with their social introductions with the goal of a single integrated group.
- The SSP is available for guidance on introduction planning.
- Female 999 Randi is genetically valuable and will be considered for possible future breeding situations. Following successful integrations, future opportunities for group growth and diversification will be considered.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

CHICAGOLP
Lincoln Park Zoo
 Chicago, IL

Institutional contact/representative: Sue Margulis (312-742-2345)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
185	314	s	48	Keo	HOLD	CHICAGOLP	DO NOT BREED		excluded
304	1935	F	42	Vicky	HOLD	CHICAGOLP	DO NOT BREED		excluded
371	464	F	41	June	HOLD	CHICAGOLP	DO NOT BREED		excluded
403	1368	F	41	Donna	HOLD	CHICAGOLP	DO NOT BREED		excluded
716	6239	F	26	Kibali	HOLD	CHICAGOLP	DO NOT BREED		
813	21172	F	22	Cashew	HOLD	CHICAGOLP	DO NOT BREED		excluded
976	21174	F	16	Kathy	HOLD	CHICAGOLP	DO NOT BREED		excluded
979	21169	s	16	Hank	HOLD	CHICAGOLP	DO NOT BREED		excluded
1029	21175	F	12	Nana	HOLD	CHICAGOLP	DO NOT BREED		excluded
1076	21171	M	7	Optimus	HOLD	CHICAGOLP	DO NOT BREED		excluded
1119	21170	M	6	Kipper	HOLD	CHICAGOLP	DO NOT BREED		excluded
1129	21173	F	7	Chuckie	HOLD	CHICAGOLP	DO NOT BREED		excluded

Summary:

Before transfers: 4 males, 8 females

After transfers: 4 males, 8 females

Notes:

- Maintain two non-breeding groups.
- The SSP will continue to consider options for adding individuals depending on group membership changes over the next few years.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

CLEVELAND

Cleveland Metroparks Zoo

Cleveland, OH

Institutional contact/representative: Kristen Lukas (216-635-2523)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
601	760613	F	32	Jackie	SEND TO	KNOXVILLE	DO NOT BREED		excluded
811	840711	F	22	Bo	SEND TO	KNOXVILLE	DO NOT BREED		
821	851113	F	22	Binti	SEND TO	KNOXVILLE	DO NOT BREED		

Summary:

Before transfers: 0 males, 3 females

After transfers: 0 males, 0 females

Notes:

- Per institutional request, all chimpanzees are recommended to be transferred out. Transfer all 0.3 to Knoxville Zoo at a time to be determined by both institutions. Following the transfers, Cleveland should notify the SSP regarding the future intentions for this species and if they want to remain part of the SSP as non-holding members.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

DALLAS

Dallas Zoo

Dallas, TX

Institutional contact/representative: Todd Bowsher (214-671-0432)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
212	001034	F	48	Bon Bon	HOLD	DALLAS	DO NOT BREED		excluded
368	001101	F	41	Missy	HOLD	DALLAS	DO NOT BREED		
473	1616	M	37	Doyle	RECEIVE FROM	BROWNSVIL	BREED WITH	914,629, 613	
613	15154	F	33	Samantha	RECEIVE FROM	BUSCH GARDENS		473,1063	
629	15153	F	35	Penny	RECEIVE FROM	BUSCH GARDENS		473,1063	
828	854223	F	21	Koko	HOLD	DALLAS	DO NOT BREED		excluded
954	959806	F	17	Victoria	HOLD	DALLAS	DO NOT BREED		
962	959805	M	17	Mookie	HOLD	DALLAS	DO NOT BREED		excluded
1063	97B518	M	10	K.C.	HOLD	DALLAS	BREED WITH	914,629, 613	
914	585	F	19	Ramona	HOLD	DALLAS	DO NOT BREED	473,1063	

Summary:

Before transfers: 2 males, 5 females

After transfers: 3 males, 8 females

Notes:

- Receive two adult females from Busch Gardens (613 and 629) and one adult male from Brownsville (473). All three of these individuals (in addition to resident male 1063 and resident female 914) come with breeding recommendations. All other females should be contracepted.
- The SSP is available for guidance on introduction planning.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

DETROIT

Detroit Zoological Institute
Royal Oak, MI

Institutional contact/representative: Scott Carter (248-541-5717 x3160)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
492	2897	F	36	Trixi	HOLD	DETROIT	DO NOT BREED		excluded
521	1847	F	35	Bubbles	HOLD	DETROIT	DO NOT BREED		excluded
774	2621	F	23	Abby	HOLD	DETROIT	DO NOT BREED		excluded
804	11081	M	22	Bahati	HOLD	DETROIT	BREED WITH	891, 983, 984	
891	2849	f	19	Akati	HOLD	DETROIT	BREED WITH	804 or 1052	
984	3412	F	15	Tanya	HOLD	DETROIT	BREED WITH	804 or 1052	
1047	4154	F	12	Chiana	HOLD	DETROIT	DO NOT BREED		excluded
1052	11105	M	11	Imara	HOLD	DETROIT	BREED WITH	891, 983, 984	
923	1830	s	17	Kiri	HOLD	DETROIT	BREED WITH		excluded
983	1791	F	15	Nyani	HOLD	DETROIT	BREED WITH	804 or 1052	

Summary:

Before transfers: 3 males, 7 females

After transfers: 3 males, 7 females

Notes:

- Both adult males (1052 and 804) have breeding recommendations with females 891, 983, 984. All other females should be contracepted.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

FORTWORTH

Fort Worth Zoological Park

Ft Worth, TX

Institutional contact/representative: Kurt Giesler (817-759-7500)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
630	282	s	31	Martin	HOLD	FORTWORTH	DO NOT BREED		excluded
635	283	F	31	Margaret	HOLD	FORTWORTH	DO NOT BREED		
922	730	s	17	Kirk	HOLD	FORTWORTH	DO NOT BREED		excluded
986	750	s	16	Nick	HOLD	FORTWORTH	DO NOT BREED		excluded

Summary:

Before transfers: 3 males, 1 females

After transfers: 3 males, 1 females

Notes:

- Maintain non-breeding group of 3.1

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

HONOLULU

Honolulu Zoo

Honolulu, HI

Institutional contact/representative: Richard Ball (808-971-7193)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
509	940027	F	36	Boo	HOLD	HONOLULU	DO NOT BREED		
569	940023	M	34	Roscoe	HOLD	HONOLULU	DO NOT BREED		Vasectomize
687	940025	F	27	Kumi	HOLD	HONOLULU	DO NOT BREED		
841	940028	F	21	Tatu	HOLD	HONOLULU	DO NOT BREED		
960	940026	M	16	Kibale	HOLD	HONOLULU	DO NOT BREED		Vasectomize
1012	940029	M	13	Konakona	HOLD	HONOLULU	DO NOT BREED		
1035	940404	M	12	Ke'alohe	HOLD	HONOLULU	DO NOT BREED		
1036	950217	M	11	Nalu	HOLD	HONOLULU	DO NOT BREED		
1081	990224	M	7	Pu'lwa	HOLD	HONOLULU	DO NOT BREED		

Summary:

Before transfers: 6 males, 3 females

After transfers: 6 males, 3 females

Notes:

- Female 509 Boo is genetically valuable and will be considered for placement in the future.
- Permanent contraception should be completed for 569 Roscoe and 960 Kibale.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

HOUSTON

Houston Zoo

Houston, TX

Institutional contact/representative: Hollie Collahan (713-533-6528)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
1048	M03050	F	10	Teeoni	RECEIVE FROM	KANSASCTY	DO NOT BREED		excluded
1049	M03051	F	10	Teetoo	RECEIVE FROM	KANSASCTY	DO NOT BREED		excluded
1061	M03042	M	8	Nusu	RECEIVE FROM	KANSASCTY	DO NOT BREED		excluded

Summary:

Before transfers: 0 males, 0 females

After transfers: 1 males, 2 females

Notes:

- Receive 1.2 from Kansas City. Transfers are tentatively scheduled for late 2008 and will be re-evaluated at the 2008 masterplan meeting
- Continue to work with the SSP in identifying appropriate cases in which chimpanzees could enter from outside the current population. The total group aims to be a multimale group of 6-8 individuals depending on availability both within and outside of the SSP.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

JACKSON

Jackson Zoological Park

Jackson, MS

Institutional contact/representative: Willie Bennett (601-352-2589)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
332	001767	M	42	Jo Jo	HOLD	JACKSON	BREED WITH	715	
433	000193	F	38	Judy	HOLD	JACKSON	DO NOT BREED		
450	000266	s	37	Jeanette	HOLD	JACKSON	DO NOT BREED		excluded
636	001768	F	31	Belle	HOLD	JACKSON	DO NOT BREED		
659	000630	s	28	Jackson	HOLD	JACKSON	DO NOT BREED		excluded
715	000815	F	26	Missy	HOLD	JACKSON	BREED WITH	332	
951	002017	F	17	Maybelle	HOLD	JACKSON	DO NOT BREED		
1071	991001	F	7	Binti	HOLD	JACKSON	DO NOT BREED		

Summary:

Before transfers: 2 male, 6 females

After transfers: 2 male, 6 females

Notes:

- Maintain two groups this year by integrating 715 Missy with 332 JoJo. The SSP is available to provide consultation for the introduction process.
- Breeding recommendation for 332 Jojo and 715 Missy. All other females should be contracepted and the group maintained as a non-breeding group.
- Coordinate with the SSP to determine long-term plan that will allow for a single group at this institution. If integration is not possible, solutions may include a small cohort being transferred elsewhere.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

JACKSONVL

Jacksonville Zoological Gardens

Jacksonville, FL

Institutional contact/representative: Tracy Williams (904-757-4463 x108)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
427	880040	F	38	Cindy	SEND TO	OKLAHOMA	DO NOT BREED		excluded
543	872072	M	35	Jackson	SEND TO	OKLAHOMA	DO NOT BREED		excluded
566	877107	F	34	Baby Face	SEND TO	OKLAHOMA	DO NOT BREED		excluded

Summary:

Before transfers: 1 male, 2 females

After transfers: 0 males, 0 females

Notes:

- As per institutional request, all chimpanzees are recommended to be transferred elsewhere.
- Following the transfers, Jacksonville should notify the SSP regarding the future intentions for this species and if they want to remain part of the SSP as non-holding members.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

JOHN BALL

John Ball Zoological Garden

Grand Rapids, MI

Institutional contact/representative: Norah Fletchall (616-336-4301)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
462	302525	F	37	Peggy	HOLD	JOHN BALL	DO NOT BREED		excluded
502	302522	s	27	Donnie	HOLD	JOHN BALL	DO NOT BREED		excluded
819	302526	f	22	Sanga	HOLD	JOHN BALL	DO NOT BREED		
892	302524	f	19	Susan	HOLD	JOHN BALL	DO NOT BREED		
1068	302527	F	8	Kiambi	HOLD	JOHN BALL	DO NOT BREED		excluded
661	92020	M	28	Sammy	RECEIVE FROM	SOUTHBEND	DO NOT BREED		
885	87003	F	19	Jody	RECEIVE FROM	SOUTHBEND	DO NOT BREED		

Summary:

Before transfers: 1 males, 4 females

After transfers: 2 male, 5 females

Notes:

Receive 1.1 from Potawatomi and integrate into social group. The SSP is available to provide consultation for the introduction process.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

KANSASCTY

Kansas City Zoological Gardens

Kansas City, MO

Institutional contact/representative: Liz Harmon (816-513-4605)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
272	299	F	43	Patty	HOLD	KANSASCTY	DO NOT BREED		excluded
273	298	F	43	Blackie	HOLD	KANSASCTY	DO NOT BREED		excluded
374	297	M	40	Jimmie	HOLD	KANSASCTY	DO NOT BREED		
609	M03049	F	32	Rachel	HOLD	KANSASCTY	DO NOT BREED		excluded
883	102154	f	19	Lucy	HOLD	KANSASCTY	BREED WITH	957, 1060	
957	102704	M	17	Joshua	HOLD	KANSASCTY	BREED WITH	883, 1044, 1015	
961	102363	M	16	Bondo	HOLD	KANSASCTY	DO NOT BREED		
1015	102486	f	13	Amber	HOLD	KANSASCTY	BREED WITH	957, 1060	
1044	102532	F	12	Kioja	HOLD	KANSASCTY	SEE NOTES		pregnant
1048	M03050	F	10	Teeoni	SEND TO	HOUSTON	DO NOT BREED		excluded
1049	M03051	F	10	Teetoo	SEND TO	HOUSTON	DO NOT BREED		excluded
1056	99M010	F	7	Molly	HOLD	KANSASCTY	DO NOT BREED		
1060	M03043	M	9	Dekese	HOLD	KANSASCTY	BREED WITH	883, 1044, 1015	
1061	M03042	M	8	Nusu	HOLD	HOUSTON	DO NOT BREED		excluded
1102	M00030	F	6	Halla	HOLD	KANSASCTY	DO NOT BREED		

Summary:

Before transfers: 6 males, 10 females

After transfers: 6 males, 10 females

Notes:

- Transfer 1.2 to Houston in late 2008 or early 2009 depending on timeline of new exhibit there.
- Recommended female 1044 Kioja is scheduled to give birth this year. Maintain contact with Ape TAG Birth Management Group and the SSP for assistance if necessary.
- Breeding recommendations for specific males (957 and 1060) will require consortship strategies in which temporary subgroups are formed with recommended individuals during peak female receptivity. Females without breeding recommendations must be contracepted in the presence of any uncontracepted males. Please consult with the SSP to develop a group-specific consort strategy.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

KNOXVILLE

Knoxville Zoological Gardens

Knoxville, TN

Institutional contact/representative: Lisa New (865-637-5331 x329)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
532	93	F	35	Debbie	HOLD	KNOXVILLE	DO NOT BREED		excluded
601	760613	F	32	Jackie	RECEIVE FROM	CLEVELAND	DO NOT BREED		excluded
811	840711	F	22	Bo	RECEIVE FROM	CLEVELAND	DO NOT BREED		
821	851113	F	22	Binti	RECEIVE FROM	CLEVELAND	DO NOT BREED		
639	3190	F	31	Daisy	HOLD	KNOXVILLE	BREED WITH	670	
670	3284	M	27	Jimbo	HOLD	KNOXVILLE	BREED WITH	639	
847	1050	F	20	Julie	HOLD	KNOXVILLE	DO NOT BREED		excluded
965	1447	M	16	Mugsy	HOLD	KNOXVILLE	DO NOT BREED		
967	1448	M	16	Mwelu	HOLD	KNOXVILLE	DO NOT BREED		

Summary:

Before transfers: 3 males, 3 females

After transfers: 3 males, 6 females

Notes:

- Receive three adult females (532, 601, 811) from Cleveland
- The SSP is available to provide consultation for the introduction process.
- 2006-07 breeding recommendation (670 x 639) remains in effect.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

LITTLEROC

Little Rock Zoological Gardens

Little Rock, AR

Institutional contact/representative: Syd Tanner (501-666-2406 x105)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
134	76	s	50	Jodie	HOLD	LITTLEROC	DO NOT BREED		excluded
237	0078	F	46	Kim	HOLD	LITTLEROC	DO NOT BREED		excluded
494	3311	F	36	Judy	HOLD	LITTLEROC	DO NOT BREED		
1072	4570	F	12	Mahale	HOLD	LITTLEROC	DO NOT BREED		
1073	5509	M	8	Kasoje	SEND TO	BALTIMORE	DO NOT BREED		
1004	5367	M	15	Kijana	RECEIVE FROM	SEDGWICK	DO NOT BREED		
853	2303	M	21	Bahati	RECEIVE FROM	SEDGWICK	DO NOT BREED		
1080	9996	M	5	Chance	RECEIVE FROM	SEDGWICK	DO NOT BREED		

Summary:

Before transfers: 1 males, 4 females

After transfers: 3 male, 4 females

Notes:

- Transfer young male Kasoje (1073) to Maryland for eventual breeding recommendations and receive intact cohort of males from Sedgwick (853, 1004, 1080) for possible future breeding.
- The SSP is available to provide consultation for the introduction process.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

LOSANGELE

Los Angeles Zoo

Los Angeles, CA

Institutional contact/representative: Jennie McNary (323-644-4207)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
215	1091	M	43	Bosco	HOLD	LOSANGELE	BREED WITH	1100	
420	03180	F	39	Pandora	HOLD	LOSANGELE	DO NOT BREED		
702	09920	F	27	Nan	HOLD	LOSANGELE	DO NOT BREED		
780	001440	F	23	Nan	HOLD	LOSANGELE	DO NOT BREED		
834	002202	F	21	Joanna	HOLD	LOSANGELE	DO NOT BREED		
906	002546	F	19	Gracie	HOLD	LOSANGELE	DO NOT BREED		
909	003080	M	18	Shaun	HOLD	LOSANGELE	DO NOT BREED		
963	003592	s	16	Gerrard	HOLD	LOSANGELE	DO NOT BREED		excluded
964	003668	F	16	Yoshiko	HOLD	LOSANGELE	DO NOT BREED		
1054	004621	M	13	Glenn	HOLD	LOSANGELE	DO NOT BREED		
1055	004987	M	10	Ripley	HOLD	LOSANGELE	DO NOT BREED		
1067	990029	F	7	Jean	HOLD	LOSANGELE	DO NOT BREED		
1099	990046	M	7	Jake	HOLD	LOSANGELE	DO NOT BREED		
1100	990112	F	7	Zoe	HOLD	LOSANGELE	BREED WITH	215	

Summary:

Before transfers: 6 males, 8 females

After transfers: 6 males, 8 females

Note:

- Breeding recommendations for specific male (215) will require consortship strategies in which temporary subgroup is formed with recommended female (1100) during peak receptivity. Females without breeding recommendations must be contracepted in the presence of any uncontracepted males. Please consult with the SSP to develop a group-specific consort strategy.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

LOWRY

Lowry Park Zoological Garden

Tampa, FL

Institutional contact/representative: LeeAnn Rottman (813-935-8552 x221)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
257	101477	s	44	Bamboo	HOLD	LOWRY	DO NOT BREED		excluded
657	100082	F	29	Jamie	HOLD	LOWRY	DO NOT BREED		excluded
720	100101	F	26	Rukiya	HOLD	LOWRY	DO NOT BREED		
874	100197	F	21	Twiggy	HOLD	LOWRY	DO NOT BREED		
1074	100968	M	9	Alex	HOLD	LOWRY	DO NOT BREED		excluded
1159	102202	F	1	Sasha	HOLD	LOWRY	DO NOT BREED		

Summary:

Before transfers: 2 males, 4 females

After transfers: 2 males, 4 females

Notes:

- Continue to monitor development of young female Sasha (1159) in her surrogate group
- Maintain non-breeding group of 2.4

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

MADISON

Henry Vilas Zoo

Madison, WI

Institutional contact/representative: Jeff Stafford (608-266-4733)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
998	1790	F	15	Magadi	HOLD	MADISON	DO NOT BREED		
1108	1784	M	24	Casey	HOLD	MADISON	DO NOT BREED		Vasectomize
1109	1785	F	23	Cooky	HOLD	MADISON	DO NOT BREED		excluded

Summary:

Before transfers: 1 male, 2 females

After transfers: 1 male, 2 females

Notes:

- Vasectomize Casey (1108). Until then, maintain all females on contraception.
- Maintain non-breeding group of 1.2

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

MANHATTAN

Sunset Zoo

Manhattan, KS

Institutional contact/representative: Regan Slonecker (785-587-2737)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
142	002474	F	52	Susie	HOLD	MANHATTAN	DO NOT BREED		excluded
665				Julian	HOLD	MANHATTAN	BREED WITH	995, 882	
882	980002	F	19	Hazina	HOLD	MANHATTAN	BREED WITH	665	
995	200405	F	14	Hususa	HOLD	MANHATTAN	BREED WITH	665	

Summary:

Before transfers: 1 male, 3 females

After transfers: 1 males, 3 females

Notes:

- Breeding recommendation for Julian (665) and two females, Hazina (882) and Hususa (995)

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

METROZOO

Miami Metrozoo

Miami, FL

Institutional contact/representative: Terry Webb (305-251-0400 x243)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
250	M00018	F	39	Bubbles	HOLD	METROZOO	DO NOT BREED		
448	931	F	37	Samantha	HOLD	METROZOO	DO NOT BREED		
748	M00032	F	24	Binti	HOLD	METROZOO	DO NOT BREED		excluded
972	M01240	s	16	Bocco	HOLD	METROZOO	DO NOT BREED		excluded
973	M01345	s	16	Niger	HOLD	METROZOO	DO NOT BREED		excluded
1046	M01740	s	12	Hondo	HOLD	METROZOO	DO NOT BREED		excluded
1086	Y2M034	M	4	Ben	HOLD	METROZOO	DO NOT BREED		excluded

Summary:

Before transfers: 4 males, 3 females

After transfers: 4 males, 3 females

Notes:

- Maintain non-breeding group of 4.3

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

MONTGOMRY

Montgomery Zoo

Montgomery, AL

Institutional contact/representative: Ken Naugher (334-354-6361)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
752	1418	M	24	Chester	HOLD	MONTGOMRY	DO NOT BREED		excluded
792	1390	F	22	Lihso	HOLD	MONTGOMRY	DO NOT BREED		
878	1999	F	18	Sessa	HOLD	MONTGOMRY	DO NOT BREED		excluded
1087	2290	M	9	John Paul	HOLD	MONTGOMRY	DO NOT BREED		excluded
1088	2648	F	7	Betty Lou	HOLD	MONTGOMRY	DO NOT BREED		excluded
1089	2936	M	5	Dougie	TRANSFER TO	SACRAMENTO	DO NOT BREED		
1145	1723	s	45	Snika	HOLD	MONTGOMRY	DO NOT BREED		excluded

Summary:

Before transfers: 3 males, 4 females

After transfers: 2 males, 4 females

Notes:

- Transfer young male Dougie (1089) to Sacramento for eventual breeding recommendation
- Maintain non-breeding group of 2.4

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

OAKLAND

Oakland Zoo

Oakland, CA

Institutional contact/representative: Danielle Stith (510-632-9525)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
771	578	s	23	Abigail	HOLD	OAKLAND	DO NOT BREED		excluded
1042	1032	F	11	Amira	HOLD	OAKLAND	DO NOT BREED		
1043	1036	F	11	Caramia	HOLD	OAKLAND	DO NOT BREED		
1090	1090	M	13	Moses	HOLD	OAKLAND	DO NOT BREED		excluded
1091	1089	F	14	Andi	HOLD	OAKLAND	DO NOT BREED		excluded

Summary:

Before transfers: 1 male, 4 females

After transfers: 1 males, 4 females

Notes:

- Maintain non-breeding group of 1.4
- 1042 Amira is genetically valuable and will be considered for placement elsewhere.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

OKLAHOMA

Oklahoma City Zoological Park

Oklahoma City, OK

Institutional contact/representative: Jennifer Davis (405-607-2320)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
427	880040	F	38	Cindy	RECEIVE FROM	JACKSONV	DO NOT BREED		excluded
543	872072	M	35	Jackson	RECEIVE FROM	JACKSONV	DO NOT BREED		excluded
566	877107	F	34	Baby Face	RECEIVE FROM	JACKSONV	DO NOT BREED		excluded
1003	927508	F	14	Chloe	HOLD	OKLAHOMA	BREED WITH	917	
760	612003	F	24	Abby	HOLD	OKLAHOMA	DO NOT BREED		excluded
781	613005	M	23	Mr. C	HOLD	OKLAHOMA	DO NOT BREED		
827	613106	M	21	Qadeer	HOLD	OKLAHOMA	DO NOT BREED		
879	612104	F	20	Kito	HOLD	OKLAHOMA	BREED WITH	917	
917	770007	M	18	Mwami	HOLD	OKLAHOMA	BREED WITH	879, 1003	

Summary:

Before transfers: 3 males, 2 females

After transfers: 4 males, 5 females

Notes:

- Receive intact group of 1.2 from Jacksonville and integrate to form single group of 4.5
- The SSP is available to provide consultation for the introduction process.
- Existing breeding recommendation for Mwami (917) with Kito (873) and/or Chloe (1003)

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

PORTLAND

Oregon Zoo

Portland, OR

Institutional contact/representative: Dave Thomas (503-226-1561 x283)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
128	0835	F	54	Coco	HOLD	PORTLAND	DO NOT BREED		excluded
456	1221	s	37	Buffy	HOLD	PORTLAND	DO NOT BREED		excluded
485	1021	M	36	Charlie	HOLD	PORTLAND	DO NOT BREED		
583	1143	F	33	Delilah	HOLD	PORTLAND	DO NOT BREED		excluded
610	1219	F	32	Leah	HOLD	PORTLAND	DO NOT BREED		excluded

Summary:

Before transfers: 1 male, 4 females

After transfers: 1 male, 4 females

Notes:

- The SSP will coordinate with Oregon to form a long-term plan for this institution and determine the restrictions and capabilities of the facility for future introductions.
- 485 Charlie is very genetically valuable and will be considered for a breeding situation in the future.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

RIO GRAND

Albuquerque Biological Park

Albuquerque, NM

Institutional contact/representative: Rick Janser (505-764-6224)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
1135	M02024	F	34	Bernice	HOLD	RIO GRAND	DO NOT BREED		excluded
1136	M02025	F	30	Elaine	HOLD	RIO GRAND	DO NOT BREED		excluded
1137	M02026	F	29	Gari	HOLD	RIO GRAND	DO NOT BREED		
1138	M02027	M	19	Alf	HOLD	RIO GRAND	DO NOT BREED		excluded
1139	M02028	F	25	Tracey	HOLD	RIO GRAND	DO NOT BREED		
1140	M02029	F	8	Leia	HOLD	RIO GRAND	DO NOT BREED		excluded
1141	M02030	F	7	Geri	HOLD	RIO GRAND	DO NOT BREED		excluded
1142	M02031	M	6	Thunder	HOLD	RIO GRAND	DO NOT BREED		excluded
1143	M02032	F	6	Rainey	HOLD	RIO GRAND	DO NOT BREED		excluded
1144	M02033	F	6	Babbett	HOLD	RIO GRAND	DO NOT BREED		excluded
1163	M07003	F	1	Kianga	HOLD	RIO GRAND	DO NOT BREED		

Summary:

Before transfers: 2 males, 8 females

After transfers: 2 males, 8 females

Notes:

- Females 1137 Gari and 1139 Tracey are genetically valuable and will be considered for breeding situation in the future.
- Many of the individuals in this group are excluded from the breeding population due to unknownness. If animal record research provides sufficient information, some of the individuals could be added back into the breeding population and possibly receive breeding recommendations in the future.
- Maintain a non-breeding group of 2.8

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

ROLLING H

Rolling Hills Refuge Wildl.Cons.Center
Salina, KS

Institutional contact/representative: Sandy Walker (785-827-9488)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
1093	08A97	M	35	Cocoa	HOLD	ROLLING H	DO NOT BREED		
1094	08B97	M	25	Tohlo	HOLD	ROLLING H	DO NOT BREED		
1095	08C97	M	28	Shudak	HOLD	ROLLING H	DO NOT BREED		
1096	08D97	s	25	Auli	HOLD	ROLLING H	DO NOT BREED		excluded

Summary:

Before transfers: 4 males, 0 females

After transfers: 4 males, 0 females

Notes:

- 1094 Tohlo, 1095 Shudak and 1096 Auli are all genetically valuable and will be considered for placement in a breeding situation in the future.
- A timeline of future facility renovation will be necessary to evaluate the suitability of animal transfers and group changes

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

SACRAMNTO

Sacramento Zoo

Sacramento, CA

Institutional contact/representative: Leslie Field

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
1089	2936	M	5	Dougie	RECEIVE FROM	MONTGMRY	DO NOT BREED		
276	100082	M	43	Joey	HOLD	SACRAMNTO	DO NOT BREED		excluded
295	100737	F	42	Josie	HOLD	SACRAMNTO	DO NOT BREED		excluded
969	101004	M	17	Pablo	HOLD	SACRAMNTO	DO NOT BREED		
991	100997	F	15	Amelia	HOLD	SACRAMNTO	DO NOT BREED		
1097	101028	F	6	Maria	HOLD	SACRAMNTO	DO NOT BREED		

Summary:

Before transfers: 2 males, 3 females

After transfers: 3 males, 3 females

Notes:

- Receive Dougie (1089) from Montgomery for possible future breeding.
- The SSP is available to provide consultation for the introduction process.
- Maintain non-breeding group of 3.3

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

SAN FRAN

San Francisco Zoological Gardens

San Francisco, CA

Institutional contact/representative: Lisa Hamburger

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
186	16816	M	48	Cobby	HOLD	SAN FRAN	BREED WITH	446, 447	
214	1679	s	47	Tallulah	HOLD	SAN FRAN	DO NOT BREED		excluded
446	1708	F	37	Maggie	HOLD	SAN FRAN	BREED WITH	186	excluded
447	1707	F	37	Minnie	HOLD	SAN FRAN	BREED WITH	186	excluded

Summary:

Before transfers: 1 male, 3 females

After transfers: 1 male, 3 females

Notes:

- Three individuals are highly genetically valuable but given facility issues and reproductive histories, no transfers are recommended at this time.
- Maintain standing breeding recommendations for current group with the recognition that these are of low probability.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

SCOTTSBLU

Riverside Zoo

Scottsbluff, NE

Institutional contact/representative: Joe Clawson (308-630-6236)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
226	724	F	46	Nina	HOLD	SCOTTSBLU	DO NOT BREED		excluded
341	485	M	41	Jack	HOLD	SCOTTSBLU	DO NOT BREED		excluded
380	484	F	40	Rosie	HOLD	SCOTTSBLU	DO NOT BREED		
459	738	F	37	Sarah	HOLD	SCOTTSBLU	DO NOT BREED		
823	725	F	22	Baby Jane	HOLD	SCOTTSBLU	DO NOT BREED		
1016	677	M	14	Scooter	HOLD	SCOTTSBLU	DO NOT BREED		excluded
1092	1208	F	6	Millie	HOLD	SCOTTSBLU	DO NOT BREED		

Summary:

Before transfers: 2 males, 5 females

After transfers: 2 males, 5 females

Notes:

- 823 Baby Jane and 1092 Millie are genetically valuable and will be considered for breeding situations in the future.
- Contracept all females to maintain non-breeding status.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

SEDGWICK

Sedgwick County Zoo
Wichita, KS

Institutional contact/representative: Mike Quick (316 266 8237)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
474	SM63	M	37	Marbles	HOLD	SEDGWICK	BREED WITH	475	
475	SM57	F	36	Audra	HOLD	SEDGWICK	BREED WITH	474	
511	8774	F	35	Tammy	HOLD	SEDGWICK	DO NOT BREED		excluded
653	916	M	29	Gomez	HOLD	SEDGWICK	DO NOT BREED		
876	899	F	19	Bea	RECEIVE FROM	ASHEBORO	DO NOT BREED		excluded
820	1828	s	22	Mwana	HOLD	SEDGWICK	DO NOT BREED		excluded
853	2303	M	20	Bahati	SEND TO	LITTLEROC	DO NOT BREED		
1004	5367	M	14	Kijana	SEND TO	LITTLEROC	DO NOT BREED		
1051	7237	M	11	Moshi	HOLD	SEDGWICK	DO NOT BREED		
1057	7824	F	9	Sukari	HOLD	SEDGWICK	DO NOT BREED		
1080	9996	M	4	Chance	SEND TO	LITTLEROC	DO NOT BREED		

Summary:

Before transfers: 6 males, 4 females

After transfers: 3 males, 5 females

Notes:

- Receive female Bea (876) from North Carolina and transfer out three males (853, 1004, 1080) to Little Rock
- The SSP is available for guidance on introduction planning.
- Standing breeding recommendation for 474 Marbles and 475 Audra...ensure contraception for all other females

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

SOUTHBEND

Potawatomi Zoo

South Bend, IN

Institutional contact/representative: Dan Powell (219-235-9800)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
661	92020	M	28	Sammy	SEND TO	JOHN BALL	DO NOT BREED		
885	87003	F	19	Jody	SEND TO	JOHN BALL	DO NOT BREED		excluded

Summary:

Before transfers: 1 male, 1 female

After transfers: 0 males, 0 females

Notes:

- As per institutional request, all chimpanzees are recommended to be transferred out. Transfer 1.1 to John Ball Zoo. Following the transfers, Potawatomi should notify the SSP regarding the future intentions for this species and if they want to remain part of the SSP as non-holding members.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

ST LOUIS

St. Louis Zoological Park

St. Louis, MO

Institutional contact/representative: Ingrid Porton (314-781-0900 x358)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
574	1850	F	33	Beauty	HOLD	ST LOUIS	DO NOT BREED		excluded
375	940105	M	39	Smoke	HOLD	ST LOUIS	DO NOT BREED	1065, 515	
1001	940302	M	14	Jimiyu	HOLD	ST LOUIS	DO NOT BREED	1065, 515	
1008	941706	F	14	Mlinzi	HOLD	ST LOUIS	DO NOT BREED		
1010	930544	M	13	Hugo	HOLD	ST LOUIS	DO NOT BREED	1065, 515	
1020	940809	F	12	Cinders	HOLD	ST LOUIS	DO NOT BREED		
1064	980753	F	8	Holly	HOLD	ST LOUIS	DO NOT BREED		excluded
1065	980754	F	8	Bakhari	HOLD	ST LOUIS	DO NOT BREED	1001, 375, 1010	
1148	102967	F	5	Tammy	HOLD	ST LOUIS	DO NOT BREED		excluded
515	105628	F	37	Rosebud	HOLD	ST LOUIS	BREED WITH	1001, 375, 1010	
1085	105627	F	5	Utamu	HOLD	ST LOUIS			

Summary:

Before transfers: 3 males, 8 females

After transfers: 3 males, 8 females

Notes:

- Breeding recommendations for all three males (375, 1001, 1010) with selected females (1065 and 515). All other females should be contracepted.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

TOLEDO

Toledo Zoological Gardens

Toledo, OH

Institutional contact/representative: Glenous Favata

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
224	63	M	47	Harvey	HOLD	TOLEDO	SEE NOTES		excluded
228	64	F	46	Fifi	HOLD	TOLEDO	SEE NOTES		excluded

Summary:

Before transfers: 1 male, 1 female

After transfers: 1 male, 1 female

Notes:

- Maintain non-breeding group of 1.1

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

TULSA

Tulsa Zoo and Living Museum

Tulsa, OK

Institutional contact/representative: Pat Murphy (918-669-6230)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	With	Notes
472	1839	F	35	Suzy	HOLD	TULSA	DO NOT BREED		
568	2461	F	32	Jodi	HOLD	TULSA	DO NOT BREED		
621	4625	F	31	Sarah	HOLD	TULSA	DO NOT BREED		excluded
859	8074	M	20	Morris	HOLD	TULSA	DO NOT BREED		excluded
982	10066	F	16	Hope	HOLD	TULSA	DO NOT BREED		
990	10257	M	15	Alvin	HOLD	TULSA	DO NOT BREED		
1164	15327	F	1	Vindi	HOLD	TULSA	DO NOT BREED		
1169	15407	M	1	Bernsen	HOLD	TULSA	DO NOT BREED		

Summary:

Before transfers: 3 males, 5 females

After transfers: 3 males, 5 females

Notes:

- Monitor development of youngsters Vindi (1164) and Bernsen (1169) and maintain contraception on all females.

PLEASE NOTE: INSTITUTIONS HOLDING ANIMALS WITHOUT BREEDING RECOMMENDATIONS ARE RESPONSIBLE FOR ENSURING THAT PROPER CONTRACEPTIVE STRATEGIES ARE IN PLACE.

W PALM BE

Lion Country Safari Inc - Florida

Loxahatchee, FL

Institutional contact/representative: Terry Wolf (561-793-1084 x350)

ID	Local ID	Sex	Age	Name	Disposition	Location	Breeding	Notes
62	347	F	63	Inky	HOLD	W PALM BE	DO NOT BREED	Excluded
110	350	F	68	Lil	HOLD	W PALM BE	DO NOT BREED	Excluded
				Mama				
277	351	s	43	Whitey	HOLD	W PALM BE	DO NOT BREED	Excluded
343	357	s	36	Bashful	HOLD	W PALM BE	DO NOT BREED	Excluded
424	50	F	38	Doll	HOLD	W PALM BE	DO NOT BREED	excluded
425	60	F	39	Swing	HOLD	W PALM BE	DO NOT BREED	excluded
439	354	F	38	Melody	HOLD	W PALM BE	DO NOT BREED	Excluded
471	364	F	37	Cindy	HOLD	W PALM BE	DO NOT BREED	Excluded
480	49	s	36	Cooper	HOLD	W PALM BE	DO NOT BREED	Excluded
554	375	F	35	Gin	HOLD	W PALM BE	DO NOT BREED	Excluded
582	360	s	33	Higgy	HOLD	W PALM BE	DO NOT BREED	Excluded
603	361	s	33	Peter	HOLD	W PALM BE	DO NOT BREED	Excluded
710	376	s	26	Elgin	HOLD	W PALM BE	DO NOT BREED	Excluded
737	371	F	25	Gin	HOLD	W PALM BE	DO NOT BREED	
759	382	F	24	Sabrina	HOLD	W PALM BE	DO NOT BREED	Excluded
762	377	s	24	Ian	HOLD	W PALM BE	DO NOT BREED	Excluded
830	390	F	21	Tonic	HOLD	W PALM BE	DO NOT BREED	Excluded
974	2000	s	16	Figment	HOLD	W PALM BE	DO NOT BREED	Excluded
975	1098	F	16	Dandy	HOLD	W PALM BE	DO NOT BREED	Excluded
1033	950252	F	11	Orbit	HOLD	W PALM BE	DO NOT BREED	Excluded
1034	950254	F	11	Janice	HOLD	W PALM BE	DO NOT BREED	Excluded
1075	970063	F	9	Juniper	HOLD	W PALM BE	DO NOT BREED	Excluded
1128	990139	F	7	Irene	HOLD	W PALM BE	DO NOT BREED	Excluded
1146	D003	M	4	Bamboo	HOLD	W PALM BE	DO NOT BREED	Excluded
1156	F069	F	1	Olive	HOLD	W PALM BE	DO NOT BREED	Excluded
1157	F077	F	1	Noel	HOLD	W PALM BE	DO NOT BREED	Excluded

Summary:

Before transfers: 10 males, 17 females

After transfers: 10 males, 17 females

Notes:

- Continue integration of groups 2 and 3. The SSP is available to provide consultation for the introduction process.

Appendix A

Summary of Data Exports

Project: chimp07c
Report compiled under Population Management 2000, version 1.211
9:42:41 AM, 8/13/2007

Comments: third project, second studbook, to get accurate genetic stats

Date to be used for calculations: 8/13/2007

Demographic data from: C:\Program Files\PopLink 1.07\PopLink Databases\Chimp07b\mChimp07b.prn and
C:\Program Files\PopLink 1.07\PopLink Databases\Chimp07b\fChimp07b.prn

Genetic data from: C:\Program Files\PopLink 1.07\PopLink Databases\Chimp07b\Chimp07b.ped

Studbook information:

Data exported on: 8/1/2007

Data compiled by: Steve Ross

Contact info: Lincoln Park Zoo ross@lpzoo.org

Data current thru: 8/1/2007

Scope of data: NORTH AMERICAN REGIONAL

Demographic filter conditions:

Association = AZA.FED During 1/1/1975 - 8/1/2007 Status = Living

Genetic filter conditions:

Association = AZA.FED

As of 8/1/2007

Status = Living

Appendix B

Individuals Excluded from the Analytical Population

Some exclusions have changed as a result of new pedigree information. The SSP encourages institutions housing individuals with unknownness in their pedigree to research the animals' pedigrees in order to clarify their origins and enable their inclusion in the genetic analyses and the breeding population.

ID	LOCATION/REASON		
		566	JACKSONVL 0% known
62	W PALM BE Reproductive History	571	ASHEBORO 0% known
110	W PALM BE Reproductive History	574	ST LOUIS Reproductive History
128	PORTLAND Reproductive History	582	W PALM BE Sterile; 0% known
134	LITTLEROC Sterile	583	PORTLAND 50% known
142	MANHATTAN 0% known	601	CLEVELAND 0% known
185	CHICAGOLP Sterile	603	W PALM BE Sterile; 0% known
212	DALLAS 0% known	609	KANSASCTY 50% known
214	SAN FRAN Sterile	610	PORTLAND 50% known
224	TOLEDO Reproductive History	617	BROWNSVIL Sterile; 0% known
226	SCOTTSBLU Reproductive History	621	TULSA Reproductive History
228	TOLEDO Reproductive History	622	ASHEBORO Behavioral
237	LITTLEROC Reproductive History	630	FORTWORTH Sterile
257	LOWRY Sterile	634	CHATTANOG 50% known
258	BUSCH TAM Reproductive History	638	BROWNSVIL 0% known
259	BUSCH TAM Reproductive History	649	CHATTANOG Sterile; 0% known
272	KANSASCTY Age	657	LOWRY
273	KANSASCTY Age	659	JACKSON Sterile
276	SACRAMNTO	710	W PALM BE Sterile
277	W PALM BE Sterile	721	BALTIMORE Sterile; 50% known
295	SACRAMNTO 0% known	748	METROZOO 50% known
304	CHICAGOLP Reproductive History	752	MONTGOMRY Sterile;
341	SCOTTSBLU Reproductive History	759	W PALM BE 75% known
343	W PALM BE Sterile	760	OKLAHOMA 50% known
371	CHICAGOLP 50% known; health	762	W PALM BE Sterile
403	CHICAGOLP Reproductive History	771	OAKLAND Sterile
424	W PALM BE Sterile	774	DETROIT 50% known
425	W PALM BE Sterile	813	CHICAGOLP 50% known
427	JACKSONVL Sterile	820	SEDGWICK Sterile
439	W PALM BE 50% known	828	DALLAS 50% known
446	SAN FRAN Reproductive History	830	W PALM BE 0% known
447	SAN FRAN Reproductive History	847	KNOXVILLE 50% known
449	ASHEBORO Sterile; 0% known	857	CHATTANOG 50% known
450	JACKSON Sterile	859	TULSA Reproductive History
456	PORTLAND Sterile; 0% known	876	ASHEBORO 50% known
462	JOHN BALL Reproductive History	878	MONTGOMRY 50% known
471	W PALM BE 0% known	885	SOUTHBEND Health
480	W PALM BE Sterile	922	FORTWORTH Sterile; 50% known
492	DETROIT Reproductive History	923	DETROIT
502	JOHN BALL Sterile; 0% known	962	DALLAS 50% known
506	BROWNSVIL sterile	963	LOSANGELE Sterile
511	SEDGWICK 0% known	967	KNOXVILLE
516	ASHEBORO Sterile	972	METROZOO Sterile
521	DETROIT Reproductive History	973	METROZOO Sterile
532	KNOXVILLE 0% known	974	W PALM BE Sterile
543	JACKSONVL	975	W PALM BE Sterile
554	W PALM BE 0% known	976	CHICAGOLP 50% known

979	CHICAGOLP Sterile; 0% known	1091	OAKLAND 0% known
986	FORTWORTH Sterile; 75% known	1096	ROLLING H Sterile
993	BUSCH TAM Sterile	1107	CHATTANOOG Sterile
1016	SCOTTSBLU 50% known	1108	MADISON 50% known
1025	BALTIMORE 75% known	1109	MADISON 0% known
1027	BALTIMORE 50% known	1119	CHICAGOLP 25% known
1029	CHICAGOLP 0% known	1128	W PALM BE 0% known
1033	W PALM BE 50% known	1129	CHICAGOLP 25% known
1034	W PALM BE 0% known	1135	RIO GRAND 0% known
1046	METROZOO Sterile; 75% known	1136	RIO GRAND 50% known
1047	DETROIT 75% known	1138	RIO GRAND 0% known
1048	KANSASCTY 75% known	1140	RIO GRAND 0% known
1049	KANSASCTY 75% known	1141	RIO GRAND 50% known
1061	KANSASCTY 75% known	1142	RIO GRAND 0% known
1064	ST LOUIS 50% known	1143	RIO GRAND 0% known
1068	JOHN BALL 50% known	1144	RIO GRAND 0% known
1074	LOWRY 0% known	1145	MONTGOMRY Sterile; 0% known
1075	W PALM BE 0% known	1146	W PALM BE % known
1076	CHICAGOLP 0% known	1148	ST LOUIS 0% known
1077	ASHEBORO 50% known	1154	BALTIMORE 50% known
1086	METROZOO 62.5% known	1156	W PALM BE 0% known
1087	MONTGOMRY Sterile;	1157	W PALM BE 0% known
1088	MONTGOMRY 75% known	1163	RIO GRAND 0% known
1090	OAKLAND 0% known		

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Appendix C
Life Tables

Males

Age (x)	Qx	Px	lx	Mx	Vx	Ex	Risk (Qx)	Risk (Mx)
0	0.310	0.690	1.000	0.000	1.183	26.163	197.600	142.300
1	0.020	0.980	0.690	0.000	1.481	31.127	136.900	134.200
2	0.020	0.980	0.676	0.000	1.530	30.741	132.200	131.700
3	0.010	0.990	0.663	0.000	1.572	30.196	138.800	137.400
4	0.010	0.990	0.656	0.000	1.607	29.491	136.700	136.300
5	0.010	0.990	0.649	0.000	1.643	28.779	141.200	140.800
6	0.010	0.990	0.643	0.010	1.679	28.059	136.000	135.200
7	0.040	0.960	0.637	0.070	1.732	27.751	133.000	128.800
8	0.040	0.960	0.611	0.080	1.752	27.865	127.100	123.400
9	0.010	0.990	0.587	0.100	1.736	27.563	119.400	118.700
10	0.020	0.980	0.581	0.110	1.681	26.967	117.200	116.600
11	0.010	0.990	0.569	0.100	1.614	26.364	110.900	110.200
12	0.030	0.970	0.563	0.120	1.564	25.880	111.600	111.000
13	0.010	0.990	0.547	0.100	1.491	25.392	109.200	108.300
14	0.000	1.000	0.541	0.100	1.415	24.515	103.900	103.900
15	0.060	0.940	0.541	0.120	1.372	24.242	102.000	97.700
16	0.000	1.000	0.509	0.080	1.307	23.984	94.900	94.900
17	0.030	0.970	0.509	0.150	1.261	23.334	90.500	89.300
18	0.010	0.990	0.493	0.130	1.147	22.793	82.900	82.700
19	0.000	1.000	0.488	0.110	1.035	21.903	79.700	79.700
20	0.040	0.960	0.488	0.110	0.955	21.330	82.300	80.400
21	0.030	0.970	0.469	0.100	0.886	21.069	77.600	76.400
22	0.010	0.990	0.455	0.060	0.812	20.482	74.300	73.800
23	0.030	0.970	0.450	0.160	0.777	19.879	71.800	71.100
24	0.040	0.960	0.437	0.060	0.647	19.562	68.000	66.600
25	0.020	0.980	0.419	0.080	0.612	19.140	62.400	61.900
26	0.030	0.970	0.411	0.070	0.552	18.604	61.300	60.000
27	0.020	0.980	0.399	0.050	0.501	18.057	58.000	57.300
28	0.050	0.950	0.391	0.030	0.473	17.673	55.400	53.600
29	0.020	0.980	0.371	0.030	0.464	17.284	48.200	47.600
30	0.000	1.000	0.364	0.040	0.444	16.451	44.800	44.800
31	0.050	0.950	0.364	0.040	0.419	15.847	43.800	43.300
32	0.070	0.930	0.345	0.110	0.408	15.790	40.100	38.100
33	0.030	0.970	0.321	0.030	0.318	15.581	36.400	36.100
34	0.030	0.970	0.312	0.030	0.301	15.031	33.700	33.500
35	0.060	0.940	0.302	0.000	0.287	14.689	32.100	30.800
36	0.000	1.000	0.284	0.040	0.299	14.126	28.900	28.900
37	0.080	0.920	0.284	0.020	0.273	13.673	24.600	23.700
38	0.000	1.000	0.261	0.020	0.268	13.224	22.000	22.000
39	0.050	0.950	0.261	0.030	0.257	12.537	20.600	19.600
40	0.000	1.000	0.248	0.000	0.236	11.841	19.000	19.000
41	0.110	0.890	0.248	0.030	0.252	11.472	18.000	16.900
42	0.000	1.000	0.221	0.000	0.239	11.119	14.700	14.700
43	0.070	0.930	0.221	0.080	0.251	10.486	13.900	13.100
44	0.000	1.000	0.206	0.000	0.179	9.843	10.000	10.000
45	0.100	0.900	0.206	0.050	0.191	9.309	10.000	9.600
46	0.000	1.000	0.185	0.000	0.151	8.770	9.000	9.000
47	0.000	1.000	0.185	0.060	0.152	7.770	9.000	9.000
48	0.130	0.870	0.185	0.000	0.100	7.241	7.900	7.700
49	0.000	1.000	0.161	0.000	0.109	6.707	5.000	5.000
50	0.000	1.000	0.161	0.110	0.110	5.707	5.000	5.000
51	0.200	0.800	0.161	0.000	0.000	5.230	5.000	4.000
52	0.000	1.000	0.129	0.000	0.000	4.759	4.000	4.000
53	0.250	0.750	0.129	0.000	0.000	4.296	4.000	3.200
54	0.000	1.000	0.097	0.000	0.000	3.845	3.000	3.000
55	0.330	0.670	0.097	0.000	0.000	3.407	3.000	2.700
56	0.500	0.500	0.065	0.000	0.000	4.000	2.000	1.900
57	0.000	1.000	0.032	0.000	0.000	4.500	1.000	1.000
58	0.000	1.000	0.032	0.000	0.000	3.500	1.000	1.000
59	0.000	1.000	0.032	0.000	0.000	2.500	1.000	1.000
60	0.000	1.000	0.032	0.000	0.000	1.500	1.000	1.000
61	1.000	0.000	0.032	0.000	0.000	1.000	0.000	0.000

r = 0.0119
lambda = 1.0120
T = 18.63
N = 59.50
N(at 20 yrs) = 75.54

Females

Age (x)	Qx	Px	lx	Mx	Vx	Ex	Risk (Qx)	Risk (Mx)
0	0.250	0.750	1.000	0.000	1.143	33.511	222.600	174.500
1	0.060	0.940	0.750	0.000	1.379	39.102	173.100	165.800
2	0.010	0.990	0.705	0.000	1.435	39.516	163.600	163.000
3	0.010	0.990	0.698	0.000	1.454	38.905	168.500	167.300
4	0.000	1.000	0.691	0.000	1.466	38.096	168.500	168.500
5	0.020	0.980	0.691	0.010	1.486	37.471	174.800	172.100
6	0.010	0.990	0.677	0.010	1.504	37.028	177.500	176.400
7	0.010	0.990	0.670	0.020	1.514	36.392	178.000	177.200
8	0.020	0.980	0.664	0.060	1.521	35.930	177.400	175.400
9	0.010	0.990	0.650	0.060	1.489	35.464	171.900	171.000
10	0.020	0.980	0.644	0.090	1.455	34.988	178.800	177.300
11	0.020	0.980	0.631	0.080	1.398	34.682	181.100	179.100
12	0.010	0.990	0.618	0.070	1.342	34.196	181.100	180.800
13	0.010	0.990	0.612	0.060	1.289	33.532	176.500	175.500
14	0.010	0.990	0.606	0.060	1.246	32.860	167.700	166.200
15	0.020	0.980	0.600	0.080	1.208	32.345	162.300	161.500
16	0.020	0.980	0.588	0.070	1.155	31.984	154.700	153.600
17	0.010	0.990	0.576	0.050	1.105	31.458	146.600	145.500
18	0.010	0.990	0.571	0.060	1.069	30.765	147.000	146.700
19	0.010	0.990	0.565	0.050	1.023	30.066	145.500	144.800
20	0.000	1.000	0.559	0.050	0.981	29.213	137.900	137.900
21	0.010	0.990	0.559	0.030	0.939	28.355	135.100	133.900
22	0.020	0.980	0.554	0.070	0.925	27.770	125.800	125.100
23	0.020	0.980	0.542	0.070	0.876	27.317	116.600	115.800
24	0.020	0.980	0.532	0.050	0.825	26.854	111.200	110.200
25	0.020	0.980	0.521	0.070	0.793	26.382	107.500	106.600
26	0.010	0.990	0.511	0.050	0.737	25.769	105.300	105.200
27	0.030	0.970	0.505	0.030	0.703	25.274	101.200	99.100
28	0.010	0.990	0.490	0.040	0.689	24.773	95.700	94.800
29	0.010	0.990	0.485	0.020	0.658	24.013	94.200	93.500
30	0.000	1.000	0.481	0.040	0.643	23.129	93.000	93.000
31	0.020	0.980	0.481	0.030	0.611	22.353	90.800	89.900
32	0.040	0.960	0.471	0.040	0.601	22.011	82.100	80.500
33	0.030	0.970	0.452	0.010	0.584	21.775	73.300	72.000
34	0.010	0.990	0.439	0.060	0.587	21.202	68.000	67.300
35	0.020	0.980	0.434	0.020	0.537	20.510	62.500	62.200
36	0.020	0.980	0.425	0.030	0.529	19.908	55.200	54.900
37	0.080	0.920	0.417	0.020	0.527	19.896	49.900	47.100
38	0.030	0.970	0.384	0.040	0.539	20.018	38.000	37.800
39	0.000	1.000	0.372	0.000	0.509	19.312	32.700	32.700
40	0.070	0.930	0.372	0.020	0.529	18.977	30.100	28.700
41	0.000	1.000	0.346	0.040	0.530	18.653	25.600	25.600
42	0.040	0.960	0.346	0.000	0.501	18.013	22.900	22.600
43	0.000	1.000	0.332	0.030	0.514	17.368	19.900	19.900
44	0.000	1.000	0.332	0.000	0.485	16.368	17.000	17.000
45	0.070	0.930	0.332	0.000	0.504	15.925	15.000	14.900
46	0.000	1.000	0.309	0.000	0.525	15.487	13.900	13.900
47	0.080	0.920	0.309	0.040	0.549	15.091	12.000	11.400
48	0.100	0.900	0.284	0.000	0.561	15.477	9.700	9.200
49	0.130	0.870	0.256	0.000	0.635	16.344	8.000	7.400
50	0.180	0.820	0.223	0.100	0.752	18.121	5.500	5.000
51	0.000	1.000	0.183	0.000	0.726	19.000	4.000	4.000
52	0.000	1.000	0.183	0.000	0.729	18.000	4.000	4.000
53	0.000	1.000	0.183	0.000	0.731	17.000	3.000	3.000
54	0.000	1.000	0.183	0.000	0.734	16.000	3.000	3.000
55	0.000	1.000	0.183	0.000	0.736	15.000	2.000	2.000
56	0.000	1.000	0.183	0.000	0.739	14.000	2.000	2.000
57	0.000	1.000	0.183	0.000	0.741	13.000	2.000	2.000
58	0.000	1.000	0.183	0.000	0.743	12.000	2.000	2.000
59	0.000	1.000	0.183	0.250	0.746	11.000	2.000	2.000
60	0.000	1.000	0.183	0.000	0.498	10.000	2.000	2.000
61	0.000	1.000	0.183	0.250	0.499	9.000	2.000	2.000
62	0.000	1.000	0.183	0.250	0.250	8.000	2.000	2.000
63	0.000	1.000	0.183	0.000	0.000	7.000	2.000	2.000
64	0.000	1.000	0.183	0.000	0.000	6.000	1.000	1.000
65	0.000	1.000	0.183	0.000	0.000	5.000	1.000	1.000
66	0.000	1.000	0.183	0.000	0.000	4.000	1.000	1.000
67	0.000	1.000	0.183	0.000	0.000	3.000	1.000	1.000
68	0.000	1.000	0.183	0.000	0.000	2.000	1.000	1.000

$r = 0.0033$
 $\lambda = 1.0033$
 $T = 25.28$
 $N = 137.50$
 $N(\text{at } 20 \text{ yrs}) = 146.88$

Appendix D

Ordered Mean Kinship

Note: This list is current to August 2007 and values are subject to change with any birth, death, import, export, inclusion, or exclusion.
Population MK as of August 2007 = 0.0122

Male					Female				
ID	MK	%known	Age	Location	ID	MK	%known	Age	Location
186	0	100	49	SAN FRAN	380	0	100	41	SCOTTSBLU
215	0	100	44	LOSANGELE	459	0	100	38	SCOTTSBLU
485	0.004	100	37	PORTLAND	588	0.002	100	33	ASHEBORO
670	0.004	100	29	KNOXVILLE	433	0.002	100	39	JACKSON
1095	0.004	100	29	ROLLING H	639	0.002	100	32	KNOXVILLE
375	0.007	100	40	ST LOUIS	507	0.003	100	36	ASHEBORO
917	0.007	100	19	OKLAHOMA	494	0.004	100	37	LITTLEROC
1093	0.007	100	36	ROLLING H	1100	0.004	100	8	LOSANGELE
804	0.008	100	23	DETROIT	1043	0.004	100	12	OAKLAND
957	0.008	100	18	KANSASCTY	1137	0.004	100	30	RIO GRAND
1063	0.008	100	11	DALLAS	1139	0.004	100	26	RIO GRAND
1073	0.008	100	9	LITTLEROC	515	0.004	100	37	ST LOUIS
474	0.009	100	38	SEDGWICK	568	0.004	100	33	TULSA
1060	0.009	100	10	KANSASCTY	737	0.004	100	26	W PALM BE
1094	0.009	100	26	ROLLING H	250	0.005	100	40	METROZOO
1052	0.01	100	12	DETROIT	1024	0.007	100	19	BALTIMORE
1079	0.01	100	7	BUSCH TAM	368	0.007	100	42	DALLAS
1080	0.01	100	5	SEDGWICK	509	0.007	100	37	HONOLULU
1084	0.011	75	6	ASHEBORO	1042	0.007	100	12	OAKLAND
990	0.012	100	16	TULSA	475	0.007	100	37	SEDGWICK
1083	0.012	100	6	ASHEBORO	472	0.007	100	36	TULSA
1169	0.012	100	U0	TULSA	785	0.008	100	24	ASHEBORO
332	0.013	100	43	JACKSON	1019	0.008	100	13	ASHEBORO
473	0.013	100	37	BROWNSVIL	1072	0.008	100	13	LITTLEROC
665	0.013	100	29	MANHATTAN	448	0.008	100	38	METROZOO
781	0.013	100	24	OKLAHOMA	1003	0.008	100	15	OKLAHOMA
827	0.013	100	22	OKLAHOMA	1050	0.009	100	11	ASHEBORO
853	0.013	100	21	SEDGWICK	1022	0.009	100	35	BALTIMORE
1001	0.013	100	15	ST LOUIS	1023	0.009	100	22	BALTIMORE
1004	0.013	100	15	SEDGWICK	545	0.009	100	36	BUSCH TAM
1051	0.013	100	12	SEDGWICK	831	0.009	100	22	CHATTANOOG
1089	0.013	100	6	MONTGOMRY	914	0.009	100	20	DALLAS
374	0.014	100	41	KANSASCTY	983	0.009	100	16	DETROIT
1010	0.014	100	14	ST LOUIS	984	0.009	100	16	DETROIT
1036	0.014	100	12	HONOLULU	636	0.009	100	32	JACKSON
653	0.015	100	30	SEDGWICK	715	0.009	100	27	JACKSON
661	0.015	100	29	SOUTHBEND	720	0.009	100	27	LOWRY
961	0.015	100	17	KANSASCTY	823	0.009	100	23	SCOTTSBLU
969	0.015	100	18	SACRAMNTO	1020	0.009	100	13	ST LOUIS
1012	0.016	100	14	HONOLULU	1065	0.009	100	9	ST LOUIS
1035	0.017	100	13	HONOLULU	1026	0.01	100	15	BALTIMORE
569	0.018	100	35	HONOLULU	629	0.01	100	32	BUSCH TAM
960	0.018	100	17	HONOLULU	819	0.01	100	23	JOHN BALL
1081	0.02	100	8	HONOLULU	1044	0.01	100	13	KANSASCTY
965	0.021	100	17	KNOXVILLE	995	0.01	100	16	MANHATTAN
1054	0.021	100	13	LOSANGELE	1057	0.01	100	10	SEDGWICK
1055	0.022	100	11	LOSANGELE	1085	0.01	100	6	ST LOUIS

909	0.023	100	19	LOSANGELE	1164	0.01	100	0	TULSA
1099	0.023	100	8	LOSANGELE	1155	0.011	100	2	BALTIMORE
1166	0.5	0	8	ASHEBORO	1158	0.011	100	2	BALTIMORE
					808	0.011	100	23	BROWNSVIL
					970	0.011	100	18	BROWNSVIL
					613	0.011	100	33	BUSCH TAM
					1071	0.011	100	9	JACKSON
					892	0.011	100	20	JOHN BALL
					792	0.011	100	23	MONTGOMRY
					879	0.011	100	21	OKLAHOMA
					991	0.011	100	17	SACRAMNTO
					1008	0.011	100	15	ST LOUIS
					982	0.011	100	17	TULSA
					635	0.012	100	32	FORTWORTH
					1169	0.012	100	U0	TULSA
					784	0.013	100	24	BROWNSVIL
					890	0.013	100	20	BROWNSVIL
					1009	0.013	100	16	BROWNSVIL
					821	0.013	100	23	CLEVELAND
					687	0.013	100	28	HONOLULU
					951	0.013	100	18	JACKSON
					1159	0.013	100	2	LOWRY
					998	0.013	100	17	MADISON
					882	0.013	100	20	MANHATTAN
					1092	0.013	100	8	SCOTTSBLU
					811	0.014	100	23	CLEVELAND
					891	0.014	100	21	DETROIT
					1056	0.014	100	9	KANSASCTY
					874	0.014	100	22	LOWRY
					716	0.015	100	27	CHICAGOLP
					1015	0.015	100	14	KANSASCTY
					1102	0.015	100	7	KANSASCTY
					1097	0.015	100	7	SACRAMNTO
					883	0.016	100	20	KANSASCTY
					702	0.016	100	28	LOSANGELE
					841	0.017	100	22	HONOLULU
					420	0.017	100	40	LOSANGELE
					780	0.019	100	24	LOSANGELE
					954	0.021	100	18	DALLAS
					906	0.023	100	21	LOSANGELE
					964	0.023	100	17	LOSANGELE
					1067	0.025	100	8	LOSANGELE

Appendix E Definitions

Management Terms

SSP Master Plan – A document that provides complete breeding and transfer recommendations for a Species Survival Plan (SSP®) population. The document is based on genetic and demographic analyses with consideration of behavioral, social, and institutional wants and needs. A draft of the Master Plan must be published in the Members Only section of the AZA Web site for a 30-day comment period. After the Coordinator incorporates/responds to institutional comments, a final version of the Master Plan must be published in the Members Only section of the AZA Web site. SSP Participation by AZA institutions is required.

Full Participation – AZA policy stating that all AZA accredited institutions and certified related facilities having an SSP animal in their collection are required to participate in the SSP partnership process and abide by the recommendations of the SSP.

Population Management Plan (PMP)– A document that provides complete breeding and transfer recommendations for a PMP population. The document is based on genetic and demographic analyses with consideration of behavioral, social, and institutional wants and needs. A draft of the PMP must be published in the Members Only section of the AZA Web site for a 30-day comment period. After the PMP Manager incorporates/responds to institutional comments, a final version of the PMP must be published in the Members Only section of the AZA Web site. PMP Participation by AZA institutions is voluntary.

Demographic Terms

Age Distribution – A two-way classification showing the numbers or percentages of individuals in various age and sex classes.

Ex, Life Expectancy – Average years of further life for an animal in age class x.

Lambda (λ) or Population Growth Rate – The proportional change in population size from one year to the next. Lambda can be based on life-table calculations (the expected lambda) or from observed changes in population size from year to year. A lambda of 1.11 means a 11% per year increase; lambda of .97 means a 3% decline in size per year.

lx, Age-Specific Survivorship – The probability that a new individual (e.g., age 0) is alive at the *beginning* of age x. Alternatively, the proportion of individuals which survive from birth to the beginning of a specific age class.

Mx, Fecundity – The average number of same-sexed young born to animals in that age class. Because SPARKS is typically using relatively small sample sizes, SPARKS calculates Mx as 1/2 the average number of young born to animals in that age class. This provides a somewhat less "noisy" estimate of Mx, though it does not allow for unusual sex ratios. The fecundity rates provide information on the age of first, last, and maximum reproduction.

Px, Age-Specific Survival – The probability that an individual of age x survives one time period; is conditional on an individual being alive at the beginning of the time period. Alternatively, the proportion of individuals which survive from the beginning of one age class to the next.

Qx, Mortality – Probability that an individual of age x dies during time period. $Qx = 1 - Px$

Risk (Qx or Mx) – The number of individuals that have lived during an age class. The number at risk is used to calculate Mx and Qx by dividing the number of births and deaths that occurred during an age class by the number of animals at risk of dying and reproducing during that age class.

The proportion of individuals that die during an age class. It is calculated from the number of animals that die during an age class divided by the number of animals that were alive at the beginning of the age class (i.e. "at risk").

Vx, Reproductive Value – The expected number of offspring produced this year and in future years by an animal of age x.

Genetic Terms

Allele Retention – The probability that a gene present in a founder individual exists in the living, descendant population.

Current Gene Diversity (GD) -- The proportional gene diversity (as a proportion of the source population) is the probability that two alleles from the same locus sampled at random from the population will not be identical by descent. Gene diversity is calculated from allele frequencies, and is the heterozygosity expected in progeny produced by random mating, and if the population were in Hardy-Weinberg equilibrium.

Effective Population Size (Inbreeding N_e) -- The size of a randomly mating population of constant size with equal sex ratio and a Poisson distribution of family sizes that would (a) result in the same mean rate of inbreeding as that observed in the population, or (b) would result in the same rate of random change in gene frequencies (genetic drift) as observed in the population. These two definitions are identical only if the population is demographically stable (because the rate of inbreeding depends on the distribution of alleles in the parental generation, whereas the rate of gene frequency drift is measured in the current generation).

FOKE, First Order Kin Equivalents – The number of first-order kin (siblings or offspring) that would contain the number of copies of an individual's alleles (identical by descent) as are present in the captive-born population. Thus an offspring or sib contributes 1 to FOKE; each grand-offspring contributes 1/2 to FOKE; each cousin contributes 1/4 to FOKE. $FOKE = 4 * N * MK$, in which N is the number of living animals in the captive population.

Founder – An individual obtained from a source population (often the wild) that has no known relationship to any individuals in the derived population (except for its own descendants).

Founder Contribution -- Number of copies of a founder's genome that are present in the living descendants. Each offspring contributes 0.5, each grand-offspring contributes 0.25, etc.

Founder Genome Equivalents (FGE) – The number wild-caught individuals (founders) that would produce the same amount of gene diversity as does the population under study. The gene diversity of a population is $1 - 1 / (2 * FGE)$.

Founder Genome Surviving – The sum of allelic retentions of the individual founders (i.e., the product of the mean allelic retention and the number of founders).

Founder Representation -- Proportion of the genes in the living, descendant population that are derived from that founder. I.e., proportional Founder Contribution.

GU, Genome Uniqueness – Probability that an allele sampled at random from an individual is not present, identical by descent, in any other living individual in the population. GU-all is the genome uniqueness relative to the entire population. GU-Desc is the genome uniqueness relative to the living non-founder, descendants.

Inbreeding Coefficient (F) -- Probability that the two alleles at a genetic locus are identical by descent from an ancestor common to both parents. The mean inbreeding coefficient of a population will be the proportional decrease in observed heterozygosity relative to the expected heterozygosity of the founder population.

Kinship Value (KV) – The weighted mean kinship of an animal, with the weights being the reproductive values of each of the kin. The mean kinship value of a population predicts the loss of gene diversity expected in the subsequent generation if all animals were to mate randomly and all were to produce the numbers of offspring expected for animals of their age.

Mean Generation Time (T) – The average time elapsing from reproduction in one generation to the time the next generation reproduces. Also, the average age at which a female (or male) produces offspring. It is not the age of first reproduction. Males and females often have different generation times.

Mean Kinship (MK) – 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. Mean kinship is also the reciprocal of two times the founder genome equivalents: $MK = 1 / (2 * FGE)$. $MK = 1 - GD$.

Percent Known – Percent of an animal's genome that is traceable to known Founders. Thus, if an animal has an UNK sire, the % Known = 50. If it has an UNK grandparent, % Known = 75.

Prob Lost – Probability that a random allele from the individual will be lost from the population in the next generation, because neither this individual nor any of its relatives pass on the allele to an offspring. Assumes that each individual will produce a number of future offspring equal to its reproductive value, V_x .

Appendix F

Directory of Institutional Representatives

Institution	IR Name	phone	email
Albuquerque Zoo	Rick Janser	505-764-6224	Rjanser@cabq.gov
Busch Gardens, Tampa	Lisa Harris	813-987-5250	Lisa.Harris@anheuser-busch.com
Chattanooga Zoo	Dardenelle Long	423-697-1319	dlongwpz@aol.com
Cleveland Metroparks Zoo	Kristen Lukas	216-635-3314	kel@clevelandmetroparks.com
Dallas Zoo	Todd Bowsher	214-670-6833 or 214-671-0778	tbowsher@msn.com
Detroit Zoological Institute	Scott Carter	248-541-5717 x3160	scarter@detroitzoo.org
Fort Worth Zoo	Kurt Geisler	817-759-7500	KGiesler@fortworthzoo.org
Gladys Porter Zoo	Jerry Stones	956-546-7187	jstones@gpz.org
Henry Vilas Zoo	Jeff Stafford	608-266-4733	stafford@co.dane.wi.us
Honolulu Zoo	Richard Ball	808-971-7193	rball@honolulu.gov
Houston Zoo	Hollie Colahan	713-533-6528	hcolahan@houstonzoo.org
Jackson Zoological Park	Willie Bennett	601-352-2589	WBEN639596@aol.com
Jacksonville Zoo	Tracy Williams	904-757-4463 x 108	williamst@JaxZoo.org
John Ball Zoo	Norah Fletchall	616-336-4301	norah@zoo.co.kent.mi.us
Kansas City Zoo	Liz Harmon	816-513-4605	lizharmon@fotzkc.org
Knoxville Zoo	Lisa New	865-637-5331 x 329	lnew@knoxville-zoo.org
Lincoln Park Zoo	Sue Margulis	312-742-2345	smargulis@Lpzoo.org
Lion Country Safari	Terry Wolf	561-793-1084 x350	wolf@lioncountryzoo.com
Little Rock Zoo	Sydney Tanner	501-666-2406 x105	stanner@littlerock.state.ar.us
Los Angeles Zoo	Jennie McNary	323-644-4207	jmcnary@zoo.lacity.org
Lowry Park Zoo	Lee Ann Rottman	813-935-8552 x 221	Curator@LowryParkZoo.com
Maryland Zoo	Rebecca Gullott	410-396-7102	rgullott@marylandzoo.org
Miami Metrozoo	Terry Webb	305 251-0400x 243	webbt@miamidade.gov
Montgomery Zoo	Ken Naugher	334-354-6361	knaugher@ci.montgomery.al.us
North Carolina Zoo	Lorraine Smith	336-879-7603	Lorraine.Smith@nczoo.org
Oakland Zoo	Danielle Stith	510-632-9525 x 161	animan@oaklandzoo.org
Oklahoma City Zoo	Jennifer Davis	405-607-2320	jdavis@okczoo.com
Oregon Zoo	Dave Thomas	503-226-1561x 283	thomasd@metro.dst.or.us
Potawatomi Zoo	Dan Powell	219-235-9800	monkey11@prodigy.net
Riverside Zoo	Joe Clawson	308-630-6236	jclawson@scottsbuff.org
Rolling Hills Refuge	Sandy Walker	785-827-9488	sandy@rhrwildlife.com
Sacramento Zoo	Leslie Field	916-264-5013	lfield@cityofsacramento.org
Saint Louis Zoo	Ingrid Porton	314-781-0900 x 358	rufflemur@aol.com
San Francisco Zoo	David Bochian	415 753 8194	DavidBocian@sfzoo.org
Sedgwick County Zoo	Mike Quick	316 266 8237	mquick@scz.org
Sunset Zoological Park	Regan Slonecker	785-587-2737	slonecker@ci.manhattan.ks.us
Toledo Zoo	Glenous Favata	419-385-5721	gfavata@aol.com
Tulsa Zoo	Pat Murphy	918-669-6230	patmurphy@ci.tulsa.ok.us