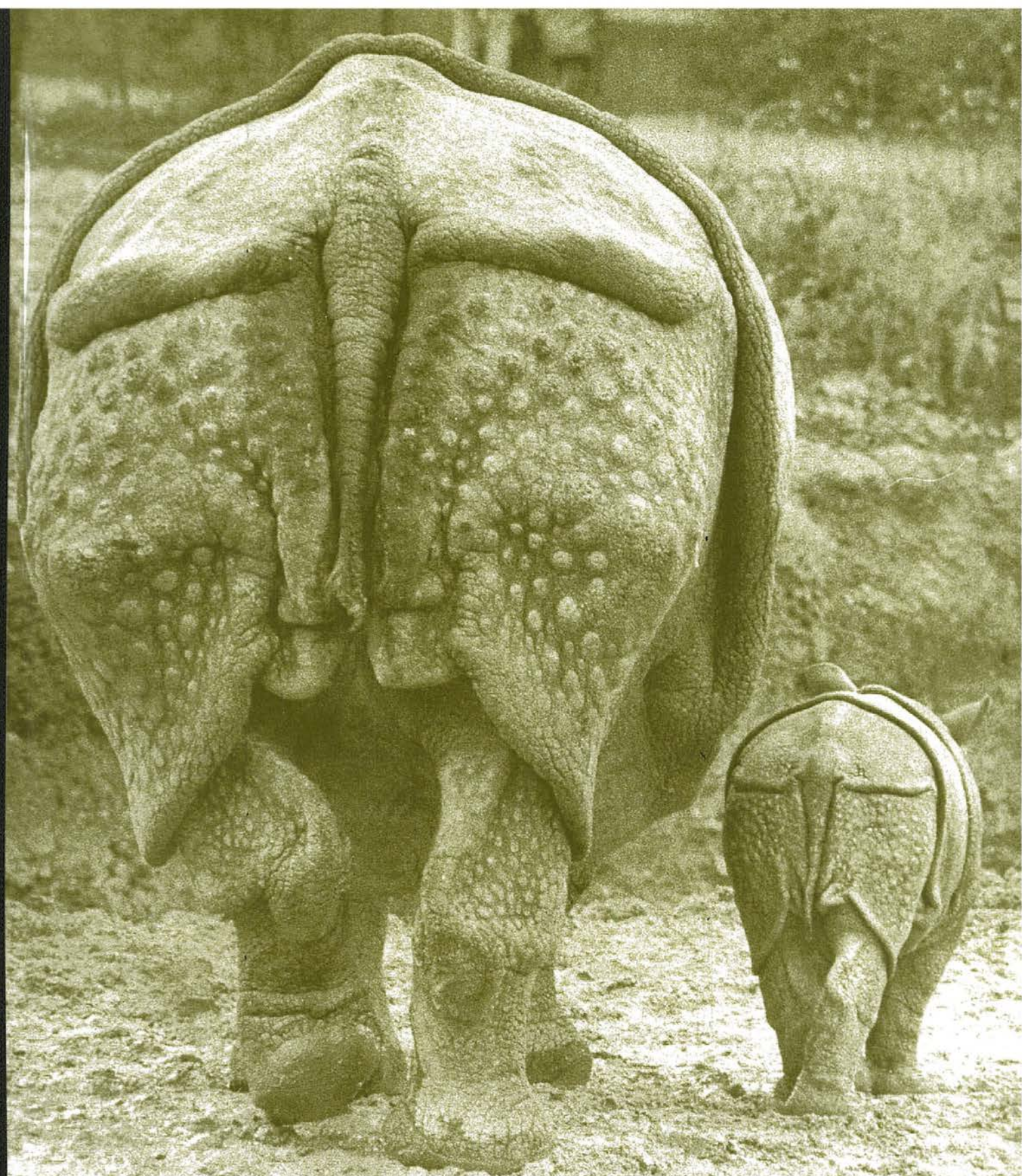




GREATER ONE-HORNED OR INDIAN RHINOCEROS
***RHINOCEROS UNICORNIS* LINNÉ, 1758**
INTERNATIONAL STUDBOOK 2002
BASEL ZOO

INTERNATIONAL STUDBOOK for the year 2002

Greater One-Horned or Indian Rhinoceros *Rhinoceros unicornis* Linné, 1758

Report date 31 December 2002

International Studbook Keeper

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Acknowledgements

I would like to thank all the zoos and institutions keeping Greater one-horned rhinoceros for their cooperation and help to update the International Studbook 2002. All the data of the annual reports returned by the 15th of March 2003 have been registered in this edition. This year 35 out of 52 institutions keeping Indian rhinos responded to our questionnaire.

Further thanks to Dr. Samuel Zschokke, Department of Integrative Biology, Section Conservation Biology (director Prof. Dr. B. Baur), University of Basel, who has carried out the demographic and genetic analyses of this studbook.

Thank you very much for your good cooperation.

Gabriele Hlavacek
International Studbook Keeper

Biological Data

Present distribution: north-eastern India (Assam), southern Nepal

Population status: endangered, CITES Appendix I

Habitat: floodplains, riverine grasslands and forests, marshlands

Food:

Grass, browse, fruits and crops. In Nepal, the most important food item is Elephant grass (*Saccharum spontaneum*), making up for 86-92% of the food intake during the hot season and 42-57% during the cool season. During monsoon the fruits of the *Trewia* tree are eaten in large quantities.

Behaviour:

Social Groupings:

Adult males and adult females without calves are almost always solitary. An adult female will allow an older calf to accompany her and her newborn calf. Especially subadult males but to a lesser extent also subadult females form stable groups of 2-3 individuals.

Short-term aggregations:

Adult females with calves often associate temporarily with other cow-calf units at prime wallowing areas or in concentrations of new shoots of Elephant grass, usually numbering six to ten individuals.

But there are also typical aggregations in wallows including a dominant male, cow-calf pairs, and single adult or subadult females, but never other males.

In Nepal, the average home-range sizes in prime habitat are for males 4.3 km² and for females 3.5 km². Male dominance and reproductive success depend on the size of their lower incisors (up to 9 centimetres long) and not the size of the horn, as they fight with the teeth and not with the horn. Male-male combat accounts for nearly half of the mortalities recorded. Males only stay dominant for some months, rarely for more than a year. The damage or loss of the incisors put an immediate end to the dominance.

Reproduction:

One calf. They give birth all year round without a recognizable peak season.

Birth weight in captivity:	64.3 kg (44-90.6 kg)
Gestation length in the wild:	15.7 months
Gestation length in captivity:	479.1 days (459-496 days)
Oestrus cycle in captivity:	36 to 58 days
Interbirth interval in the wild:	45.6 months (34-51)
First reproduction in the wild:	males 9 years, females 6 years
First reproduction in captivity:	male 7 years and 7 months female 4 years and 77 days

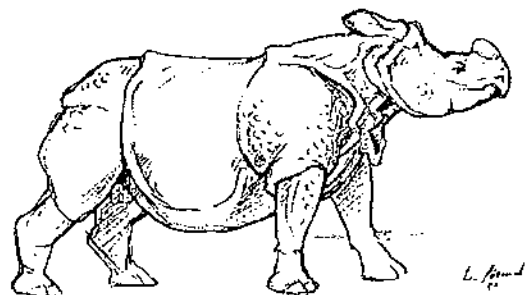
Sizes and weights:

Body weight in the wild:	males up to 2'000 kg
Body weight in captivity:	males 2000-2700 kg, females 1300-2200 kg
Shoulder height in the wild:	males up to 172 cm, females up to 149 cm
Shoulder height in captivity:	males up to 190 cm, females up to 170 cm
Head-body-length in the wild:	males up to 346 cm, females up to 335 cm
Horn length in captivity:	up to 61 cm, one horn

Longevity:

In Philadelphia, the male rhino Jim died on the 6th of December 1904 after 40 years and 140 days in captivity

All field data come from Dinerstein (2003)



Species Status

The Greater one-horned rhinoceros is classified as an endangered species, listed in CITES Appendix I. The main threats to this species are the loss of its habitat and poaching for the horn. The use of the horn as an aphrodisiac is a myth. In the Chinese medicine rhino horn taken against live-threatening fevers. A much bigger threat is the use of the horn as dagger handles for the traditional *jambiyas* in Yemen.

Direnstein (2003) estimates that no more than 2'000 individuals remain in the wild, with only two populations containing more than 100 individuals: Kaziranga National Park in Assam, India, has about 1'200 individuals, and Royal Chitwan National Park in Nepal holds more than 600 individuals.

The estimates of the IUCN SSC Asian Rhino Specialist Group (2000) are higher and in the range of 2'500 animals

Demographic and Genetic Analysis

Demographic Analysis

On the 31st of December 2002, the International Studbook recorded 138 (69.69) Greater one-horned (or Indian) rhinoceros kept in 52 institutions in Asia, Europe, North America and - for the first time - in Australia. Of these 138 rhinos, 101 (54.47 = 73%) are captive-born. The age structure is reasonably healthy (Fig. 1) with some shortage of young males. During the last two years, 2 (1.1) young individuals were transferred from the Chitwan National Park, Nepal, to Tokyo Tama Zoo.

The captive population increased regularly until 1991, when it had reached 126 (73.53) individuals. In the following years, the population remained more or less stable, but since 1997, it has started to grow again, thanks to successful reproduction at various institutions. Especially the San Diego Wild Animal Park was very successful with 22 (13.9) births over the last ten years. When we consider that during that time period a total of 69 (35.34) individuals were born in captivity world-wide, we can see that during the last ten years almost every third birth of a Greater one-horned rhinoceros took place in the San Diego Wild Animal Park.

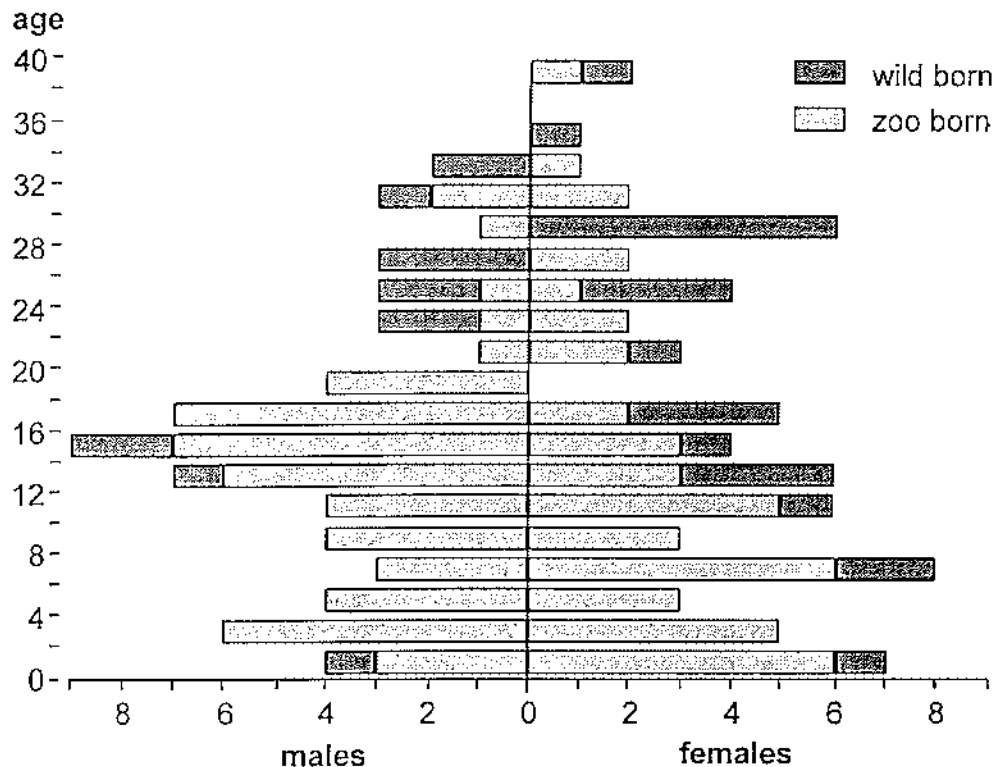


Fig. 1 Age structure of the captive population of the Greater one-horned rhinoceros on the 31st of December 2002. One wild-born male with unknown age (Stud# 157) was omitted.

Life History

The reproductive phase of the Greater one-horned rhinoceros lies between 4 and 32 years in females and 7 and 40 years in males (Table 1, Fig. 2). The age specific fertility of females shows a concave shape. In contrast, no age-specific decline in male fertility can be detected in the data so far available. Greater one-horned rhinoceros give births throughout the year, there is no peak during a particular season (Fig. 3). The average generation time in captivity is 15.5 years.

The Greater one-horned rhinoceros has a maximum live span of approximately 40 years for both sexes. Infant mortality (birth to 6 months, including stillbirths) is high (21-27%) in both sexes. Juvenile and young adult mortality (6 months to 12 years) is low, on average less than 2% p.a. From 12 years onwards, mortality increases exponentially (Fig. 4). There is no obvious difference in mortality between the two sexes. The oldest males currently alive in captivity are Stud # 49 in NZP Washington (c. 33y 6m) and Stud # 94 in Calcutta (c. 32y 11m); the oldest females are Stud # 29 in Gulf Breeze (39y 6m) and Stud # 50 in Metro Zoo (c. 38y 4m).

Table 1

List of youngest and oldest sires and dams to reproduce. Age indicated is at time of offspring birth.

YOUNG SIRES

OLD SIRES

Sire	Age Sire	Off-spring	S	Birth-date	Sire	Age Sire	Off-spring	S	Birth-date
152 Stutt 9	7y 7m	237 Mun 1	m	13/07/96 3)	10 Assam 5	42y 01m	223 Phil 5	f	05/10/94 1)
24 Kaz 39	7y 9m	29 Gauh 2	f	10/07/63 1)	10 Assam 5	38y 10m	187 Phil 4	m	24/07/91 1)
106 Hyde 3	7y 11m	163 SDWAP 11	f	20/04/89 2)	10 Assam 5	35y 11m	147 Phil 3	m	14/08/88 1)
5 Kaz 4	8y 4m	14 Basel 1	m	14/09/56 1)	1 Assam 1	34y 03m	079 Myso 3	f	19/07/75 1)
86 Stutt 3	8y 4m	167 Dvkr 1	f	14/01/86 2)	26 Basel 3	33y 04m	236 SDWAP 25	m	04/01/96
71 Stutt 2	8y 4m	122 Kan 1	f	01/10/82	10 Assam 5	33y 02m	126 Phil 2	m	03/11/85 1)

YOUNG DAMS

OLD DAMS

Dam	Age Dam	Off-spring	S	Birth-date	Dam	Age Dam	Off-spring	S	Birth-date
209 SD WAP 19	4y 077d	249 SDWAP 29	m	23/11/97	29 Gauh 2	31y 05m	224 SDWAP 21	m	26/11/94
244 SD WAP 26	4y 096d	279 SDWAP 39	m	28/11/01	7 Kaz 5	31y 00m	88 Basel 17	m	16/07/78 1) 2
99 SDWAP 3	4y 128d	112 SDWAP 5	m	25/07/82	29 Gauh 2	29y 00m	198 SDWAP 17	f	21/07/92 3)
130 SDWAP 8	4y 183d	182 SDWAP 13	f	20/07/90	7 Kaz 5	28y 03m	80 Basel 14	f	10/10/75 1)
182 SD WAP 13	4y 185d	226 Ber-T 3	f	21/01/95	11 Assam 6	27y 01m	79 Myso 3	f	19/07/75 1)
17 Basel 2	4y 204d	27 Basel 4	m	09/03/63	29 Gauh 2	26y 07m	180 SDWAP 12	m	27/01/90

1) age uncertain 2) offspring did not survive the first 6 months 3) aborted

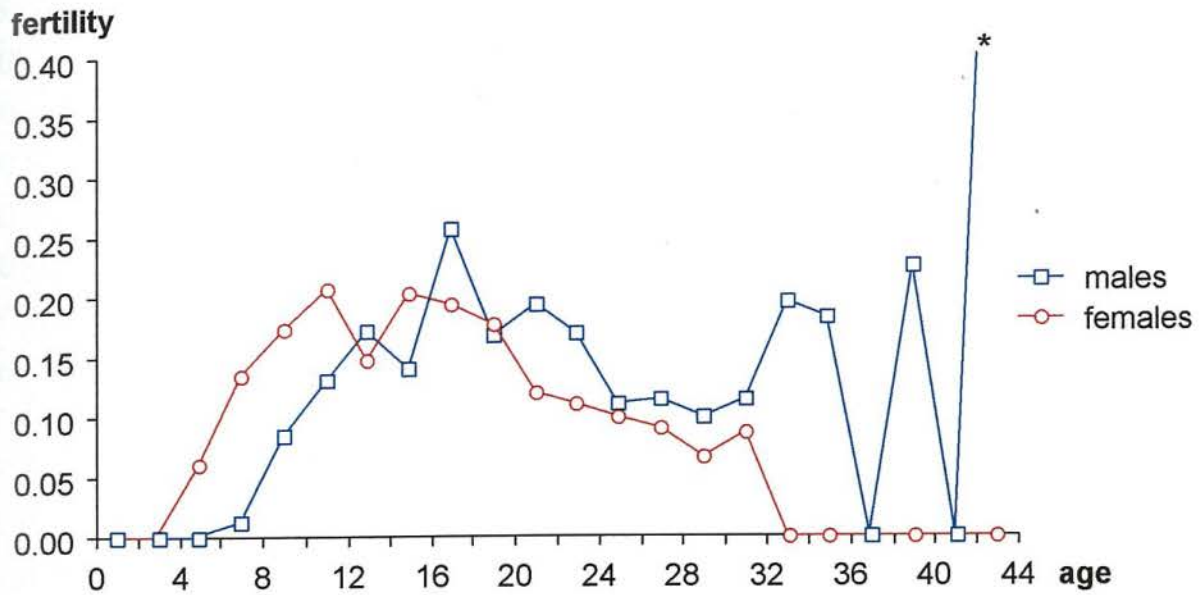


Fig. 2 Age specific fertility in captive-held Greater one-horned rhinoceros. Data for ages > 30 are very unreliable owing to the small sample sizes. * This data point is high (0.76) due to a low sample-size artefact.

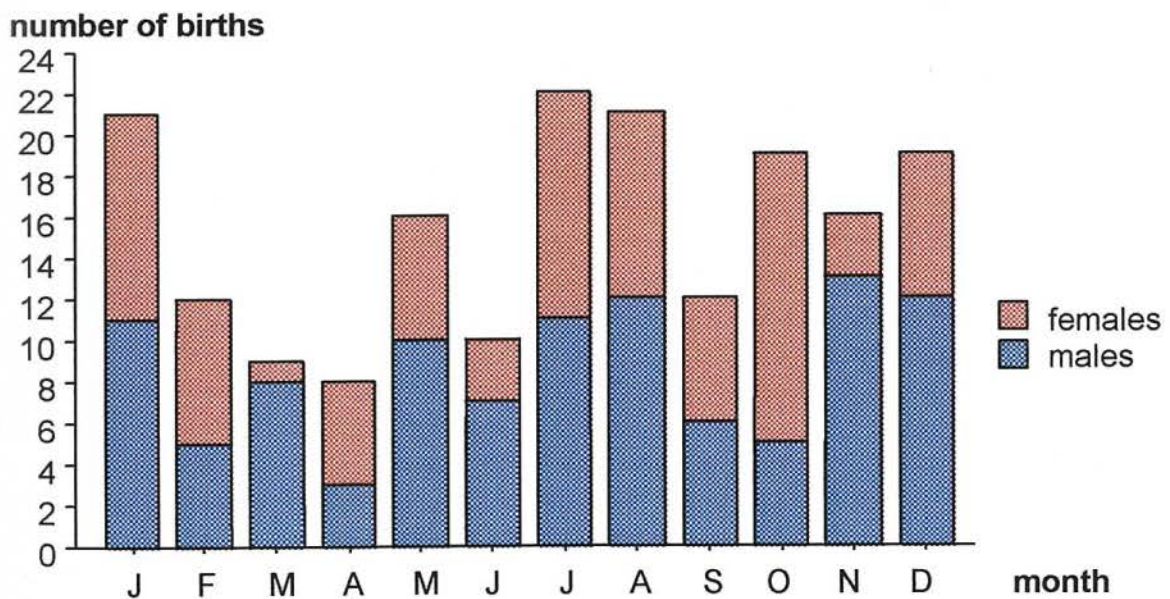


Fig. 3 Distribution of births over the year.

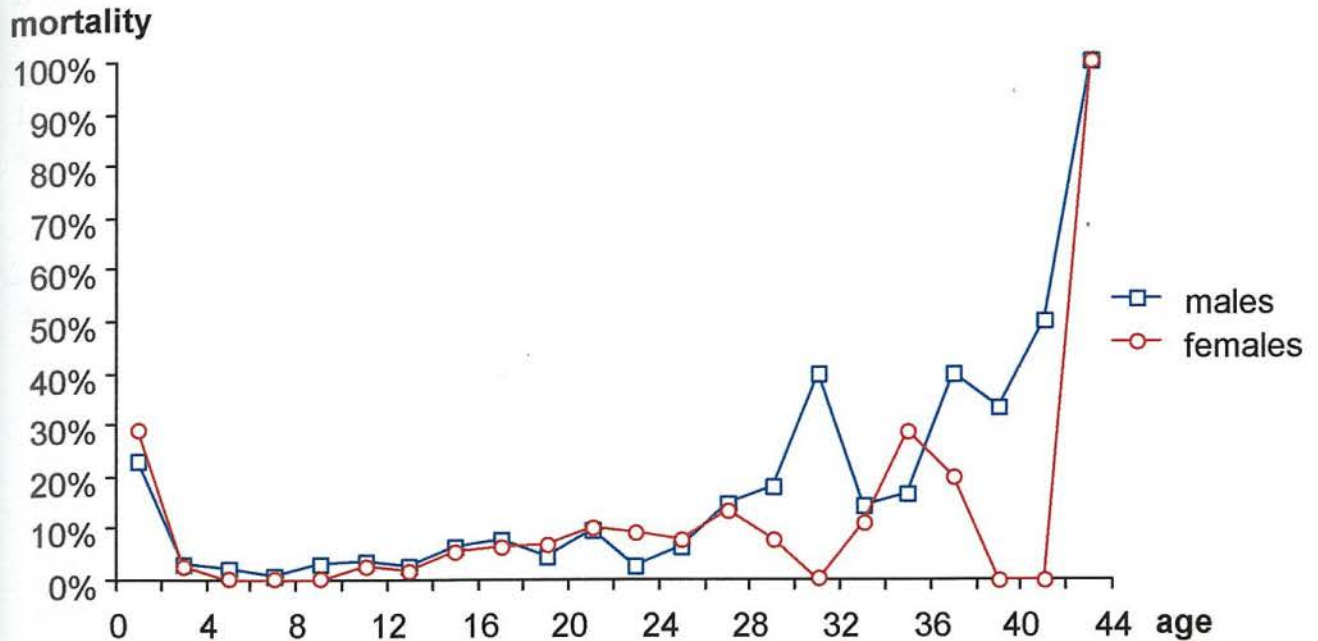


Fig. 4 Age specific mortality in Greater one-horned rhinoceros in captivity. Data for ages > 30 are very unreliable owing to the small sample sizes. Stillborn individuals were included in this graphic. If they were excluded, the mortality of age class 0 (0 to 2 years old) would be 11.5% in males and 11.7% in females.

Inbreeding and Outbreeding

All captive Greater one-horned rhinoceros descend from animals captured in either of the two large remaining populations in Assam (Kaziranga NP) and Nepal (Chitwan NP) (Rookmaaker 1998, Zschokke et al. 1998). These two populations have been separated for at least several centuries and they are morphologically slightly distinct (Groves 1993). The Assam population went through a severe bottleneck a hundred years ago. Bottlenecks are known to reduce genetic variability in a population and subsequently to reduce susceptibility to inbreeding depression in the recovered population. In a recent study on inbreeding and outbreeding in the Greater one-horned rhinoceros, it was shown that inbred individuals from the Assam population indeed show no reduced infant survival compared to non-inbred ones (Zschokke & Baur 2002). However, in the same study it was also shown that outbred individuals, i.e., offspring of matings between individuals from the Assam and the Nepal populations, had a much lower infant survival (58%) than non outbred ones (82%), suggesting that the two populations might be genetically partially incompatible. The Section of Conservation Biology of the University of Basel plans to conduct a study on the genetic variability within and between the two populations. In a first step, microsatellite primers for *Rhinoceros unicornis* have been developed (Zschokke et al. 2003). However, to perform the analysis, more blood and tissue samples from *Rhinoceros unicornis* (dead or alive) are still required to obtain a sufficient sample size. Any zoo that has the possibility to provide such samples is kindly asked to contact Dr. Samuel Zschokke (address see imprint of this studbook).

Table 2

List of mean kinship (m_k) of all living captive males ordered by m_k . Individuals whose entry is printed in *italics* should not be used for future breeding.

males

Stud #	m_k	age	Stud #	m_k	age	Stud#	m_k	age
282	0.0000	1	53	0.0198	31	224	0.0769	8
179	0.0000	12	186	0.0221	11	180	0.0769	12
177	0.0000	14	160	0.0221	13	146	0.0769	14
175	0.0000	14	140	0.0221	15	116	0.0769	19
170	0.0000	22	129	0.0221	18	277	0.0778	1
217	0.0000	23	57	0.0281	31	259	0.0778	3
156	0.0000	25	273	0.0285	1	188	0.0778	11
154	0.0000	25	173	0.0347	15	101	0.0794	22
172	0.0000	30	254	0.0389	4	249	0.0795	5
49	0.0000	33	239	0.0434	6	287	0.0816	0
190	0.0025	13	187	0.0475	11	270	0.0816	2
215	0.0025	26	147	0.0475	14	253	0.0816	4
250	0.0049	16	106	0.0495	21	87	0.0878	24
169	0.0049	26	132	0.0509	16	124	0.0949	17
94	0.0049	32	145	0.0522	14	206	0.0961	9
157	0.0049	?	255	0.0572	4	240	0.0964	6
150	0.0062	18	134	0.0585	16	181	0.0964	12
202	0.0074	10	279	0.0629	1	117	0.0970	19
125	0.0099	17	263	0.0646	3	152	0.0980	14
166	0.0111	12	262	0.0700	3	135	0.0980	16
69	0.0124	28	220	0.0700	8	123	0.0991	17
222	0.0186	8	227	0.0705	7	265	0.0995	3
176	0.0190	13	184	0.0705	12	141	0.0995	15

Table 3

List of mean kinship (m_k) of all living captive males ordered by Stud #. Individuals whose entry is printed in *italics* should not be used for future breeding.

males

Stud #	m_k	age	Stud #	m_k	age	Stud#	m_k	age
49	0.0000	33	152	0.0980	14	215	0.0025	26
53	0.0198	31	154	0.0000	25	217	0.0000	23
57	0.0281	31	156	0.0000	25	220	0.0700	8
69	0.0124	28	157	0.0049	?	222	0.0186	8
87	0.0878	24	160	0.0221	13	224	0.0769	8
94	0.0049	32	166	0.0111	12	227	0.0705	7
101	0.0794	22	169	0.0049	26	239	0.0434	6
106	0.0495	21	170	0.0000	22	240	0.0964	6
116	0.0769	19	172	0.0000	30	249	0.0795	5
117	0.0970	19	173	0.0347	15	250	0.0049	16
123	0.0991	17	175	0.0000	14	253	0.0816	4
124	0.0949	17	176	0.0190	13	254	0.0389	4
125	0.0099	17	177	0.0000	14	255	0.0572	4
129	0.0221	18	179	0.0000	12	259	0.0778	3
132	0.0509	16	180	0.0769	12	262	0.0700	3
134	0.0585	16	181	0.0964	12	263	0.0646	3
135	0.0980	16	184	0.0705	12	265	0.0995	3
140	0.0221	15	186	0.0221	11	270	0.0816	2
141	0.0995	15	187	0.0475	11	273	0.0285	1
145	0.0522	14	188	0.0778	11	277	0.0778	1
146	0.0769	14	190	0.0025	13	279	0.0629	1
147	0.0475	14	202	0.0074	10	282	0.0000	1
150	0.0062	18	206	0.0961	9	287	0.0816	0

Table 4

List of mean kinship (m_k) of all living captive males ordered by m_k . Individuals whose entry is printed in *italics* should not be used for future breeding.

females

Stud#	m_k	age	Stud#	m_k	age	Stud#	m_k	age
283	0.0000	1	159	0.0074	14	274	0.0700	1
256	0.0000	6	128	0.0099	29	272	0.0705	2
257	0.0000	6	66	0.0111	29	244	0.0712	5
192	0.0000	12	51	0.0149	31	182	0.0712	12
191	0.0000	13	264	0.0186	3	201	0.0753	10
193	0.0000	13	189	0.0186	11	245	0.0779	5
144	0.0000	15	235	0.0190	7	278	0.0795	1
243	0.0000	24	79	0.0198	27	266	0.0795	3
98	0.0000	24	276	0.0334	1	80	0.0827	27
92	0.0000	24	241	0.0334	6	130	0.0856	16
153	0.0000	28	271	0.0389	2	99	0.0865	24
219	0.0000	28	230	0.0389	7	45	0.0867	33
50	0.0000	38	238	0.0434	6	110	0.0933	20
138	0.0025	16	288	0.0465	0	55	0.0935	31
139	0.0025	16	223	0.0475	8	210	0.0964	9
137	0.0025	16	29	0.0504	39	183	0.0971	12
95	0.0025	29	161	0.0519	13	148	0.0971	14
40	0.0025	35	131	0.0531	16	195	0.0973	10
204	0.0049	10	284	0.0543	0	93	0.0991	23
155	0.0049	28	269	0.0543	2	280	0.0994	1
97	0.0062	23	229	0.0572	7	185	0.1002	11
252	0.0074	5	113	0.0573	20	143	0.1017	15
203	0.0074	11	226	0.0629	7	209	0.1055	9

Table 5

List of mean kinship (m_k) of all living captive males ordered by Stud #. Individuals whose entry is printed in *italics* should not be used for future breeding.

females

Stud#	m_k	age	Stud#	m_k	age	Stud#	m_k	age
29	0.0504	39	143	0.1017	15	229	0.0572	7
40	0.0025	35	144	0.0000	15	230	0.0389	7
45	0.0867	33	148	0.0971	14	235	0.0190	7
50	0.0000	38	153	0.0000	28	238	0.0434	6
51	0.0149	31	155	0.0049	28	241	0.0334	6
55	0.0935	31	159	0.0074	14	243	0.0000	24
66	0.0111	29	161	0.0519	13	244	0.0712	5
79	0.0198	27	182	0.0712	12	245	0.0779	5
80	0.0827	27	183	0.0971	12	252	0.0074	5
92	0.0000	24	185	0.1002	11	256	0.0000	6
93	0.0991	23	189	0.0186	11	257	0.0000	6
95	0.0025	29	191	0.0000	13	264	0.0186	3
97	0.0062	23	192	0.0000	12	266	0.0795	3
98	0.0000	24	193	0.0000	13	269	0.0543	2
99	0.0865	24	195	0.0973	10	271	0.0389	2
110	0.0933	20	201	0.0753	10	272	0.0705	2
113	0.0573	20	203	0.0074	11	274	0.0700	1
128	0.0099	29	204	0.0049	10	276	0.0334	1
130	0.0856	16	209	0.1055	9	278	0.0795	1
131	0.0531	16	210	0.0964	9	280	0.0994	1
137	0.0025	16	219	0.0000	28	283	0.0000	1
138	0.0025	16	223	0.0475	8	284	0.0543	0
139	0.0025	16	226	0.0629	7	288	0.0465	0

Genetic Analysis of the captive population

A large number of equally represented founders is of decisive importance for the building of a viable captive population. In the case of the Greater one-horned rhinoceros, this goal has not yet been achieved. Today's captive population is based on 38 founder animals, which are very unequally represented (Fig. 5). Even though the situation has improved over the last ten years (in 1992, the four best represented founders had contributed 57.9% of all genes, see also Table 7), it is still important, that no individuals with a high proportion (50% or more) of their genes coming from the three best represented founders (Stud # 5, 7, 18 or 24) are used for breeding. On the other hand, breeding with individuals imported from the wild and with offspring from underrepresented founders should be encouraged; these individuals can be identified by their low mean kinship values (Table 2-5). There are still 21 (9.12) mature, wild-born individuals with no living descendants (Table 6), which should be used for breeding to preserve their alleles.

Table 6

List of potential founders (wild caught animals with no living descendants) sorted by sex and age. Animals marked with an * are not yet mature.

males			females		
animal	location	age	animal	location	age
049 Nepal 3	NZP-WASH	33y 06m	050 Nepal 4	METROZOO	38y 04m
172 Kaz 23	ASSAM	30y 05m	153 Kaz 21	NANDANKAN	28y 06m
154 Assam 34	NANDANKAN	25y 11m	219 Assam 29	CALCUTTA	28y 05m
156 Assam 20	PATNA	25y 10m	092 Assam 16	LUCKNOW	24y 09m
217 Assam 28	BOMBAY	23y 09m	243 Nepal 27	CHIANG MAI	24y 08m
170 Assam 22	ASSAM	22y 10m	098 Nepal 7	PEKING	24y 03m
175 Assam 25	TRIVANDRU	14y 09m	144 Nepal 17	BERLIN TP	15y 00m
177 Kaz 24	TRIVANDRU	14y 05m	193 Nepal 20	MUNICH	13y 04m
179 Kaz 26	TRIPURA	12y 07m	191 Nepal 23	FORT WORTH	13y 02m
282 Nepal 30*	TOKYO TAMA	01y 07m	192 Kaz 27	ASSAM	12y 05m
			256 Nepal 28	WHIPSNADE	06y 11m
			257 Nepal 29	WHIPSNADE	06y 06m
			283 Nepal 31*	TOKYO TAMA	01y 07m

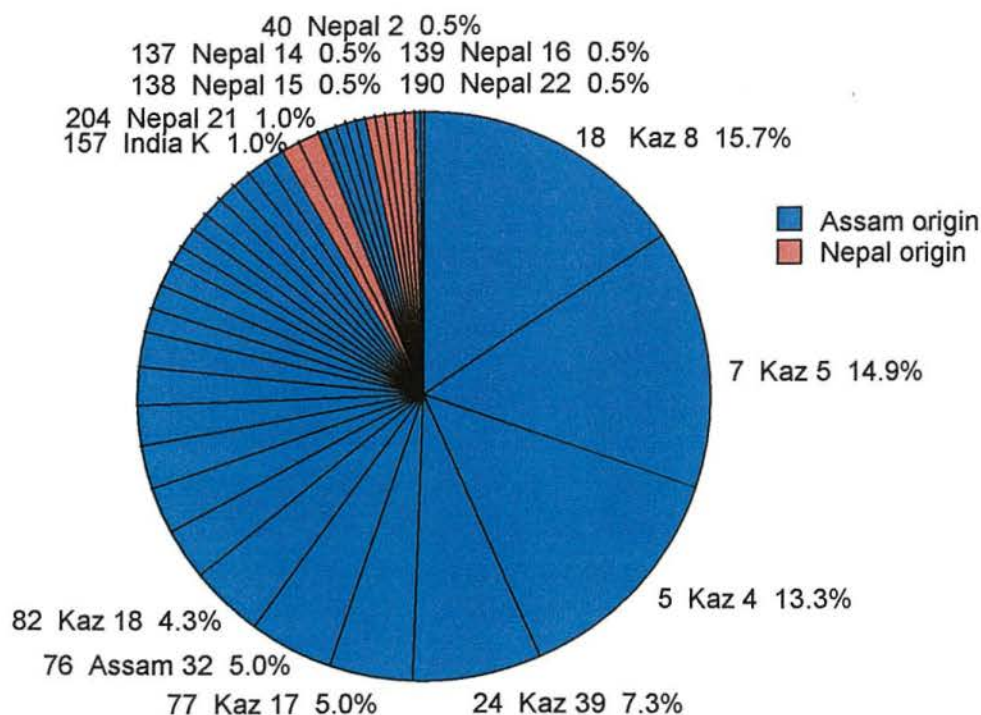


Fig. 5 Distribution of founder representations in today's living captive-born population of the Greater one-horned rhinoceros. It shows that the four best represented founders (Stud # 5, 7, 18 and 24) have contributed more than half (51.1%) of all genes found in the living captive-born population. The other 34 founders contributed the other half of the genes. The colour indicates the origin of the founders (blue: Assam, red: Nepal).

Table 7

Genetic summary of the current captive population and the comparison with the values for Dec 2000 and Dec 1992. The calculations of the values for Dec 2000 and Dec 1992 are based on the latest studbook data and may therefore differ slightly from those published previously. All values were calculated with the computer program 'Studbook' (Zschokke 2003).

	Dec 2002	Dec 2000	Dec 1992
Number of captive individuals	138 (69.69)	137 (72.65)	125 (72.53)
Number of founders	38	38	34
Potential number of founders	61	62	68
Founder genomes surviving	23.856	23.964	21.881
Average inbreeding coefficient	0.0702	0.0714	0.0629
Average mean kinship	0.0595	0.0588	0.0642
Gene diversity	0.9405	0.9412	0.9356
Founder genome equivalents	8.4024	8.4980	7.7936

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References

References cited in the text

- Dinerstein E (2003) **The return of the unicorns – The natural history and conservation of the Greater one-horned rhinoceros** — Columbia University Press, New York.
- Groves CP (1993) **Testing rhinoceros subspecies by multivariate analysis** — In Ryder OA: *Rhinoceros biology and conservation*, Zoological Society of San Diego, San Diego CA: 92-100.
- Rookmaaker LC (1998) **The rhinoceros in captivity** — SPB Academic Publishing, Den Haag NL.
- Zschokke S (2003) **Studbook v3.4 for Macintosh** — Samuel Zschokke, University of Basel, Basel.
- Zschokke S & Baur B (2002) **Inbreeding, outbreeding, infant growth, and size dimorphism in captive Indian rhinoceros (*Rhinoceros unicornis*)** — *Canadian Journal of Zoology* 80: 2014-2023.
- Zschokke S, Gautschi B & Baur B (2003) **Polymorphic microsatellite loci in the endangered Indian rhinoceros, *Rhinoceros unicornis*** — *Molecular Ecology Notes* 3: in press.
- Zschokke S, Studer P & Baur B (1998) **Past and future breeding of the Indian rhinoceros in captivity** — *International Zoo News* 45: 261-276.

Recent publications concerning the Greater one-horned Rhinoceros

- Atkinson MW, Hull B, Gandolf AR & Blumer ES (2002) **Repeated chemical immobilization of a captive Greater one-horned rhinoceros (*Rhinoceros unicornis*), using combinations of etorphine, detomidine, and ketamine** — *Journal of Zoo and Wildlife Medicine* 33: 157-162.
- Baishya G, Kalita A & Chakraborty A (2001) **Anatomy of the distal sesamoid of Indian one-horned rhinoceros** — *Indian Veterinary Journal* 78: 824-825.
- Clauss M, Jessup DA, Norkus EB, Chen TC, Holick MF, Streich WJ & Dierenfeld ES (2002) **Fat soluble vitamins in blood and tissues of free-ranging and captive rhinoceros** — *Journal of Wildlife Diseases* 38: 402-413.
- Guldenschuh G & von Houwald F (eds.) (2002) **Husbandry manual for the Greater one-horned or Indian rhinoceros *Rhinoceros unicornis* Linné, 1758** — Basel Zoo, Basel.
- Hussain B (2001) **Status of *Rhinoceros unicornis* in Orang National Park, Assam** — *Tigerpaper* 28: 25-27.
- Jones ML (2002) **Prolific female rhinoceroses** — *International Zoo News* 49: 414-415.
- Kapur V, Bashamboo A & Ali S (2002) **Development of genetic markers specific for highly endangered species *Rhinoceros unicornis*: Strategies and implications in conservation** — *Indian Journal of Biotechnology* 1: 96-100.

Kapur V, Prasanth SG, O'Ryan C, Azfer MA & Ali S (2003) Development of a DNA marker by minisatellite associated sequence amplification (MASA) from the endangered Indian rhino (*Rhinoceros unicornis*) — *Molecular and Cellular Probes* 17: 1-4.

Martin E (2001) What strategies are effective for Nepal's rhino conservation: a recent case study — *Pachyderm* 31: 42-51.

Paglia DE (2000) Captivity acquired hemochromatosis resembling Bantu siderosis in browser, but not grazer, rhinoceroses — *Blood* 96: 484a.

Rookmaaker LC (2002) Historical records of the rhinoceros (*Rhinoceros unicornis*) in northern India and Pakistan — *Zoos' Print Journal* 17: 923-929.

Schaffer NE, Foley GL, Gill S & Pope CE (2001) Clinical implications of rhinoceros reproductive tract anatomy and histology — *Journal of Zoo and Wildlife Medicine* 32: 31-46.

Schwammer HM, Foose TJ, Fouraker M & Olson D (eds.) (2001) Recent research on elephants and rhinos. Abstracts of the International Elephant and Rhino Research Symposium, June 7-11, 2001 — Zoologischer Garten, Vienna.

Sinha A & Ghosh DK (2000) Food, feeding and feeding ecology of the Indian greater one-horned rhinoceros (*Rhinoceros unicornis*) — In Pandey BN & Singh BK: *Advances in zoology, environmental degradation and biodiversity: 10th All-India Congress of Zoology (14th-18th October, 1998)*, Daya Publishing House, Delhi: 273-279.

Tougaard C (2001) Biogeography and migration routes of large mammal faunas in South-East Asia during the Late Middle Pleistocene: Focus on the fossil and extant faunas from Thailand — *Palaeogeography Palaeoclimatology Palaeoecology* 168: 337-358.

Tougaard C, Delefosse T, Hanni C & Montgelard C (2001) Phylogenetic relationships of the five extant rhinoceros species (Rhinocerotidae, Perissodactyla) based on mitochondrial cytochrome b and 12S rRNA genes — *Molecular Phylogenetics and Evolution* 19: 34-44.

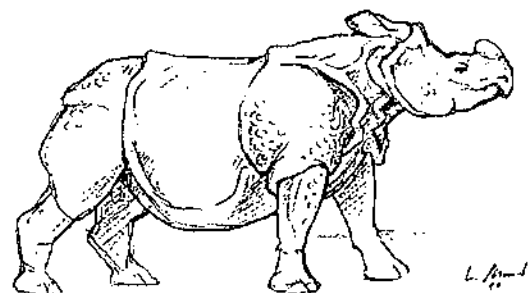
von Houwald F (2001) Foot problems in Indian Rhinoceroses (*Rhinoceros unicornis*) in zoological gardens: Macroscopic and microscopic anatomy, pathology, and evaluation of the causes — PhD thesis, Universität Zürich.

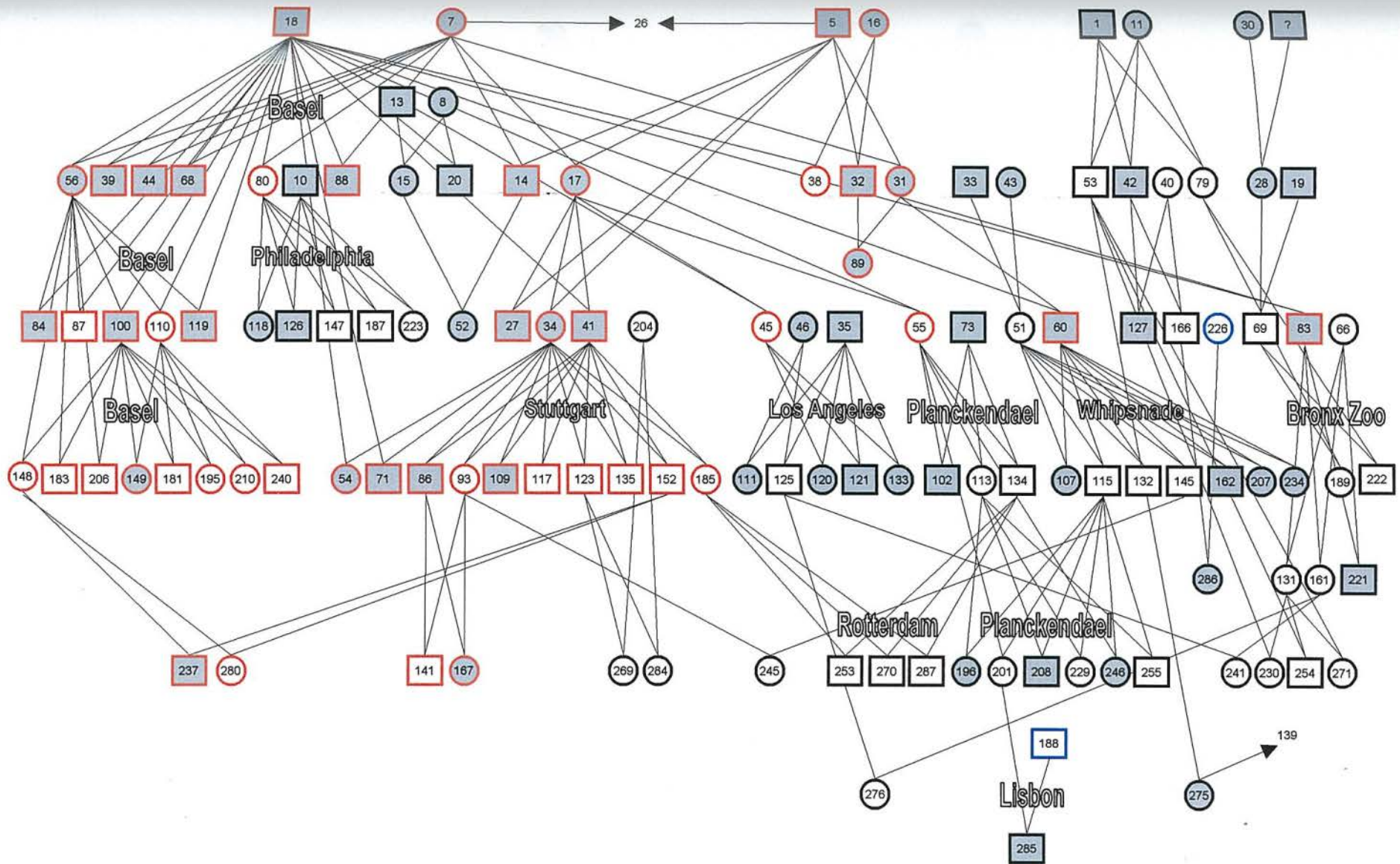
Yadav VK (2000) Male-male aggression in *Rhinoceros unicornis*: Case study from North Bengal, India — *Indian Forester* 126: 1030-1034.

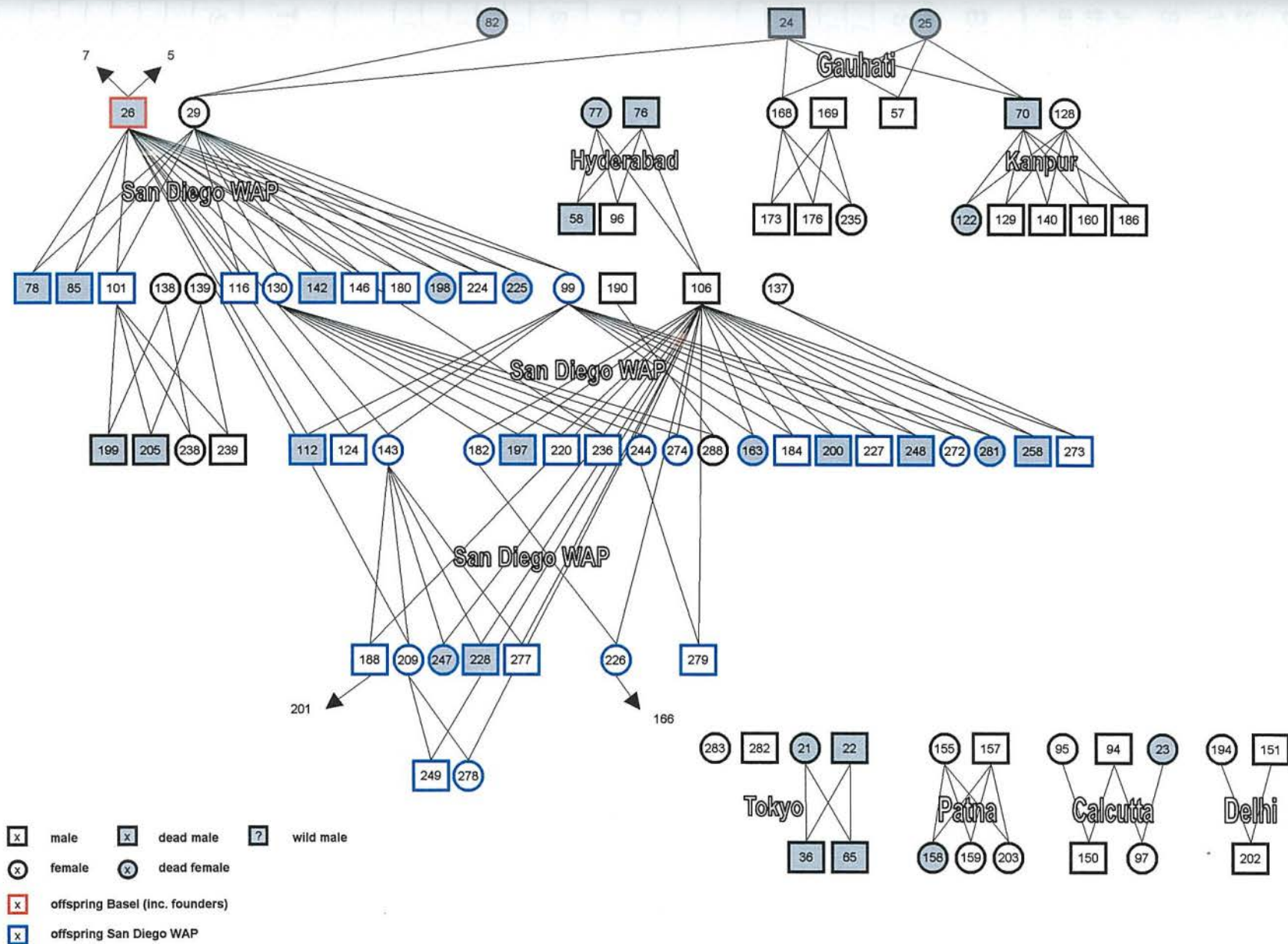
Zschokke S & Baur B (2002) Inbreeding, outbreeding, infant growth, and size dimorphism in captive Indian rhinoceros (*Rhinoceros unicornis*) — *Canadian Journal of Zoology* 80: 2014-2023.

A comprehensive list of rhinoceros literature is available from the Rhinoceros Resource Centre (<http://www.rhinoresourcecenter.com/> or contact Dr. Kees Rookmaaker, Chapelgate, St Neots Road, Dry Drayton CB3 8BE, UK, Tel/Fax: +44 1 954 21 18 98, e-mail: rhino@rookmaaker.freemove.co.uk).

PEDIGREE of the Greater One-Horned Rhinoceros







Events 2002

Changes in the studbook data:

Stb # 36: the birth date was changed from the 20th of June 1966 to the 11th of June 1967, according to L.C. Rookmaaker (1998).

Stb # 47: has been deleted because it turned out being identical with Stb # 16.

Just before this studbook was printed, we received a copy of the Indian Studbook of the Greater one-horned rhinoceros (report date 30th of September 2000). All those animals will be registered in the 2004 update.

Births in 2002

Stud #	Sex	Sire	Dam	Breeder	Location	House name	ISIS	Birthdate
0284	F	0123	0204	Stutt 12	Stuttgart	Shiwa	7916	13.04.2002
0285	M	0188	0201	Lis 1	Lisbon		8346	25.09.2002
0286	F	0166	0226	Berlin-T 4	Berlin TP			23.10.2002
0287	M	0134	0185	Rott 3	Rotterdam		106592	07.12.2002
0288	F	0190	0130	SDWAP 41	SD-WAP	Raji	602549	23.12.2002

Deaths in 2002

Stud #	Sex	Sire	Dam	Breeder	Location	ISIS	Death-date	Age
0060	M	0018	0031	Ber-Z 1	Whipsnade	L260	15.10.2002	30 y
0109	M	0041	0034	Stutt 5	Chiang Mai		02.01.2002	21 y
0126	M	0010	0080	Phil 2	Metrozoo	M00755	22.11.2002	17 y
0285	M	0188	0201	Lis 1	Lisbon	8346	25.09.2002	0 d
0286	F	0166	0226	Berlin-T 4	Berlin TP		23.10.2002	0 d

Transfers in 2002

Stud #	Transferdate	Old Location	Status	New Location	Owner
0144	03.06.2002	Berlin Zoo	Loan	Berlin TP	Berlin Zoo
0182	03.06.2002	Berlin TP	Loan	Berlin Zoo	Stuttgart
0262	17.06.2002	SD-WAP	Loan	Langley	SD-WAP
0269	30.01.2002	Stuttgart	Loan	Madrid Z	Stuttgart
0282	28.03.2002	WILD		Tokyotama	Tokyotama
0283	28.03.2002	WILD		Tokyotama	Tokyotama

Abbreviations

Sex:

F = female

M = male

U = unknown sex

Parents:

WILD = Animal has been captured from the wild

UNKN = Captive born animal, but the identification of the parents is impossible.

Breeder name:

Assam = animals born in Assam, including the Kaziranga Reserve

Kaz = animals born in the Kaziranga Reserve

Nepal = animals born in Nepal

India = animals born on the Indian subcontinent, including Nepal

The breeder name shows the name of the place where an animal was born or captured. The following letter or number indicates the sequence of birth or capture.

For example: Kaz 5 = the 5th animal captured in the Kaziranga Reserve

Basel 28 = the 28th animal born in Basel

Status:

B = Birth

P = Purchase

L = Loan

R = Return from loan

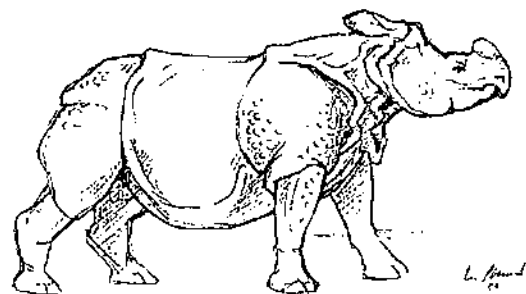
D = Donation

T = Trade

REL = Release

APPENDIX I

International Studbook Population



Studbook population Greater one-horned rhinoceros

Report date: 31 December 2002

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0001	M	WILD	WILD	Assam 1	24.04.1965	MYSORE	P	Kasi		30.04.1979
0002	F	WILD	WILD	Kaz 1	15.05.1948	SHIP	?	Kamala-Rani		
					24.06.1948	CHICAGOBR	P			06.05.1968
0003	M	WILD	WILD	Kaz 2	24.06.1948	CHICAGOBR	P	Kashi-Ram		13.11.1970
0004	F	WILD	0002	Kaz 3	16.05.1948	SHIP	B			16.05.1948
0005	M	WILD	WILD	Kaz 4	30.05.1951	BASEL	P	Gadadhar	510001	25.11.1964
0006	M	WILD	WILD	Kaz 33	05.09.1951	ROMA	P	Tomy		28.02.1983
0007	F	WILD	WILD	Kaz 5	08.07.1952	BASEL	P	Joymolhi	520016	10.11.1983
0008	F	WILD	WILD	Kaz 34	16.07.1952	WHIPSHADE	P	Mohini		
					26.04.1976	AMSTERDAM	L			25.04.1985
0009	F	WILD	WILD	Kaz 35	17.06.1953	PHILADELP	P	Kanaklota	100248	
					07.12.1976	SD-WAP	L		101985	12.05.1977
0010	M	WILD	WILD	Assam 5	14.09.1955	PHILADELP	P	Kanakbala	100249	06.01.1996
0011	F	WILD	WILD	Assam 6	15.06.1956	MYSORE	P	Rani		07.05.1992
0012	M	WILD	WILD	Kaz 6	29.05.1956	TRIVANDRU	P	Moni		16.02.1987
0013	M	WILD	WILD	Kaz 36	07.08.1947	WHIPSHADE	P	Mohan		07.03.1961

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0014	M	0005	0007	Basel 1	14.09.1956	BASEL	B	Rudra	560017	06.02.1987
					20.07.1959	MILWAUKEE	P			
0015	F	0013	0008	Whip 1	29.10.1957	WHIPSNADÉ	B	Mohinija		24.06.1975
					20.07.1959	MILWAUKEE	P			
0016	F	WILD	WILD	Kaz 7	11.08.1957	HAMBURG	P	Nepali II	04427	22.01.1971
					21.09.1962	BASEL	L			
					28.05.1963	HAMBURG	R			
					03.11.1965	BASEL	L			
					13.04.1966	HAMBURG	R			
					25.05.1966	LOSANGELE	P			
0017	F	0005	0007	Basel 2	17.08.1958	BASEL	B	Mcola	580018	04.01.1973
0018	M	WILD	WILD	Kaz 8	22.09.1959	BERLINZOO	P	Arjun	650023	15.04.1983
					08.07.1965	BASEL	P			
0019	M	WILD	WILD	Assam 30	26.05.1960	NZP-WASH	P	Tarun		25.09.1989
					01.04.1981	NY BRONX	L			
					16.12.1983	OKLAHOMA	L			
0020	M	0013	0008	Whip 2	18.08.1960	WHIPSNADÉ	B	Manik		25.04.1975
0021	F	WILD	WILD	Kaz 37	06.06.1961	CALCUTTA	P	Lauie/Rani		03.12.1991
					16.07.1961	TOKYOTAMA	P			
0022	M	WILD	WILD	Kaz 38	10.11.1958	TOKYOTAMA	P	Tamao	267	16.07.1995
0023	F	WILD	0021	Calc 3	12.06.1961	CALCUTTA	B	Sneha		14.08.1982
0024	M	WILD	WILD	Kaz 39	24.09.1960	ASSAM	P	Shivaji		23.09.1986
0025	F	WILD	WILD	Kaz 41	25.09.1965	ASSAM	P	Padmini Jr.		19.10.1982

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0026	M	0005	0007	Basel 3	31.08.1962	BASEL	B	Lasai	620010	
					12.10.1963	SANDIEGOZ	P			
					26.04.1972	SD-WAP	P			
					27.06.1995	WILDS	L			
										08.09.1995
0027	M	0005	0017	Basel 4	09.03.1963	BASEL	B	Khunlai	630021	
					29.09.1964	PARIS	P			
										26.02.1976
0028	F	UNKN	0030	Gauh 1	10.04.1963	ASSAM	B	Deepali Jr.		
					16.12.1963	NZP-WASH	D			
										09.09.1980
0029	F	0024	0082	Gauh 2	10.07.1963	ASSAM	B	Jaypuri		
					28.02.1965	SANDIEGOZ	P			
					26.04.1972	SD-WAP	P			
					07.11.1995	GULF BREZ	L			
0030	F	WILD	WILD	Kaz 40	29.10.1962	ASSAM	P	Deepali		
					16.12.1963	NZP-WASH	?			
										26.12.1963
0031	F	0005	0007	Basel 5	12.06.1964	BASEL	B	Miris	640022	
					06.07.1965	BERLINZOO	P			
					08.08.1970	BASEL	L			
					26.04.1971	BERLINZOO	R			
					10.06.1974	BASEL	L			
					06.05.1975	BERLINZOO	R			
										02.03.1993
0032	M	0005	0016	Hamb 1	11.08.1964	HAMBURG	B	Gauhati		
					06.08.1965	BERLINZOO	?			
										09.12.1993
0033	M	WILD	WILD	Kaz 9	29.06.1960	ASSAM	P	Mehan/Mohan		
					24.11.1965	DELHI	?			
										06.07.1988



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0034	F	0005	0017	Basel 6	25.08.1965	BASEL	B	Nanda	650024	
					29.05.1968	STUTTGART	P		1784	
					03.06.1969	BASEL	L		650024	
					09.06.1970	STUTTGART	R		1784	
					19.07.1973	BASEL	L		650024	
					24.10.1973	STUTTGART	R		1784	
										13.07.1992
0035	M	WILD	WILD	Assam 7	07.02.1966	LOSANGELE	P	Herman	01743	
										31.05.2001
0036	U	0022	0021	Tokyo 1	11.06.1967	TOKYOTAMA	B			
										11.06.1967
0037	F	WILD	WILD	Nepal 1	06.08.1966	BERLIN TP	P	Kanchi		
										09.01.1967
0038	F	0018	0016	Hamb 2	09.04.1967	HAMBURG	B	Shita		
					12.04.1983	BERLINZOO	L			
					13.06.1985	HAMBURG	R			
					08.01.1994	SINGAPORE	P		G2430	
										15.06.1999
0039	M	0018	0007	Basel 7	07.07.1967	BASEL	B	Pandur	670021	
					05.09.1968	HAMBURG	P			
					08.01.1994	SINGAPORE	P		G2429	
										04.02.1994
0040	F	WILD	WILD	Nepal 2	01.08.1967	BERLIN TP	P	Kumari	M00120	
0041	M	0018	0017	Basel 8	22.12.1967	BASEL	B	Puri	670022	
					03.06.1969	STUTTGART	P		2065	
										20.02.1997
0042	M	0001	0011	Myso 1	13.02.1968	MYSORE	B	Mysore		
					24.04.1971	BERLIN TP	P			
										23.12.1966
0043	F	WILD	WILD	Kaz 10	28.03.1968	DELHI	P	Rengi/Rongi		
										02.06.1966
0044	M	0018	0007	Basel 9	27.04.1969	BASEL	B	Ruedi	690023	
					06.10.1970	HOUSTON	P			
										09.02.1971

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0045	F	0018	0017	Basel 10						
					05.10.1969	BASEL	B	Randa	690025	
					06.10.1970	HOUSTON	P			
					06.04.1972	BROWNSVL	?			
					22.11.1974	LOSANGELE	P		07940	
0046	F	WILD	WILD	Assam 8	23.12.1967	ASSAM	P	Rukmini		
					29.11.1969	LOSANGELE	D	Rhadha	92900	
										10.11.1988
0048	F	WILD	WILD	Kaz 42	29.07.1968	ASSAM	P	Goiangi		
					23.01.1970	OMAHA	P			
										31.01.1970
0049	M	WILD	WILD	Nepal 3	23.04.1970	METROZOO	D	Mohan	107	
					14.06.1998	NZP-WASH	L			
0050	F	WILD	WILD	Nepal 4	12.06.1970	METROZOO	D	Shanti	108	
					10.04.1987	PHILADELP	L		101589	
					22.11.1988	NY BRONX	L		881458	
					28.03.1990	METROZOO	R		108	
					29.05.1995	NY BRONX	L		881458	
					12.10.1996	METROZOO	R		108	
0051	F	0033	0043	Delhi 1	27.01.1971	DELHI	B	Roopa		
					06.02.1973	WHIPSNAD	T		L259	
0052	F	0014	0015	Milw 1	30.01.1967	MILWAUKEE	B			
										30.01.1967
0053	M	0001	0011	Myso 2	16.04.1971	MYSORE	B	Vinu		
					28.08.1975	GELSNKRKN	P			
					28.08.1976	TORONTO	P		7720	
					30.05.1990	NY BRONX	L		901284	
0054	F	0018	0034	Stutt 1	16.07.1971	STUTTGART	B		3383	
										16.07.1971
0055	F	0018	0017	Basel 11	11.08.1971	BASEL	B	Tutuma	710026	
					05.09.1972	PLANCKNDL	P	Zutuma	184003	

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0056	F	0018	0007	Basel 12	24.08.1971	BASEL	B	Tanaya	710027	17.02.1996
0057	M	0024	0025	Gauh 3	12.09.1971	ASSAM	B	Sambar		
					02.10.1974	NAGOYA	P	Sanver		
0058	M	0076	0077	Hyde 1	25.11.1971	HYDERABAD	B	Rajesh		11.08.1983
0060	M	0018	0031	Ber-Z 1	04.04.1972	BERLINZOO	B	Kumar		
					15.06.1973	AMSTERDAM	P			
					23.04.1976	WHIPSNIDE	T		L260	16.10.2002
0061	M	WILD	WILD	Kaz 13	24.01.1980	ASSAM	P	Ram		
					29.01.1985	MYSORE	P	Muniya		02.08.2002
0062	M	WILD	WILD	Assam 11	14.04.1952	VEERMATA	P	Lacit		14.09.1980
0063	M	WILD	WILD	Nepal 5	09.09.1966	OMAHA	P			24.02.1975
0064	F	WILD	WILD	Assam 10	03.01.1974	ASSAM	P	Jaya		
					02.10.1974	NAGOYA	P			26.02.2001
0065	M	0022	0021	Tokyo 2	20.12.1973	TOKYOTAMA	B	Saitaro		
					12.12.1978	AMSTERDAM	D			24.05.1989
0066	F	WILD	WILD	Kaz 14	14.08.1973	ASSAM	P	Mayang		
					30.01.1975	NY BRONX	P	Pinky	751511	
0067	F	WILD	WILD	Kaz 15	21.06.1973	ASSAM	P	Radha		
					30.01.1975	NY BRONX	P		751512	12.07.1996
0068	M	0018	0007	Basel 13	03.01.1974	BASEL	B		740028	03.01.1974



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0069	M	0019	0025	Wash 1	30.01.1974	NZP-WASH	B	Patrick	100859	
					29.10.1975	NY BRONX	L		751821	
					16.06.1989	TORONTO	L		24640	
0070	M	0024	0025	Gauh 4	23.05.1974	ASSAM	B	Lachit		
					04.03.1977	KANPUR	?			08.08.1992
0071	M	0018	0034	Stutt 2	05.12.1974	STUTTGART	B	Nabob	2665	
					23.11.1976	GELSNKRKN	P			
					31.10.1977	SAO PAULO	P		9895	13.06.1997
0072	M	WILD	WILD	Nepal 6	15.07.1959	PEKING	P	Xiang Ka		12.11.1978
0073	M	WILD	WILD	Assam 33	30.07.1970	ASSAM	P	Sasadev		
					23.03.1971	PLANCKNDL	P	Yassam	184002	16.10.1986
0074	M	WILD	WILD	Nepal 24	19.01.1934	ST LOUIS	P	Harry		31.12.1981
0075	M	WILD	WILD	Assam 12	09.06.1953	MADRAS	P	Kushal		15.06.1980
0076	M	WILD	WILD	Assam 32	28.08.1962	ASSAM	P	Rajkumar		19.08.1983
					16.06.1964	HYDERABAD	P			
0077	F	WILD	WILD	Kaz 17	15.06.1968	HYDERABAD	P	Padma		19.08.1983
0078	M	0026	0029	SDWAP 1	24.03.1975	SD-WAP	B		013056	25.03.1975
0079	F	0001	0011	Myso 3	19.07.1975	MYSORE	B	Indira		
					15.06.1976	GELSNKRKN	P			
					27.04.1979	TORONTO	P		11554	
0080	F	0018	0007	Basel 14	10.10.1975	BASEL	B	Xavira	750029	
					07.11.1979	PHILADELP	P		100925	

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0081	M	WILD	WILD	Kaz 43	28.06.1971	ASSAM	P	Santu		03.12.1973
					12.09.1973	BROWNSVL	P			
0082	F	WILD	WILD	Kaz 18	05.10.1958	ASSAM	P	Padmini		28.10.1964
0083	M	0018	0031	Ber-Z 2	18.02.1976	BERLINZOO	B	Heiner	968001	07.06.2000
					12.07.1981	OKLAHOMA	P			
					19.12.1983	NY BRONX	L			
0084	M	0018	0056	Basel 15	26.03.1976	BASEL	B	Yamataru	760030	08.09.1987
					02.11.1977	GELSNKRKN	L			
					02.11.1978	COLOGNE	P			
0085	M	0026	0029	SDWAP 2	18.10.1976	SD-WAP	B	Maharaja	101932	20.10.1976
0086	M	0041	0034	Stutt 3	21.09.1977	STUTTGART	B	Dvityia	2994	08.07.1992
					12.08.1980	DVURKRALV	P			
					14.05.1992	SINGAPORE	P			
0087	M	0018	0058	Basel 16	28.01.1978	BASEL	B	Assam	780031	
					08.11.1979	PHILADELP	L			
					14.10.1982	NY BRONX	P			
					29.10.1991	MILWAUKEE	L			
					22.05.1995	WILDS	L			
0088	M	0018	0007	Basel 17	16.07.1978	BASEL	B	Angkor	780032	19.11.1978
0089	F	0032	0031	Ber-Z 3	13.08.1979	BERLINZOO	B	Terai	968102	11.09.2001
					12.07.1981	OKLAHOMA	P			
					17.11.1990	LOSANGELE	L			
					18.02.1997	SD-WAP	L			
0090	M	WILD	WILD	Assam 14	30.03.1959	LUCKNOW	P	Jai Singh		06.05.1979
0091	M	WILD	WILD	Assam 15	15.11.1976	ASSAM	P	Sanjoy		18.01.1980
					20.10.1979	LUCKNOW	?			

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0092	F	WILD	WILD	Assam 16	24.04.1978	ASSAM	P	Krishna Jr.		
					20.10.1979	LUCKNOW	?			
0093	F	0041	0034	Stutt 4	13.09.1979	STUTTGART	B	Numa	3124	
					22.07.1981	DVURKRALV	P			
0094	M	WILD	WILD	Kaz 19	12.02.1974	ASSAM	P	Hihua		
					14.03.1974	CALCUTTA	P			Meghnad
0095	F	WILD	WILD	Kaz 20	22.01.1974	ASSAM	P	Mayuri		
					14.03.1974	CALCUTTA	P			Kadambini
0096	M	0076	0077	Hyde 2	12.11.1978	HYDERABAD	B	Laddu		06.08.2001
0097	F	0094	0023	Calc 1	09.01.1979	CALCUTTA	B	Gomali		
					10.03.1986	COLOGNE	P		462	
					02.05.1997	SINGAPORE	D		G4844	
0098	F	WILD	WILD	Nepal 7	09.10.1980	PEKING	D	Bang Ti		
0099	F	0026	0029	SDWAP 3	19.03.1978	SD-WAP	B	Gaında	102575	
0100	M	0018	0056	Basel 18	11.01.1980	BASEL	B	Chitawan	800033	13.11.1995
0101	M	0026	0029	SDWAP 4	08.08.1980	SD-WAP	B	Pandu	103996	
					04.11.1982	SANDIEGOZ	L		282326	
					01.07.1985	NZP-WASH	L		106574	
					12.02.1993	NZP-WASH	D		106574	
					09.07.1996	PHILADELP	L		103314	
					04.05.1998	MONTGOMER	L		2499	
0102	M	0073	0055	Antw 1	03.11.1980	PLANCKNDL	B			07.11.1980
0103	M	WILD	WILD	Nepal 8	27.08.1980	RANGOON	P			01.06.1993

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0104	F	WILD	WILD	Nepal 9	27.08.1980	RANGOON	P			01.06.1993
0105	F	WILD	WILD	Nepal 10	02.02.1944	LUCKNOW	P	Rosy		02.04.1973
0106	M	0076	0077	Hyde 3	15.05.1981	HYDERABAD	B	Srinivas		
					10.08.1983	SD-WAP	D	Rabha	783639	
					30.11.1983	SANDIEGOZ	D			
					29.05.1985	SD-WAP	D		783639	
					16.05.2001	FORTWORTH	L		200677	
0107	F	0060	0051	Whip 3	21.05.1981	WHIPSNAD	B			21.05.1981
0108	M	WILD	WILD	Nepal 11	20.10.1981	PEKING	P	Ka Ma		26.11.1981
0109	M	0041	0034	Stutt 5	30.08.1981	STUTTGART	B	Nadir	3125	
					13.04.1983	ROTTERDAM	L		109	
					28.05.1990	SINGAPORE	L		G45	
					15.12.1994	CHIANG MA	L			23.01.2002
0110	F	0018	0056	Basel 19	16.01.1982	BASEL	B	Ellora	820034	
0111	F	0035	0046	Losan 1	16.02.1982	LOSANGELE	B	Meelah	94307	
					18.06.1985	SD-WAP	L		028842	03.07.1985
0112	M	0026	0099	SDWAP 5	25.07.1982	SD-WAP	B	Tezpur	682461	
					27.10.1983	SEOUL	P			21.06.1990
0113	F	0073	0055	Anlw 2	09.08.1982	PLANCKNDL	B	Johanna	184004	
0114	F	WILD	WILD	Nepal 12	17.05.1980	KATHMANDU	P			27.01.1990
0115	M	0060	0051	Whip 4	09.03.1983	WHIPSNAD	B	Bheema		
					03.10.1985	PLANCKNDL	D		184005	22.10.1999



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0116	M	0026	0029	SDWAP 6	01.05.1983	SD-WAP	B	Jorhat	683352	
					05.06.1985	SANDIEGOZ	L			
					17.09.1988	LOWRY	L		100123	
					30.05.2001	EVANSVILLE	L		101031	
0117	M	0041	0034	Stutt 6	12.07.1983	STUTTGART	B	Kalgin	3126	
					27.08.1985	KANAZAWA	P	Kintaro		
0118	F	0010	0080	Phil 1	25.02.1984	PHILADELP	B		101286	26.02.1984
0119	M	0018	0056	Basel 20	29.02.1984	BASEL	B	Gandak	B40035	11.03.1985
0120	F	0035	0045	Losan 2	09.08.1982	LOSANGELE	B		000948	09.08.1982
0121	M	0035	0045	Losan 3	16.12.1983	LOSANGELE	B		N00204	16.12.1983
0122	F	0070	0128	Kan 1	01.10.1982	KANPUR	B	Rashmi/Sawako		
					04.12.1985	KANAZAWA	P	Sawako		
										04.01.1995
0123	M	0041	0034	Stutt 7	29.01.1985	STUTTGART	B	Bruno	3127	
					09.12.1987	COLOGNE	L		597	
					23.04.1997	STUTTGART	R		3127	
0124	M	0026	0099	SDWAP 7	25.06.1985	SD-WAP	B	Gurkha	028851	
					26.10.1989	SINGAPORE	L		G42	
0125	M	0035	0046	Losan 4	11.08.1985	LOSANGELE	B	Chandra	002213	
					15.11.1990	OKLAHOMA	L		542705	
0126	M	0010	0080	Phil 2	03.11.1985	PHILADELP	B	BJ/Akbar	101430	
					06.04.1987	METROZOO	L	Akbar	M00755	
					01.01.1999	METROZOO	D	BJ/Akbar	M00755	
										22.11.2002
0127	M	0042	0040	Ber-T 1	23.11.1985	BERLIN TP	B			23.11.1985



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0128	F	WILD	WILD	Assam 17	11.08.1973	ASSAM	P	Usha		
					04.03.1977	KANPUR	P			
					30.04.1997	LUCKNOW	P	Mayang Kumari		
0129	M	0070	0128	Kan 2	06.12.1984	KANPUR	B	Lohit		
					06.04.1995	LUCKNOW	T			
0130	F	0026	0029	SDWAP 8	18.01.1986	SD-WAP	B	Jumia	005257	
0131	F	0083	0066	Neyo 1	09.04.1986	NY BRONX	B	Ellah	861069	
0132	M	0060	0051	Whip 5	09.08.1986	WHIPSNAD	B	Yodha		
					03.12.1987	CHESTER	L		1652	
					13.10.1998	BERLINZOO	L			
0133	F	0035	0045	Losan 5	10.10.1986	LOSANGELE	B		N00297	
										10.10.1986
0134	M	0073	0055	Antw 3	24.10.1986	PLANCKNDL	B	Nico	184006	
					09.10.1990	ROTTERDAM	L		104083	
0135	M	0041	0034	Stutt 8	24.12.1986	STUTTGART	B	Noel	3333	
					01.12.1989	NURNBERG	P		M00470	
0136	M	WILD	WILD	Nepal 13	26.05.1987	SAN FRAN	P	Chhendra		
										06.09.1996
0137	F	WILD	WILD	Nepal 14	26.05.1987	SAN FRAN	P	Shanti	187049	
					27.11.1996	SD-WAP	L		696602	
0138	F	WILD	WILD	Nepal 15	27.05.1987	NZP-WASH	D	Mechi	107663	
					10.05.1994	PHILADELP	L		102924	
					20.10.1994	NZP-WASH	R		107663	
0139	F	WILD	WILD	Nepal 16	27.05.1987	NZP-WASH	D	Kali	107664	
					23.04.1998	NY BRONX	L		981044	

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0140	M	0070	0128	Kan 3	17.06.1987	KANPUR	B	Mohit		
0141	M	0086	0093	Dvkr 2	04.11.1987	DVURKRALV	B	Nim		
					09.11.1989	LIBEREC	P			
					20.12.2001	PEKING	?			
0142	M	0026	0029	SDWAP-	07.01.1987	SD-WAP	B		687013	07.01.1987
0143	F	0026	0099	SDWAP 9	28.05.1987	SD-WAP	B	Goalpara	687346	
0144	F	WILD	WILD	Nepal 17	15.05.1988	BERLINZOO	D	Narajani		
					03.06.2002	BERLIN TP	L			
0145	M	0060	0051	Whip 6	08.05.1988	WHIPSNADDE	B	Ropen		
					16.11.1990	DVURKRALV	L			
0146	M	0026	0029	SDWAP 10	22.05.1988	SD-WAP	B	Joya	688293	
					13.09.1990	SANDIEGOZ	L			
					06.04.1995	ROLLING H	L		950029	
0147	M	0010	0080	Phil 3	14.08.1988	PHILADELP	B	Jimmy	101728	
					25.10.1989	CINCINNAT	L		189167	
0148	F	0100	0056	Basel 21	04.10.1988	BASEL	B	Nasi	880036	
					12.07.1990	MUNICH	P		079002	
0149	F	0100	0110	Basel 22	11.12.1988	BASEL	B		880037	11.12.1988
0150	M	0094	0095	Calc 2	04.06.1984	CALCUTTA	B	Debraj		
0151	M	WILD	WILD	Kaz 44	05.05.1982	ASSAM	P	Agni		
					03.03.1983	DELHI	?	Dabhu Agni		24.04.2001



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0152	M	0041	0034	Stull 9	27.11.1988	STUTTGART	B	Nikolaus	3889	
					12.06.1990	MUNICH	L		079003	
0153	F	WILD	WILD	Kaz 21	18.09.1974	ASSAM	P	Numali		
					08.04.1976	NANDANKAN	P			
0154	M	WILD	WILD	Assam 34	22.08.1977	ASSAM	P	Ganesh		
					02.12.1979	NANDANKAN	?	Nandan		
0155	F	WILD	WILD	Assam 19	21.07.1974	ASSAM	P	Caltralekha		
					28.05.1979	PATNA	?	Kanchi		
0156	M	WILD	WILD	Assam 20	19.08.1977	ASSAM	P	Vijay		
					28.05.1979	PATNA	?	Kancha		
0157	M	WILD	WILD	India K	28.03.1982	PATNA	P	Raju		
0158	F	0157	0155	Patna 1	25.10.1986	PATNA	B			25.10.1986
0159	F	0157	0155	Patna 2	03.07.1988	PATNA	B	Hartali		
0160	M	0070	0128	Kan 4	23.06.1989	KANPUR	B	Rohit		
0161	F	0083	0066	Neyo 2	05.09.1989	NY BRONX	B	Mary	891296	
					08.11.1993	OKLAHOMA	R		513604	
0162	M	0060	0051	Whip 7	02.10.1989	WHIPSNIDE	B	Bardia	L262	15.09.1995
0163	F	0106	0099	SDWAP 11	20.04.1989	SD-WAP	B		689183	20.04.1989
0164	M	WILD	WILD	Nepal 18	07.05.1990	SINGAPORE	P	Karnak	G43	06.01.1999
0165	F	WILD	WILD	Nepal 19	07.05.1990	SINGAPORE	P	Kanchan	G44	02.11.1991

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0166	M	0042	0040	Ber-T 2	01.01.1990	BERLIN TP	B	Belur	M00119	
					21.06.1993	BERLINZOO	L			
					10.08.1997	BERLIN TP	R		M00119	
0167	F	0086	0093	Dvkr 1	14.01.1986	DVURKRALV	B	Nelly		27.02.1986
0168	F	0024	0025	Gauh 5	09.01.1978	ASSAM	B	Padmini II/Gita		11.01.1998
0169	M	WILD	WILD	Assam 21	27.01.1980	ASSAM	P	Lakshman		
0170	M	WILD	WILD	Assam 22	23.08.1980	ASSAM	P	John		
0171	F	WILD	WILD	Assam 23	23.08.1980	ASSAM	P	Gini		24.06.1999
0172	M	WILD	WILD	Kaz 23	15.07.1982	ASSAM	P	Ganesh		
0173	M	0024	0188	Gauh 6	11.05.1987	ASSAM	B	Bishnu		
0174	M	WILD	WILD	Assam 24	25.08.1987	ASSAM	P	Ratul		
					17.10.1995	GORUMARA	P		REL	
0175	M	WILD	WILD	Assam 25	24.09.1988	ASSAM	P	Ramu		
					19.05.1993	TRIVANDRU	P			
0176	M	0169	0168	Gauh 7	30.03.1989	ASSAM	B	Mohesh		
0177	M	WILD	WILD	Kaz 24	26.07.1989	ASSAM	P	Jadu		
					19.05.1993	TRIVANDRU	P			
0178	M	WILD	WILD	Kaz 25	26.07.1989	ASSAM	P	Madhu		
					17.10.1995	JALDAPARA	P		REL	

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0179	M	WILD	WILD	Kaz 26	20.08.1990	ASSAM	P	Pradip		
					14.10.1994	TRIPURA	P			
0180	M	0026	0029	SDWAP 12	27.01.1990	SD-WAP	B	Jaunpur	690037	
					06.04.1995	ROLLING H	L		950030	
					14.11.1996	BATONROUG	L		7914	
					19.06.1997	BATONROUG	T		7914	
0181	M	0100	0110	Basel 23	31.05.1990	BASEL	B	Nandi	900038	
					01.12.1991	NAGOYA	P		900038	
0182	F	0106	0130	SDWAP 13	20.07.1990	SD-WAP	B	Jhansi	690458	
					10.10.1994	STUTTGART	T		5628	
					10.10.1994	BERLIN TP	L		M00121	
					03.06.2002	BERLINZOO	L			
0183	F	0100	0056	Basel 24	23.10.1990	BASEL	B	Nilgiri	910039	
					01.12.1991	NAGOYA	P		910039	
0184	M	0106	0099	SDWAP 14	28.12.1990	SD-WAP	B	Gujrat	690732	
					25.10.1996	LISBON	L		5496	
					09.12.1999	LISIEUX Z	L		M99100	
					20.08.2001	PLANCKNDL	L		184013	
0185	F	0041	0034	Stutt 10	11.02.1991	STUTTGART	B	Namaste	4449	
					16.06.1993	ROTTERDAM	L		104724	
0186	M	0070	0128	Kan 5	05.07.1991	KANPUR	B	Mudil		
0187	M	0010	0080	Phil 4	24.07.1991	PHILADELP	B	Dhaulagiri	102345	
					21.07.1992	BUFFALO	L		92M163	
					30.09.1998	BUFFALO	D		92M163	
0188	M	0106	0143	SDWAP 15	22.12.1991	SD-WAP	B	Gangtok	691776	
					25.10.1996	LISBON	L		5497	

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0189	F	0069	0079	Toro 1	25.12.1991	TORONTO	B	Nikki	27199	
					22.08.1994	CINCINNAT	L		194156	
					02.05.2001	WILDS	L		101005	
0190	M	WILD	WILD	Nepal 22	10.05.1990	FORTWORTH	P	Arun	724	
					18.05.2001	SD-WAP	L		601279	
0191	F	WILD	WILD	Nepal 23	10.05.1990	FORTWORTH	P	Arati	725	
0192	F	WILD	WILD	Kaz 27	10.08.1991	ASSAM	P	Baghekhaiti		
0193	F	WILD	WILD	Nepal 20	15.04.1990	MUNICH	P	Rapli	079001	
0194	F	WILD	WILD	Kaz 45	04.06.1982	ASSAM	?	Mohini		
					20.12.1990	DELHI	P			
										25.04.2002
0195	F	0100	0110	Basel 25	23.01.1992	BASEL	B	Purana	920040	
					08.07.1993	NURNBERG	P		M00471	
0196	F	0115	0113	Antw 4	03.02.1992	PLANCKNDL	B			03.02.1992
0197	M	0106	0130	SDWAP 16	26.02.1992	SD-WAP	B		692076	26.02.1992
0198	F	0026	0029	SDWAP 17	21.07.1992	SD-WAP	B		692441	21.07.1992
0199	M	0101	0138	Wash 2	30.07.1992	NZP-WASH	B			30.07.1992
0200	M	0106	0099	SDWAP 18	06.11.1992	SD-WAP	B		692618	06.11.1992
0201	F	0115	0055	Antw 5	15.11.1992	PLANCKNDL	B	Teja	184008	
					21.11.1992	WHIPSNADE	D		L2961	
					24.11.1996	LISBON	L		5532	
					01.01.2002	LISBON	D		5532	

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0202	M	0151	0194	Delhi 2	27.12.1992	DELHI	B	Ayodhya		
0203	F	0157	0155	Patna 3	06.07.1991	PATNA	B	Chhotki		
					26.04.1997	KANPUR	P	Chutki		
0204	F	WILD	WILD	Nepal 21	30.06.1993	STUTTGART	D	Sani	5143	
0205	M	0101	0139	Wash 3	15.01.1993	NZP-WASH	B			15.01.1993
0206	M	0100	0056	Basel 26	22.02.1993	BASEL	B	Qullon	930041	
					29.04.1995	SINGAPORE	L		G3209	
0207	F	0060	0051	Whip 8	01.05.1993	WHIPSHADE	B			02.05.1993
0208	M	0115	0113	Antw 6	04.08.1993	PLANCKNOL	B			04.08.1993
0209	F	0026	0143	SDWAP 19	07.09.1993	SD-WAP	B	Godavari	693536	
0210	F	0100	0110	Basel 27	10.10.1993	BASEL	B	Quetta	930042	
0215	M	WILD	WILD	Kaz 30	17.10.1977	ASSAM	P	Balaram		
					14.12.1977	CHANDIGAR	?			
0216	F	WILD	WILD	Kaz 31	15.06.1978	ASSAM	P	Shakuntala		
					29.07.1978	CHANDIGAR	?			25.05.1986
0217	M	WILD	WILD	Assam 28	24.04.1979	ASSAM	P	Shiva		
					25.02.1985	VEERMATA	?			
0218	M	WILD	WILD	Kaz 32	03.09.1980	ASSAM	P	Ramu		
					17.04.1985	MADRAS	?			03.07.1989
0219	F	WILD	WILD	Assam 29	11.03.1979	CALCUTTA	P	Mayuri		



ZOO BASEL

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0220	M	0106	0130	SDWAP 20	18.03.1994	SD-WAP	B	Jaffna	694115	
					29.03.1996	BASEL	P		694115	
0221	M	0083	0066	Neyo 3	22.03.1994	NY BRONX	B			22.03.1994
0222	M	0069	0079	Toro 2	11.09.1994	TORONTO	B	Sanjay	30105	
					26.01.1998	TORONTO	L		30105	
					26.01.1998	PHILADELP	D		103525	
					28.08.1998	PHILADELP	R		103525	
0223	F	0010	0080	Phil 5	05.10.1994	PHILADELP	B	Penny	103011	
					02.07.2001	NY BRONX	L		M01135	
0224	M	0026	0029	SDWAP 21	26.11.1994	SD-WAP	B	Jafar	694673	
					07.11.1995	GULF BREZ	L		A1858	
0225	F	0026	0029	SDWAP 22	31.07.1984	SD-WAP	B		026310	31.07.1984
0226	F	0106	0182	Ger-T 3	21.01.1995	BERLIN TP	B	Betty	M00122	
0227	M	0106	0099	SDWAP 23	26.05.1996	SD-WAP	B	ASSAM	695264	
					14.02.1997	SAN FRAN	L			
0228	M	0106	0143	SDWAP 24	24.08.1995	SD-WAP	B		695462	24.08.1995
0229	F	0115	0113	Antw 7	12.10.1995	PLANCKNDL	B	Winona	184010	
					26.04.2000	LISIEUX Z	L		M00057	
0230	F	0053	0131	Neyo 4	28.12.1995	NY BRONX	B	Daily	951230	
					19.06.2001	WILDS	L		101023	
0231	M	WILD	WILD	India O	13.03.1875	PHILADELP	P	Pete		03.01.1901
0232	F	WILD	WILD	Nepal 25	24.05.1923	PHILADELP	P	Maharaneer/Peggy	10303	14.04.1943



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0233	M	WILD	WILD	Assam 31	07.07.1939	NZP-WASH	P	Gunda	16923	09.01.1959
0234	F	0060	0051	Whip 9	19.10.1991	WHIPSNAD	B		L1701	20.10.1991
0235	F	0169	0168	Gauh 8	22.02.1995	ASSAM	B	Rita		
0236	M	0026	0130	SDWAP 25	04.01.1996	SD-WAP	B	Jasai	696004	17.10.2000
0237	M	0152	0148	Mun 1	13.07.1996	MUNICH	B		079004	13.07.1996
0238	F	0101	0138	Wash 5	18.09.1996	NZP-WASH	B	Chitwan	112925	
					21.05.1998	WILDS	L		980503	
					03.05.2001	CINCINNAT	L		101080	
0239	M	0101	0139	Wash 6	31.10.1996	NZP-WASH	B	Himal	112946	
					21.05.1998	WILDS	L		980502	
0240	M	0100	0110	Basel 28	20.11.1996	BASEL	B	Tarrh	960043	
					08.10.1998	TOKYOTAMA	D		2463	
0241	F	0125	0161	Okla 1	06.12.1996	OKLAHOMA	B	Tashi	701406	
					06.11.1996	BUFFALO	L		98M146	
0242	M	WILD	WILD	Nepal 26	22.04.1986	CHIANG MA	P			24.07.1986
0243	F	WILD	WILD	Nepal 27	22.04.1986	CHIANG MA	P			
0244	F	0106	0130	SOWAP 26	24.08.1997	SD-WAP	B	Jakichu	697474	
0245	F	0145	0093	Dvkr 3	13.09.1997	DVURKRALV	B	Nova		
0246	F	0115	0055	Antw 8	27.09.1997	PLANCKNDL	B		184011	27.09.1997

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0247	F	0106	0143	SDWAP 27	09.11.1997	SD-WAP	B	Gondia	697581	25.11.1997
0248	M	0106	0099	SDWAP 28	20.11.1997	SD-WAP	B		697598	20.11.1997
0249	M	0106	0209	SDWAP 29	23.11.1997	SD-WAP	B	Giirja	697600	
					30.05.2000	PEACE RV	L		100069	
0250	M	0215	0216	Chand 1	09.05.1986	CHANDIGAR	B	Chhatbir		
0251	M	0151	0194	Delhi 3	28.08.1995	DELHI	B	Meghdoot		06.03.1999
0252	F	0151	0194	Delhi 4	27.11.1997	DELHI	B	Maheshwari		
0253	M	0134	0185	Rott 1	04.01.1998	ROTTERDAM	B	Kaila Padam	105672	
					09.11.1999	MADRID Z	L		RI1	
0254	M	0053	0131	Neyo 5	27.07.1998	NY BRONX	B	Michael Cline	981132	
					13.06.2001	LOWRY	L		101460	
0255	M	0115	0113	Anlw 9	21.09.1998	PLANCKNDL	B	Zimon	184012	
					13.09.2001	AMERSFOOR	L		M2516	
0256	F	WILD	WILD	Nepal 28	29.04.1997	LONDON RP	L	Beluki	A3568	
					22.09.1998	WHIPSNADE	L		L3165	
0257	F	WILD	WILD	Nepal 29	29.04.1997	LONDON RP	L	Behin	A3569	
					03.11.1998	WHIPSNADE	L		L3188	
0258	M	0106	0137	SDWAP 30	21.12.1998	SD-WAP	B		698678	21.12.1998
0259	M	0106	0143	SDWAP 31	18.05.1999	SD-WAP	B	Gram	699277	
0260	F	0170	0171	Gauh 9	15.06.1999	ASSAM	B			15.06.1999

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0261	F	0152	0148	Mun 2	22.07.1999	MUNICH	B		079005	22.07.1999
0262	M	0106	0130	SDWAP 32	27.07.1999	SD-WAP	B	Jibito	699439	
					17.06.2002	LANGLEY	L			
0263	M	0057	0183	Nag 1	14.08.1999	NAGOYA	B	Dora		
					28.10.2001	SYDNEY	D			
0264	F	0069	0079	Toro 3	14.08.1999	TORONTO	B	Sanya	34890	
0265	M	0135	0195	Nur 1	08.10.1999	NURNBERG	B	Albrecht	M01560	
					26.09.2001	LISIEUX Z	L		M01088	
0266	F	0106	0209	SDWAP 33	22.12.1999	SD-WAP	B	Gopon	699614	
0267	U	0076	0077	Hyde 4	12.05.1975	HYDERABAD	B			12.05.1975
0268	M	0024	0025	Gauh 10	09.06.1982	ASSAM	B	Shyam Jr.		23.09.1990
0269	F	0123	0204	Stutt 11	12.02.2000	STUTTGART	B	Sarasvati	7551	
					30.01.2002	MADRID Z	L		RI2	
0270	M	0134	0185	Roll 2	04.07.2000	ROTTERDAM	B	Namaste-Nandana	106133	
					13.09.2001	AMERSFOOR	L	Daan	M2515	
0271	F	0053	0131	Neyo 6	22.12.2000	NY BRONX	B	Peggy Francis	M00167	
0272	F	0106	0099	SDWAP 34	15.02.2000	SD-WAP	B	Goyona	600038	
0273	M	0108	0137	SDWAP 35	31.12.2000	SD-WAP	B	Suru	600657	
0274	F	0106	0130	SDWAP 36	19.01.2001	SD-WAP	B	Jeta	601024	

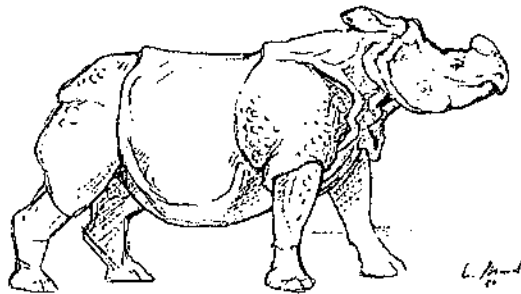


Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS	DEATHDATE dd.mm.yyyy
0275	M	0053	0139	Neyo 7	24.03.2001	NY BRONX	B		M01022	24.03.2001
0276	F	0125	0161	Okla 2	10.05.2001	OKLAHOMA	B	Jamie	769407	
0277	M	0108	0143	SDWAP 37	06.08.2001	SD-WAP	B	Gyan	601332	
0278	F	0106	0209	SDWAP 38	23.07.2001	SD-WAP	B	Gari	601408	
0279	M	0106	0244	SDWAP 39	28.11.2001	SD-WAP	B	Choto	601544	
0280	F	0152	0148	Mun 3	15.07.2001	MUNICH	B	Nisha	079006	
0281	F	0106	0099	SDWAP 40	01.10.2001	SD-WAP	B		601490	01.10.2001
0282	M	WILD	WILD	Nepal 30	28.03.2002	TOKYOTAMA	D		3799	
0283	F	WILD	WILD	Nepal 31	28.03.2002	TOKYOTAMA	D		3800	
0284	F	0123	0204	Stutt 12	13.04.2002	STUTTGART	B	Shiwa	7916	
0285	M	0188	0201	Lis 1	25.09.2002	LISBON	B		8346	25.09.2002
0286	F	0166	0226	Berlin-T 4	23.10.2002	BERLIN TP	B			23.10.2002
0287	M	0134	0185	Rott 3	07.12.2002	ROTTERDAM	B		106592	
0288	F	0190	0130	SDWAP 41	23.12.2002	SD-WAP	B	Raji	602549	

APPENDIX II

Current Studbook Population

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Current population Greater one-horned rhinoceros

Report date: 31 December 2002

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
AMERSFOOR									
0255	M	0115	0113	Antw 9	21.09.1998	PLANCKNDL	B	Zimon	184012
					13.09.2001	AMERSFOOR	L		M2516
0270	M	0134	0185	Roll 2	04.07.2000	ROTTERDAM	B	Namaste-Nandana	106133
					13.09.2001	AMERSFOOR	L	Daan	M2515
ASSAM									
0169	M	WILD	WILD	Assam 21	27.01.1980	ASSAM	P	Lakshman	
0170	M	WILD	WILD	Assam 22	23.08.1980	ASSAM	P	John	
0172	M	WILD	WILD	Kaz 23	15.07.1982	ASSAM	P	Ganesh	
0173	M	0024	0168	Gauh 6	11.05.1987	ASSAM	B	Bishnu	
0176	M	0169	0168	Gauh 7	30.03.1989	ASSAM	B	Mohesh	
0192	F	WILD	WILD	Kaz 27	10.08.1991	ASSAM	P	Baghekhaiti	
0235	F	0169	0168	Gauh 8	22.02.1995	ASSAM	B	Rita	
BASEL									
0110	F	0018	0056	Basel 19	16.01.1982	BASEL	B	Ellora	820034
0210	F	0100	0110	Basel 27	10.10.1993	BASEL	B	Quetta	930042
0220	M	0106	0130	SDWAP 20	18.03.1994	SD-WAP	B	Jaffna	694115
					29.03.1996	BASEL	P		694115
BATONROUG									
0180	M	0026	0029	SDWAP 12	27.01.1990	SD-WAP	B	Jaunpur	690037
					06.04.1995	ROLLING H	L		950030
					14.11.1996	BATONROUG	L		7914
					19.06.1997	BATONROUG	T		7914

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
BERLIN TP									
0040	F	WILD	WILD	Nepal 2	01.08.1967	BERLIN TP	P	Kumari	M00120
0144	F	WILD	WILD	Nepal 17	15.05.1986	BERLINZOO	D	Narajani	
					03.06.2002	BERLIN TP	L		
0166	M	0042	0040	Ber-T 2	01.01.1990	BERLIN TP	B	Belur	M00119
					21.06.1993	BERLINZOO	L		
					10.06.1997	BERLIN TP	R		M00119
0226	F	0106	0182	Ber-T 3	21.01.1995	BERLIN TP	B	Betty	M00122
BERLINZOO									
0132	M	0060	0051	Whip 5	09.08.1986	WHIPSHADE	B	Yodha	
					03.12.1987	CHESTER	L		1652
					13.10.1998	BERLINZOO	L		
0182	F	0106	0130	SDWAP 13	20.07.1990	SD-WAP	B	Jhansi	690458
					10.10.1994	STUTTGART	T		5628
					10.10.1994	BERLIN TP	L		M00121
					03.06.2002	BERLINZOO	L		
BUFFALO									
0187	M	0010	0080	Phil 4	24.07.1991	PHILADELP	B	Dhaulagiri	102345
					21.07.1992	BUFFALO	L		92M163
					30.09.1998	BUFFALO	D		92M163
0241	F	0125	0161	Okla 1	06.12.1996	OKLAHOMA	B	Tashi	701406
					06.11.1998	BUFFALO	L		98M146
CALCUTTA									
0094	M	WILD	WILD	Kaz 19	12.02.1974	ASSAM	P	Hihua	
					14.03.1974	CALCUTTA	P	Meghnad	
0095	F	WILD	WILD	Kaz 20	22.01.1974	ASSAM	P	Mayuri	
					14.03.1974	CALCUTTA	P	Kadambini	
0150	M	0094	0095	Calc 2	04.06.1984	CALCUTTA	B	Debraj	
0219	F	WILD	WILD	Assam 29	11.03.1979	CALCUTTA	P	Mayuri	
CHANDIGAR									
0215	M	WILD	WILD	Kaz 30	17.10.1977	ASSAM	P	Balaram	
					14.12.1977	CHANDIGAR	?		
0250	M	0215	0216	Chand 1	09.05.1986	CHANDIGAR	B	Chhatbir	
CHIANG MA									
0243	F	WILD	WILD	Nepal 27	22.04.1986	CHIANG MA	P		

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
CINCINNAT									
0147	M	0010	0080	Phil 3	14.08.1988	PHILADELP	B	Jimmy	101728
					25.10.1989	CINCINNAT	L		189167
0238	F	0101	0138	Wash 5	18.09.1996	NZP-WASH	B	Chitwan	112925
					21.05.1998	WILDS	L		980503
					03.05.2001	CINCINNAT	L		101080
DELHI									
0202	M	0151	0194	Delhi 2	27.12.1992	DELHI	B	Ayodhya	
0252	F	0151	0194	Delhi 4	27.11.1997	DELHI	B	Maheshwari	
DVURKRALV									
0093	F	0041	0034	Stutt 4	13.09.1979	STUTTGART	B	Numa	3124
					22.07.1981	DVURKRALV	P		
0145	M	0060	0051	Whip 5	08.05.1988	WHIPNADE	B	Ropen	
					16.11.1990	DVURKRALV	L		
0245	F	0145	0093	Dvkr 3	13.09.1997	DVURKRALV	B	Nova	
EVANSVILLE									
0116	M	0026	0029	SDWAP 6	01.05.1983	SD-WAP	B	Jorhat	683352
					05.06.1985	SANDIEGOZ	L		
					17.09.1988	LOWRY	L		100123
					30.05.2001	EVANSVILLE	L		101031
FORTWORTH									
0106	M	0076	0077	Hyde 3	15.05.1981	HYDERABAD	B	Srinivas	
					10.08.1983	SD-WAP	D	Rabha	783639
					30.11.1983	SANDIEGOZ	D		
					29.05.1985	SD-WAP	D		783639
					16.05.2001	FORTWORTH	L		200677
0191	F	WILD	WILD	Nepal 23	10.05.1990	FORTWORTH	P	Arali	725
GORUMARA									
0174	M	WILD	WILD	Assam 24	25.08.1987	ASSAM	P	Ratul	
					17.10.1995	GORUMARA	P		REL



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
GULF BREZ									
0029	F	0024	0082	Gauh 2	10.07.1963	ASSAM	B	Jaypuri	
					28.02.1965	SANDIEGOZ	P		
					26.04.1972	SD-WAP	P		100288
					07.11.1995	GULF BREZ	L		A1857
0224	M	0026	0029	SDWAP 21	26.11.1994	SD-WAP	B	Jafar	694673
					07.11.1995	GULF BREZ	L		A1858
JALDAPARA									
0178	M	WILD	WILD	Kaz 25	28.07.1989	ASSAM	P	Madhu	
					17.10.1995	JALDAPARA	P		REL
KANAZAWA									
0117	M	0041	0034	Stutt 6	12.07.1983	STUTTGART	B	Katgin	3126
					27.08.1985	KANAZAWA	P	Kintaro	
KANPUR									
0140	M	0070	0128	Kan 3	17.06.1987	KANPUR	B	Mohit	
0160	M	0070	0128	Kan 4	23.06.1989	KANPUR	B	Rohit	
0186	M	0070	0128	Kan 5	05.07.1991	KANPUR	B	Mudit	
0203	F	0157	0155	Patna 3	06.07.1991	PATNA	B	Chhotki	
					26.04.1997	KANPUR	P	Chutki	
LANGLEY									
0262	M	0106	0130	SDWAP 32	27.07.1999	SD-WAP	B	Jilibito	699439
					17.06.2002	LANGLEY	L		
LISBON									
0188	M	0106	0143	SDWAP 15	22.12.1991	SD-WAP	B	Gangtok	691776
					25.10.1996	LISBON	L		5497
0201	F	0115	0055	Antw 6	15.11.1992	PLANCKNDL	B	Teja	184008
					21.11.1992	WHIPSNADL	D		L2961
					24.11.1996	LISBON	L		5532
					01.01.2002	LISBON	D		5532
LISIEUX Z									
0229	F	0115	0113	Antw 7	12.10.1995	PLANCKNDL	B	Winona	184010
					26.04.2000	LISIEUX Z	L		M00057
0265	M	0135	0195	Nur 1	08.10.1999	NURNBERG	B	Albrecht	M01560
					26.09.2001	LISIEUX Z	L		M01088



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
LOSANGELE									
0045	F	0018	0017	Basel 10	05.10.1969	BASEL	B	Randa	690025
					06.10.1970	HOUSTON	P		
					06.04.1972	BROWNSVL	?		
					22.11.1974	LOSANGELE	P		07940
LOWRY									
0254	M	0053	0131	Neyo 5	27.07.1998	NY BRONX	B	Michael Cline	981132
					13.05.2001	LOWRY	L		101460
LUCKNOW									
0092	F	WILD	WILD	Assam 16	24.04.1978	ASSAM	P	Krishna Jr.	
					20.10.1979	LUCKNOW	?		
0128	F	WILD	WILD	Assam 17	11.08.1973	ASSAM	P	Usha	
					04.03.1977	KANPUR	P		
					30.04.1997	LUCKNOW	P	Mayang Kumari	
0129	M	0070	0128	Kan 2	06.12.1984	KANPUR	B	Lohit	
					06.04.1995	LUCKNOW	T		
MADRID Z									
0253	M	0134	0185	Rott 1	04.01.1998	ROTTERDAM	B	Kaila Padam	105672
					09.11.1999	MADRID Z	L		R11
0289	F	0123	0204	Stutt 11	12.02.2000	STUTT GART	B	Sarasvati	7561
					30.01.2002	MADRID Z	L		R12
METROZOO									
0050	F	WILD	WILD	Nepal 4	12.06.1970	METROZOO	D	Shanli	108
					10.04.1987	PHILADELP	L		101589
					22.11.1988	NY BRONX	L		881458
					28.03.1990	METROZOO	R		108
					29.05.1996	NY BRONX	L		881458
					12.10.1996	METROZOO	R		108
MONTGOMER									
0101	M	0026	0029	SDWAP 4	08.08.1980	SD-WAP	B	Pandu	103996
					04.11.1982	SANDIEGOZ	L		282326
					01.07.1985	NZP-WASH	L		106574
					12.02.1993	NZP-WASH	D		106574
					09.07.1996	PHILADELP	L		103314
					04.05.1998	MONTGOMER	L		2499

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
MUNICH									
0148	F	0100	0056	Basel 21	04.10.1988	BASEL	B	Nasi	880036
					12.07.1990	MUNICH	P		079002
0152	M	0041	0034	Stutt 9	27.11.1988	STUTTGART	B	Nikolaus	3869
					12.06.1990	MUNICH	L		079003
0193	F	WILD	WILD	Nepal 20	15.04.1990	MUNICH	P	Rapli	079001
0280	F	0152	0148	Mun 3	15.07.2001	MUNICH	B	Nisha	079006
NAGOYA									
0057	M	0024	0025	Gauh 3	12.09.1971	ASSAM	B	Samber	
					02.10.1974	NAGOYA	P	Sanver	
0181	M	0100	0110	Basel 23	31.05.1990	BASEL	B	Nandi	900038
					01.12.1991	NAGOYA	P		900038
0183	F	0100	0056	Basel 24	23.10.1990	BASEL	B	Nilgiri	910039
					01.12.1991	NAGOYA	P		910039
NANDANKAN									
0153	F	WILD	WILD	Kaz 21	16.09.1974	ASSAM	P	Numali	
					08.04.1976	NANDANKAN	P		
0154	M	WILD	WILD	Assam 34	22.08.1977	ASSAM	P	Ganesh	
					02.12.1979	NANDANKAN	?	Nandan	
NURNBERG									
0135	M	0041	0034	Stutt 8	24.12.1986	STUTTGART	B	Noel	3333
					01.12.1989	NURNBERG	P		M00470
0195	F	0100	0110	Basel 25	23.01.1992	BASEL	B	Purana	920040
					08.07.1993	NURNBERG	P		M00471

Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
NY BRONX									
0053	M	0001	0011	Myso 2	16.04.1971	MYSORE	B	Vinu	
					28.08.1975	GELSNKRKN	P		
					28.06.1976	TORONTO	P		7720
					30.05.1990	NY BRONX	L		901264
0066	F	WILD	WILD	Kaz 14	14.06.1973	ASSAM	P	Mayang	
					30.01.1975	NY BRONX	P	Pinky	751511
0131	F	0083	0066	Neyo 1	09.04.1986	NY BRONX	B	Ellah	861069
0139	F	WILD	WILD	Nepal 16	27.05.1987	NZP-WASH	D	Kali	107664
					23.04.1998	NY BRONX	L		981044
0223	F	0010	0080	Phil 5	05.10.1994	PHILADELP	B	Penny	103011
					02.07.2001	NY BRONX	L		M01136
0271	F	0053	0131	Neyo 6	22.12.2000	NY BRONX	B	Peggy Francis	M00167
NZP-WASH									
0049	M	WILD	WILD	Nepal 3	23.04.1970	METROZOO	D	Mohan	107
					14.06.1998	NZP-WASH	L		
0138	F	WILD	WILD	Nepal 15	27.05.1987	NZP-WASH	D	Mechi	107663
					10.05.1994	PHILADELP	L		102924
					20.10.1994	NZP-WASH	R		107663
OKLAHOMA									
0125	M	0035	0046	Losan 4	11.08.1985	LOSANGELE	B	Chandra	002213
					15.11.1990	OKLAHOMA	L		542705
0161	F	0083	0066	Neyo 2	05.09.1989	NY BRONX	B	Mary	891296
					08.11.1993	OKLAHOMA	R		513604
0276	F	0125	0161	Okla 2	10.05.2001	OKLAHOMA	B	Jamie	769407
PATNA									
0155	F	WILD	WILD	Assam 19	21.07.1974	ASSAM	P	Caltralekha	
					28.05.1979	PATNA	?	Kanchi	
0156	M	WILD	WILD	Assam 20	19.08.1977	ASSAM	P	Vijay	
					28.05.1979	PATNA	?	Kancha	
0157	M	WILD	WILD	India K	28.03.1982	PATNA	P	Raju	
0159	F	0157	0155	Patna 2	08.07.1988	PATNA	B	Hartali	
PEACE RV									
0249	M	0106	0209	SDWAP 29	23.11.1997	SD-WAP	B	Girja	697600
					30.05.2000	PEACE RV	L		100069



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
PEKING									
0098	F	WILD	WILD	Nepal 7	09.10.1980	PEKING	D	Bang Ti	
0141	M	0086	0093	Dvkr 2	04.11.1987	DVURKRALV	B	Nim	
					09.11.1989	LIBEREC	P		
					20.12.2001	PEKING	?		
PHILADELP									
0080	F	0018	0007	Basel 14	10.10.1975	BASEL	B	Xavira	750029
					07.11.1979	PHILADELP	P		100925
0222	M	0069	0079	Toro 2	11.09.1994	TORONTO	B	Sanjay	30105
					26.01.1998	PHILADELP	D		103525
					26.01.1998	TORONTO	L		30105
					28.08.1998	PHILADELP	R		103525
PLANCKNDL									
0055	F	0018	0017	Basel 11	11.08.1971	BASEL	B	Tutuma	710026
					05.09.1972	PLANCKNDL	P	Zutuma	184003
0113	F	0073	0055	Antw 2	09.08.1982	PLANCKNDL	B	Johanna	184004
0184	M	0106	0099	SDWAP 14	28.12.1990	SD-WAP	B	Gujrat	690732
					25.10.1996	LISBON	L		5496
					09.12.1999	LISIEUX Z	L		M99100
					20.08.2001	PLANCKNDL	L		184013
ROLLING H									
0146	M	0026	0029	SDWAP 10	22.05.1988	SD-WAP	B	Joya	688293
					13.09.1990	SANDIEGOZ	L		
					06.04.1995	ROLLING H	L		950029
ROTTERDAM									
0134	M	0073	0055	Antw 3	24.10.1986	PLANCKNDL	B	Nico	184006
					09.10.1990	ROTTERDAM	L		104083
0186	F	0041	0034	Stutt 10	11.02.1991	STUTTGART	B	Namaste	4449
					16.06.1993	ROTTERDAM	L		104724
0287	M	0134	0185	Roll 3	07.12.2002	ROTTERDAM	B		106592
SAN FRAN									
0227	M	0106	0099	SDWAP 23	26.05.1995	SD-WAP	B	ASSAM	695264
					14.02.1997	SAN FRAN	L		



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
SD-WAP									
0099	F	0026	0029	SDWAP 3	19.03.1978	SD-WAP	B	Gainda	102575
0130	F	0026	0029	SDWAP 8	18.01.1986	SD-WAP	B	Jumia	005257
0137	F	WILD	WILD	Nepal 14	26.05.1967	SAN FRAN	P	Shanti	167049
					27.11.1996	SD-WAP	L		696602
0143	F	0026	0099	SDWAP 9	28.05.1987	SD-WAP	B	Goalpara	687346
0190	M	WILD	WILD	Nepal 22	10.05.1990	FORTWORTH	P	Arun	724
					18.05.2001	SD-WAP	L		601279
0209	F	0026	0143	SDWAP 19	07.09.1993	SD-WAP	B	Godavari	693536
0244	F	0106	0130	SDWAP 26	24.08.1997	SD-WAP	B	Jakichu	697474
0259	M	0106	0143	SDWAP 31	18.05.1999	SD-WAP	B	Gram	699277
0266	F	0106	0209	SDWAP 33	22.12.1999	SD-WAP	B	Gopon	699614
0272	F	0106	0099	SDWAP 34	15.02.2000	SD-WAP	B	Goyona	600038
0273	M	0106	0137	SDWAP 35	31.12.2000	SD-WAP	B	Suru	600657
0274	F	0106	0130	SDWAP 36	19.01.2001	SD-WAP	B	Jela	601024
0277	M	0106	0143	SDWAP 37	06.06.2001	SD-WAP	B	Gyan	601332
0278	F	0106	0209	SDWAP 38	23.07.2001	SD-WAP	B	Gari	601408
0279	M	0106	0244	SDWAP 39	28.11.2001	SD-WAP	B	Choto	601544
0288	F	0190	0130	SDWAP 41	23.12.2002	SD-WAP	B	Raji	602549
SINGAPORE									
0097	F	0094	0023	Calc 1	09.01.1979	CALCUTTA	B	Gomati	
					10.03.1986	COLOGNE	P		462
					02.05.1997	SINGAPORE	D		G4844
0124	M	0026	0099	SDWAP 7	25.06.1985	SD-WAP	B	Gurkha	028851
					26.10.1989	SINGAPORE	L		G42
0206	M	0100	0056	Basel 26	22.02.1993	BASEL	B	Quilon	930041
					29.04.1995	SINGAPORE	L		G3209



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
STUTT GART									
0123	M	0041	0034	Stutt 7	29.01.1985	STUTT GART	B	Bruno	3127
					09.12.1987	COLOGNE	L		597
					23.04.1997	STUTT GART	R		3127
0204	F	WILD	WILD	Nepal 21	30.06.1993	STUTT GART	D	Sani	5143
0284	F	0123	0204	Stutt 12	13.04.2002	STUTT GART	B	Shiwa	7916
SYDNEY									
0263	M	0057	0183	Nag 1	14.08.1999	NAGOYA	B	Dora	
					25.10.2001	SYDNEY	D		
TOKYOTAMA									
0240	M	0100	0110	Basel 28	20.11.1996	BASEL	B	Tarrh	960043
					03.10.1998	TOKYOTAMA	D		2463
0282	M	WILD	WILD	Nepal 30	28.03.2002	TOKYOTAMA	D		3799
0283	F	WILD	WILD	Nepal 31	28.03.2002	TOKYOTAMA	D		3800
TORONTO									
0069	M	0019	0028	Wash 1	30.01.1974	NZP-WASH	B	Patrick	100859
					29.10.1975	NY BRONX	L		751821
					16.06.1989	TORONTO	L		24640
0079	F	0001	0011	Myso 3	19.07.1975	MYSORE	B	Indira	
					15.06.1976	GELSNKRKN	P		
					27.04.1979	TORONTO	P		11554
0264	F	0069	0079	Toro 3	14.08.1999	TORONTO	B	Sanya	34890
TRIPURA									
0179	M	WILD	WILD	Kaz 26	20.08.1990	ASSAM	P	Pradip	
					14.10.1994	TRIPURA	P		
TRIVANDRU									
0175	M	WILD	WILD	Assam 25	24.09.1988	ASSAM	P	Ramu	
					19.05.1993	TRIVANDRU	P		
0177	M	WILD	WILD	Kaz 24	26.07.1989	ASSAM	P	Jadu	
					19.05.1993	TRIVANDRU	P		
VEERMATA									
0217	M	WILD	WILD	Assam 28	24.04.1979	ASSAM	P	Shiva	
					25.02.1985	VEERMATA	?		



Stud#	SEX	SIRE	DAM	BREEDER	ARRIVAL dd.mm.yyyy	LOCATION	STATUS	HOUSENAME	ISIS
WHIPSNADE									
0051	F	0033	0043	Delhi 1	27.01.1971	DELHI	B	Roopa	
					08.02.1973	WHIPSNADE	T		L259
0256	F	WILD	WILD	Nepal 28	29.04.1997	LONDON RP	L	Beluki	A3568
					22.09.1998	WHIPSNADE	L		L3185
0257	F	WILD	WILD	Nepal 29	29.04.1997	LONDON RP	L	Behin	A3569
					03.11.1998	WHIPSNADE	L		L3188
WILDS									
0087	M	0018	0056	Basel 16	26.01.1978	BASEL	B	Assam	780031
					06.11.1979	PHILADELP	L		100924
					14.10.1982	NY BRONX	P		821339
					29.10.1991	MILWAUKEE	L		3622
					22.05.1996	WILDS	L		960503
0189	F	0069	0079	Toro 1	25.12.1991	TORONTO	B	Nikki	27199
					22.08.1994	CINCINNAT	L		194156
					02.05.2001	WILDS	L		101005
0230	F	0053	0131	Neyo 4	28.12.1995	NY BRONX	B	Daily	951230
					19.06.2001	WILDS	L		101023
0239	M	0101	0139	Wash 6	31.10.1996	NZP-WASH	B	Himal	112946
					21.05.1998	WILDS	L		980502

Summary of the Greater One-Horned Rhinoceros Collection

The following institutions currently house indian rhinos. Institutions which participate in an international breeding programme are marked.

EEP = European Endangered Species Programme

SSP = Species Survival Programme

? = unknown Programme

✓ = responded to the annual questionnaire 2002

AMERSFOOR	Dierenpark Amersfoort, Barchman Wuytierslaan 224 3819 AC Amersfoort, The Netherlands	2.0.0	EEP	✓
ASSAM	Government of Assam, Office of the Divisional Forest Officer Assam State Zoo Divn., Guwahati 5, Assam India	5.2.0	?	
BASEL	Zoo Basel, Binningerstrasse 40, Postfach 4011 Basel, Switzerland	1.2.0	EEP	✓
BATONROUG	Brec's Baton Rouge Zoo, P.O.Box 60 Baker, Louisiana 70704-0060, USA	1.0.0	SSP	✓
BERLIN TP	Tierpark Berlin-Friedrichsfelde GmbH Am Tierpark 125, 10307 Berlin, Germany	1.3.0	EEP	✓
BERLINZOO	Zoo Berlin, Hardenbergplatz 8, 10787 Berlin Germany	1.1.0	EEP	✓
BUFFALO	Buffalo Zoo, 300 Parkside Avenue, Buffalo New York 14214-1999, USA	1.1.0	SSP	✓
CALCUTTA	Zoological Garden Alipore, Calcutta, 700027 West Bengal, India	2.3.0	?	
CHANDIGAR	M.C. Zoological Park, Chhat-Bir (Pb), SCO NO.839-40, Sector 22A, Chandigarh, India	2.0.0	?	
CHIANG MA	Chiengmai Zoo, 100 Huay Keaw Road 5000 Chiengmai, Thailand	0.1.0	?	✓
CINCINNAT	The Cincinnati Zoo and Botanical Garden 3400 Vine Street, Cincinnati, Ohio 45220-1399, USA	1.1.0	SSP	✓
DELHI	National Zoological Park, Near Purana Quila Mathura Road, 110003 New Delhi, India	1.1.0	?	
DVURKRALV	Zoo Dvur Kralové, Stefánikova 1029 54401 Dvur Kralové nad Labem, Czech Republic	1.2.0	EEP	
EVANSVILLE	Mesker Park Zoo and Botanical Garden 2421 Bement Ave, 47720-8206 Evansville, IN, USA	1.0.0	SSP	✓
FORTWORTH	Fort Worth Zoo, 1989 Colonial Parkway, Fort Worth Texas 76110, USA	1.1.0	SSP	



GULF BREZ	The Zoo Gulf Breeze, 5701 Gulf Breeze Parkway, Gulf Breeze, Florida 32561, USA	1.1.0	SSP	✓
KANAZAWA	Kanazawa Zoological Gardens of Yokohama, 5-15-1 Kamariya Higashi, Kanazawa-ku, 236-0042 Yokohama Japan	1.0.0	?	✓
KANPUR	Kanpur Zoological Park, Azad Nagar, 208002 U.P. Kanpur, India	3.1.0	?	
LANGLEY	Mountain View Farms Breeding Centre, 8011 B 240 th Street, V3A 4P9 Langley, B.C., Canada	1.0.0	?	
LISBON	Zoo Lisboa, Estrada de Benfica 158, 1500 Lisboa Portugal	1.1.0	EEP	✓
LISIEUX Z	Zoo Cerza, Hermival-les-Vaux, 14100 Lisieux France	1.1.0	EEP	✓
LOSANGELE	Los Angeles Zoo, 5333 Zoo Drive, Los Angeles CA 90027, USA	0.1.0	SSP	✓
LOWRY	Lowry Park Zoological Garden, 7530 North Boulevard Tampa, FL 33604-4756, USA	1.0.0	SSP	
LUCKNOW	Prince of Wales Zoological Gardens 226001 Lucknow, India	1.2.0	?	
MADRID Z	Zoos Aquarium Madrid., Casa de Campo S/N 28011 Madrid, Spain	1.1.0	EEP	✓
METROZOO	Miami Metrozoo, 12400 SW 152 Street, Miami Florida 33177-1499, USA	0.1.0	SSP	✓
MONTGOMER	The Montgomery Zoo, 2301 Coliseum Pkwy Montgomery AL 36110, USA	1.0.0	?	✓
MUNICH	Münchener Tierpark Hellabrunn AG, Tierparkstr. 30 81543 München, Germany	1.3.0	EEP	✓
NAGOYA	Nagoya Higashiyama Zoo 3-70 Higashiyamamotomachi Chikusaku, 464-0804 Nagoya, Japan	2.0.0	?	✓
NANDANKAN	Nandankanan Biological Park Mayur Bharan, Janpath, Saheed Nagar, 751007 Bhubaneswar (Orissa), India	1.1.0	?	
NURNBERG	Tiergarten Nürnberg, Am Tiergarten 30 90480 Nürnberg, Germany	1.1.0	EEP	✓
NY BRONX	Wildlife Conservation Park Bronx Zoo, 185th Street and Southern Boulevard, Bronx, NY 10460, USA	1.5.0	SSP	
NZP-WASH	Smithsonian Institution, National Zoological Park Washington, D.C. 20008-2598, USA	1.1.0	SSP	✓
OKLAHOMA	Oklahoma City Zoo, 2101 NE 50, Oklahoma City OK 73111, USA	1.2.0	SSP	✓
PATNA	Sanja Gandhi Biological Park, Patna, Bihar, India	2.2.0	?	

PEACE RV	Peace River Refuge, 4300 SW County Road 34266 Arcadia, FL, USA	1.0.0	SSP	
PEKING	Beijing Zoological Gardens, 137 Xi Zhi Men Wai Str. Beijing, China	1.1.0	?	✓
PHILADELP	Philadelphia Zoological Gardens 3400 West Girard Avenue, Philadelphia PA 19104-1196, USA	1.1.0	SSP	✓
PLANCKNDL	Dierenpark Planckendael, Leuvensesteenweg 582 2812 Muizen-Mechelen, Belgium	1.2.0	EEP	
ROLLING H	Rolling Hills Refuge Wildlife Center, 625 North Hedville Road, Salina, KS 67401, USA	1.0.0	SSP	✓
ROTTERDAM	Rotterdam Zoo, P.O.Box 532, 3000 AM Rotterdam The Netherlands	2.1.0	EEP	✓
SAN FRAN	San Francisco Zoo, 1 Zoo Road, CA 94132-1098 San Francisco, USA	1.0.0	SSP	✓
SD-WAP	San Diego Zoological Society Wild Animal Park, P.O.Box 551, San Diego, CA 92112-0551, USA	5.11.0	SSP	✓
SINGAPORE	Singapore Zoological Gardens, 80 Mandai Lake Road 2572 Singapore	2.1.0	?	
STUTTGART	Wilhelma Zoologisch-botanischer Garten Postfach 501227, 70342 Stuttgart, Germany	1.2.0	EEP	✓
SYDNEY	Taronga Zoo, Mosman, P.O.Box 20, 2088 Sydney NSW, Australia	1.0.0	?	✓
TOKYOTAMA	Tama Zoological Park, Hodokubo, Hino-shi 191Tokyo, Japan	2.1.0	?	✓
TORONTO	Toronto Zoo, 361A Old Finch Avenue Scarborough M1B 5K7 Ontario, Canada	1.2.0	SSP	✓
TRIPURA	Government of Tripura, Office of the Wild Life Warden Sepahijala Wild Life Sanctuary, Sepahijala, India	1.0.0	?	
TRIVANDRU	Trivandrum Zoological Gardens, Trivandrum Kerala State, India	2.0.0	?	✓
VEERMATA	Veermata Jijabai Bhosle Udyan, Dr. Ambedkar Road Byculla, 400027 Mumbai, India	1.0.0	?	✓
WHIPSNADE	Whipsnade Wild Animal Park, Dunstable, LU6 2LF Bedfordshire, United Kingdom	0.3.0	EEP	✓
WILDS	The Wilds, 14000 International Road, Cumberland OH 43732 USA	2.2.0	SSP	✓