NATIONAL STUDBOOK

One Horned Rhinoceros (*Rhinoceros unicornis*): IV Edition

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Central Zoo Authority

National Studbook of One Horned Rhinoceros (*Rhinoceros unicornis*): IV Edition

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FOREWORD

Intensive protection measures in recent times have led to the recovery of free ranging populations of One Horned Rhinoceros; however, habitat loss, fragmentation and degradation have rendered the species susceptible to extinction. Maintenance of viable *ex-situ* populations for insurance purposes therefore remains imperative. Effective *ex-situ* conservation of the species can be ensured by scientific management to ensure their long term genetic viability and demographic stability. Pedigree information contained in studbooks forms the basis for this management.

The Central Zoo Authority (CZA) in collaboration with zoos in India has initiated a conservation breeding program for threatened species in Indian zoos. One Horned Rhinoceros is a part of the identified species under this initiative. As a part of this endeavour a Memorandum of Understanding has been signed with the Wildlife Institute of India for compilation and update of studbooks of identified species in Indian zoos.

As part of the project outcomes the WII has compiled the IV edition of the National Studbook of One Horned Rhinoceros (*Rhinoceros unicornis*) in Indian zoos. The recommendations contained in the studbook will form the basis for the long term management of the species in captivity.

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National Zoological Park, Delhi
Sri Chamarajendra Zoological Gardens, Mysore
Thiruvananthapuram Zoo, Thiruvananthapuram
Kanpur Zoological Park, Kanpur
Nehru Zoological Park, Hyderabad

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GREATER ONE HORNED RHINOCEROS

(*Rhinoceros unicornis*)

Species Information

The Indian or greater one horned rhinoceros inhabits alluvial floodplain grasslands and riverine forests. The species is presently endemic to the Ganges – Brahmputra River basins with a historical reported distribution from Brahmputra valley in the east to Indus valley in the west. It is threatened by habitat loss, poaching and invasive plant species.

Taxonomy

Class	Mammalia
Order	Perissodactyla
Family	Rhinocerotidae
Genus	*Rhinoceros*
Species	*unicornis*

Classical taxonomy places the 17 extant species of perissodactyls (odd-toed ungulates)into two suborders: Ceratomorpha (rhinos and tapirs) and Hippomorpha (horses, assess and zebras) (Wood 1937). While, the tapirs and hippomorphs are reduced to a single genera each, the *Tapirus* and *Equus* respectively; the family rhinocerotidae comprising of five species has been further divided into four genera. These include the white (*Cerato theriumsimum*) and black (*Diceros bicornis*) rhinoceros in Africa and the Indian or greater one horned rhinoceros (*Rhinoceros unicornis*), Javan (*Rhinoceros sondaicus*), and Sumatran (*Dicerorhinus sumatrensis*) rhinoceros in Asia.

Several contradictory phylogenies based on morphological evidence were proposed for the order Perissodactyla. These were resolved with the use of molecular genetics techniques; wherein the split into two sub-orders the Ceratomorpha and Hippomorpha with ceratomorpha being further subdivided into the families Rhinocerotidae, and Tapiridae was supported by various studies. Within the family Rhinocerotidae, Asian rhinoceros (*R. unicornis and D. sumatrensis*) were suggested to have diverged prior to the African rhinoceros (*Cerato theriumsimum* and *Diceros bicornis*), with the Indian rhinoceros as the most basal lineage (Tougard *et al.* 2001; Willerslev 2009; Price and Bininda-Emonds 2009; Steiner and Ryder 2011). Willerslev (2009) further suggested the use of nuclear DNA based techniques for effective resolution of their phylogeny.

General characteristics

The species is characterized by the presence of a single nasal horn (Laurie *et al*. 1983) with limited sexual dimorphism (Berger 1986). The hide is grey brown in color with varying shades of pink in the skin folds; while the keratinized horn is black in colour. Scapular, pelvic, humeral, femoral, and subcaudal folds are present with males having a prominent development of neck-folds. Pedal scent glands are present in both hind and fore-feet (Laurie *et al*. 1983). Rivet like epidermal knobs (tubercles) are present all over the animal (Laurie *et al*. 1983) that emerge as the animals attain adulthood (Dinerstein and Price 1991).

Table 1: Morphometrics of One horned rhinoceros*

Features	Males	Females
Shoulder height	1.75 m (range 1.6 - 1.9m)	1.6 m (range 1.4 – 1.7m)
Head and body length	4.1 m	
Body weight	2000 kg	1600 kg

* (Laurie *et al*. 1983

Based on dental characters, horn length, body size and skin fold and tubercles Dinerstein (1991) proposed a method for identification of age and gender of free ranging specimens. Animals with their mothers considered as calves (≤ four years); animals between four to six years old considered as sub-adults and animals older than six years considered adults. Adult males were characterized by the extensive development of muscles of the neck and shoulder and secondary shoulder skin folds. Older males had a large horn base with signs of breakage and subsequent re-growth. Multiparous, older females have prominent pectoral and pelvic girdles and ribs. Further older males have a much larger body mass as compared to females (Laurie *et al*. 1983). Table 1 summarizes the morphometric measurements of the species.

Habitat

The species inhabits riverine grasslands in the alluvial floodplains throughout its range. The grasslands are interspersed with swamp patches dominated by emergent vegetation and riverine woodlands dominated by *Trewia*, *Bombax*, *Syzygium*, *Acacia*, *Dalbergia*, *Shorea* and *Terminalia* communities. Home range size varied proportionally to vegetation diversity of the area and ranged from two to more than 10 km^2. They wallow in mud-pools for cooling themselves and avoiding insect pests during summer (Laurie *et al*. 1983).

During summers, activity is limited to night, early morning and late afternoon while mid-day is also spent in feeding during the wetter and cooler days. Time spent on feeding varies seasonally with the least time spent during monsoons (36%) and winter (57%); while maximum time is spent during spring (65%) (Laurie, 1978).

Feeding ecology

They are reported to feed on parts of 183 species of plants belonging to 57 families in Chitwan. Of these grasses (mainly *Saccharum*, *Narenga* and *Cynodon*) of 53 species made upto 70 – 89% of their dietthat varies seasonally (Laurie, 1978). Fruits, leaves and branches of shrubs and trees, submerged and floating aquatic plants, sedges, ferns and agricultural crops are also reported to form a part of their diet (Laurie *et al*. 1983). Changes in seasonal availability of food plants resulted in movement between vegetation types (Laurie *et al*. 1983).

Social organization and behaviour

The species is solitary with the only exceptions being cow and calf pairs and sub-adult dispersing males. These have been termed as groups by Laurie (1982). Temporary associations of both genders and various age classes may form at wallowing pools; however, the animals continue to move independent of each other (Laurie, 1978).

Interactions between sub-adults and cows and calves involve playful interactions, that include nuzzling, running around a companion, head bobbing and weaving, and horn to horn sparring contests (Laurie, 1978). Interactions between members of different groups are agonistic and may result in flight of one or more animals after initial displays (Laurie, 1982).

Dominant males maintain a limited level of range exclusiveness; however, range may overlap with that of subordinate males and other neighbouring dominant males. The size of ranges has been reported to vary from two to eight square kilometers in Chitwan National Park, Nepal (Laurie *et al*. 1983). On being disturbed the animals exhibit a flight response; however, cows with calves may charge the intruder, with the charge being carried through occasionally resulting in casualties. Besides human beings the calves at an early age are vulnerable to attacks by tigers (Laurie, 1982).

Communication and vocalization

Auditory and olfactory cues are used for communication. The vocalizations include snort: an initial contact call; honk bleat and roar for agonistic interactions; squeak pant by males after extended chases of females or other males; moo-grunt used as a contact call by calves (Laurie, 1978). Olfactory cues in the urine, dung and secretions from pedal glands are used by males to indicate their dominant status and identify females in estrus (Laurie, 1982).

Reproduction

The cow on heat utters typical rutting calls and squirts urine at short intervals to attract the bulls (Tripathi 2013). An adult male locates an estrus female by her olfactory cues, sniffing the ground and performing flehmen. The male accompanies the female for several days, who repels his attempts by turning and snorting. Horn to horn confrontations develop and result in severe fights or prolonged chases with loud vocalizations by the female. Copulation occurs after a successful courtship, lasting upto 75 minutes with the animals dispersing afterwards (Tripathi 2013).

Pregnancy is not manifest externally initially and is discernible only during the last two – three months by the development of the teats. Females grow aggressive behavior shortly before parturition and choose secluded areas to give birth. The calves are active within an hour after parturition and seek the teats for suckling (Tripathi 2013). Parental care is provided by the mothers with the father's taking no part in the rearing. Up to the age of 6 months' calves are left alone for periods as long as 90 min while their mothers feed up to 800 m away (Laurie, *et al.*1983). Table 2 summarizes the key reproductive attributes of the species.

Table 2: Reproductive characters of Greater one horned rhinoceros

Characters	Males	Females	Source
Median age at first reproduction	10years 5months	9years 2months	Zschokke *et al*. (1998)
Estrus cycle length		48 days (39 – 64 days)	Miller (2003)
Gestation	462 – 491 days (mean 479 days)		Laurie *et al*. (1983)
Age at weaning	18 months	18 months	
Age at dispersal	39 months	36 months	
Litter size	Single calf		
Inter-birth interval	45.6 ±1.8 months (range = 34-51 months)		Dinerstein and Price (1991)

Distribution

The historical range of the species extended across the floodplains of Indus, Ganga and Brahmputra rivers from Peshawar in northern Pakistan eastward along the base of the Himalayas, through the north-western provinces of India, northern Uttar Pradesh and Bihar, the Nepal terai and north Bengal into the Brahmaputra valley of Assam (Laurie 1978). The species declined sharply in the rest of its range from 1600-1900, until the species was on the brink of extinction at the beginning of the twentieth century. The species presently persists in a few small subpopulations in Nepal and India (West Bengal, Uttar Pradesh, Assam) (Foose and van Strien 1997; Grubb, 2005), with translocated populations in Sukhlapanta Wildlife Reserve and Bardia National Park in Nepal and Dudhwa National Park in India. Reintroduction efforts of a pair of animals in Pakistan were unsuccesful (Talukdar, *et al*. 2008).

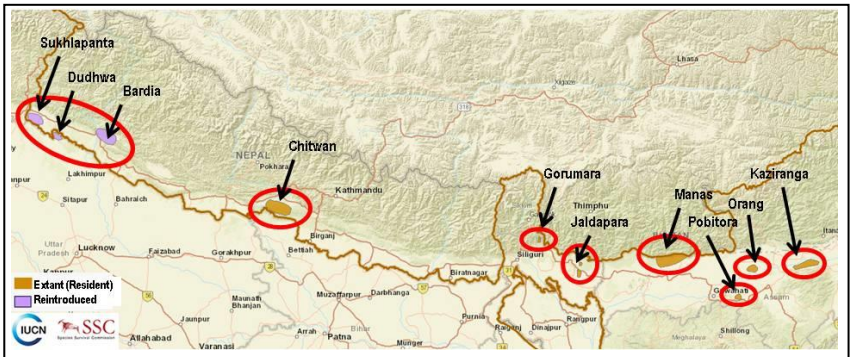


Figure 1: Distribution range of One horned rhinoceros (Talukdar,*et al*. 2008)

Threats and status

The species declined to near extinction in the 1900s due to habitat loss caused by conversion alluvial plain grasslands to farmland, sport hunting during the late 1800s and early 1900s. Recent threats include poaching for use of horns in traditional Chinese medicine and habitat degradation caused by invasion by exotic plants into grasslands reducing available habitats (Talukdar, *et al*. 2008).

The population has shown signs of recovery in the recent past. Accordingly the species threat perception of the species has declined. It is currently listed as vulnerable in the IUCN Red List of threatened species (Talukdar, *et al*. 2008) and in Schedule I of the Wildlife Protection Act (1972) of India.

Status in Captivity

The species is held at 65 institutions globally with a total of 178 (93.85) specimens (Figure 2), while 9 institutions house 34 (19.15) specimens in India according to the ZIMS database (downloaded on 20 April 2018). The CZA inventory (Table 3) indicates the presence of 34 (20.14) specimens, at 10 Indian zoos while the data that was made available by holding zoos for the compilation of the studbook includes 35 (20.15) specimens at 9 locations.

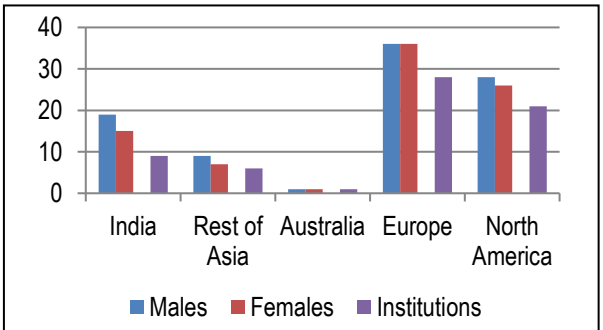


Figure 2: Holding pattern of One horned rhinoceros in zoos

Table 3: Status of One horned rhinoceros in zoos

Zoo Name	Species360				CZA Inventory				Studbook				Remarks
	Male	Female	Unk	Total	Male	Female	Unk	Total	Male	Female	Unk	Total	
Indira Gandhi Zoological Park, Vishakapatnam	0	0	0	0	1	0	0	1	0	0	0	0	No data received from the zoo
Sri Chamarajendra Zoological Gardens, Mysore	1	1	0	2	1	1	0	2	1	2	0	3	Based on data received from the zoo
Thiruvananthapuram Zoo, Thiruvananthapuram	0	0	0	0	1	0	0	1	1	0	0	1	Based on data received from the zoo
Nehru Zoological Park, Hyderabad	3	1	0	4	3	1	0	4	2	1	0	3	Based on data received from the zoo
National Zoological Park, Delhi	0	2	0	2	0	2	0	2	0	2	0	2	No data received from the zoo, information based on taxon report
Sanjay Gandhi Biological Park, Patna	6	6	0	12	6	6	0	12	7	5	0	12	Based on data received from the zoo
Assam State Zoo Cum Botanical Garden, Guwahati	3	3	0	6	3	3	0	6	4	3	0	7	Based on data received from the zoo
Alipore Zoological Garden, Kolkatta	0	0	0	0	1	0	0	1	0	0	0	0	No data received from the zoo
North Bengal Wild Animals Park, Jalpaiguri	0	0	0	0	1	0	0	1	0	0	0	0	No data received from the zoo
Kanpur Zoological Park, Kanpur	3	1	0	4	3	1	0	4	4	1	0	5	No data received from the zoo
Nawab Wazid Ali Shah Zoological Garden, Lucknow	0	0	0	0	0	0	0	0	1	0	0	1	Based on data received from the zoo
Nandankanan Biological Park, bhubaneswar	2	0	0	2	0	0	0	0	0	0	0	0	
Bhagwan Birsa Munda Biological Park, Ranchi	0	1	0	1	0	0	0	0	0	0	0	0	
Veermata Jijabai Bhosle Udyan & Zoo, Mumbai	1	0	0	1	0	0	0	0	0	0	0	0	
M. C. Zoological Park, Chatbir	0	0	0	0	0	0	0	0	1	0	0	1	No data received from the zoo, based on III Edition of studbook
Total	**19**	**15**	**0**	**34**	**20**	**14**	**0**	**34**	**20**	**15**	**0**	**35**	

Methods

Data on individual history was collected by means of questionnaires, zoo visits and from the websites of CZA and Species360. Questionnaires were sent to the institutions housing One horned rhinoceros in India, requesting information for each captive specimen. Data was entered in the Single Population Analysis and Records Keeping System (SPARKS v 1.66) (ISIS 2004) and subsequently exported to population management programme PMx v 1.2 (Ballou et al., 2011) for further analysis..

Scope of the Studbook and Conventions

- The studbook includes all specimens present in India for whom records were available from holding institutions, species taxon report from Species360 website and the International Studbook (von Houwald, 2015).
- The specimens whose fates were not known due to non availability of data from holding institutions or their movement to institutions outside India were listed as lost to follow up and the same is recorded as 'Ltf' in the events column of the studbook report.
- The mnemonics present in the SPARKS software were used for individual institutions and the same are listed in the location glossary (Annexure IV). The mnemonic India was used for all specimens acquired from the wild.
- The CZA inventory was used as a benchmark for population estimates and deviations from the same are based on movement records made available by both the donor as well as the recipient institution.
- Specimens for whom records were not available from holding institutions but present in the International studbook were assigned Studbook Numbers beginning with 'IN'.

Analysis

Demographic Status

Historical Population

The studbook includes a total of 162 (91.71) specimens that have been housed at 18 Indian zoos. The first recorded entry of the species in captivity was at Nawab Wazid Ali Shah Zoological Garden, Lucknow in 1944, with a wild origin female being acquired by the zoo. Wild origin specimens; [86 (48.38)] form approximately 53% of the captive population. A total of 76 (43.33) births have occurred in captivity accounting for approximately 47% of the total population. The captive births are attributed to 47 (19.28) i.e. approximately 29% of the captive population. The population since its inception has also witnessed 108 (62.46) deaths. A total of 19 (9.10)

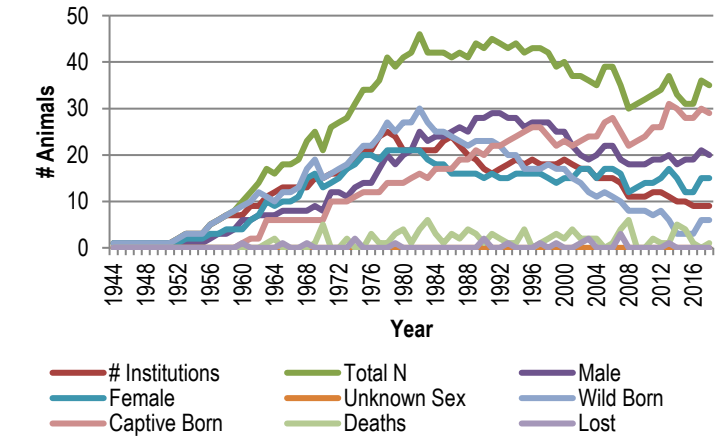


Figure 3: Census trends of the captive population

Table 4: Summary of the Historical Population

	Males	Females	Unknown	Total
Studbook size	91	71	0	162
Acquisition from wild	48	38	0	86
Captive Born	43	33	0	76
Deaths	62	46	0	108
Breeding individuals	19	28	0	47
Lost to follow up/ released	9	10	0	19

specimens listed as 'lost to follow up' (Ltf) includes specimens that have been transferred to zoos outside India, for whom records were unavailable. Figure 3 and Table 4 summarize the trends of the historical population while Annexure I includes detailed event-wise information on individual specimens.

Living Population

The living population includes 35 (20.15) specimens housed at 9 institutions; with 6 (3.3) wild origin specimens. The living population includes 12 (4.8) i.e. approximately 34% of the specimens that are active breeders. Table 5 summarizes the status of the living population while Annexure II provides location-wise specimen details of the living individuals. A perusal of Table 3 and Annexure II reveals the presence of 54% of the population at Sanjay Gandhi Biological Park, Patna [12 (7.5)] and Assam State Zoo cum Botanical Garden, Guwahati [7 (4.3)].

Table 5: Summary of living population

	Males	Females	Unknown	Total
Living	20	15	0	35
Wild-born	3	3	0	6
Captive-born	17	12	0	29
Breeding	4	8	0	12

Population Vital Rates

The population is currently declining at a rate of approximately 2% annually with females showing a marginally faster decline. The captive population has a generation time of 16.4 years a consequence of its natural history as the species reaches sexual maturity at 5 years in captivity, with an extended gestation period and inter-birth interval. The declining population trend is also reflected in the projected population after 20 years with a decrease of 6 individuals in the population. The accuracy of the life table analysis carried out to arrive at the conclusions is limited by the small number of specimens in the population

Table 6: Vital rates of the captive population

Vital rates	Males	Females	Total
λ: Population growth rate	0.977	0.984	0.981
T: Generation time	19	13.9	16.4
N 20: population after 20 years	15.5	13.8	29.3

Age Distribution

Age distribution of 35 (20.15) known age living specimens indicates a female bias. The living population includes 26 (16.10) animals of known age and sex in reproductively active age classes (> 32 years for males and > 20 years for females Figure 4). The population also includes 2 females that have reached reproductive senescence, an additional 7 (4.3) specimens are present in the pre-reproductive age classes. The age distribution shows specimens missing across several age classes in the reproductive span of the species. It also shows the presence of only single specimens

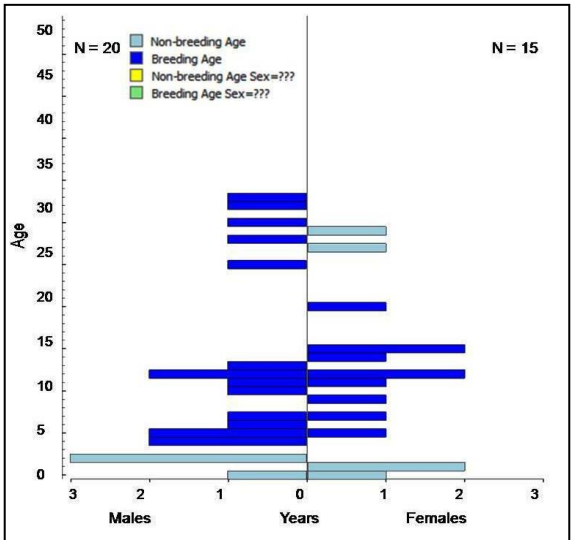


Figure 4: Age distribution of known age specimens

across most age classes. These factors in association with the natural history of the species indicate a declining population.

Genetic Status

Table 7 summarizes the genetic status of the living population. Analysis indicates that it originates from 12 founders although the population includes 86 (48.38) wild origin specimens. The living population of 35 specimens retains 90.56% of the genetic diversity brought in by these 12 founders. The low reproductive output and limited number of generations in captivity have resulted in the population retaining a large proportion of the sampled genetic diversity.

Table 7: Genetic Summary of the current population

Genetic parameters	Current
Founders	12
Living Animals	35
Percent Ancestry Known	91%
Gene Diversity (GD)	0.9056
Founder Genome Equivalent (FGE)	5.29
Mean Inbreeding (F)	0.0425
Population mean kinship (Mk)	0.0944
Ne/N	0.3692

The unequal representation of the founders in the living population has resulted in the population having the founder genome equivalents of only 5.29 wild origin specimens. The population is characterized by breeding between related individuals with relatedness between individuals ranging between first and second cousins (mean inbreeding = 0.0425). This relatedness is reflected by the values of population mean kinship (0.0944). The continued small population size, poor representation of the small founder base and high degree of relatedness between individuals is a cause for concern.

Pairing Recommendations

The pairing recommendations (table 8) for the species in captivity have been arrived at based on 'Mate Suitability Index' (Box 1 for details) that assesses changes in genetic diversity, differences in mean kinship and inbreeding coefficient as result of each pairing choice being exercised. The recommendations include pairing of the sires (93, 153 and 157) with multiple dams due to the close relationships shared by the remaining sires with the females.

Table 8: Pairing recommendations

Dam		Sire		F	dGD	MSI
NSB #	Location	NSB #	Location			
89	ASSAM	154	ASSAM	0.0000	0.0047	1
151	MYSORE	79	TRIVANDRU	0.0000	0.0097	1
158	ASSAM	**157**	ASSAM	0.0000	0.0135	1
159	ASSAM	75	CHATBIR Z	0.0000	0.0169	1
100	DELHI	85	KANPUR	0.0000	0.0055	2
112	ASSAM	**157**	ASSAM	0.0000	0.0094	2
80	PATNA	72	LUCKNOW	0.0000	-0.0004	4
114	PATNA	**93**	PATNA	0.0000	0.0083	4
118	KANPUR	**93**	PATNA	0.0000	0.0072	4
124	DELHI	147	KANPUR	0.0000	0.0062	4
127	HYDERABAD	**153**	ASSAM	0.0000	0.0067	4
130	PATNA	72	LUCKNOW	0.0000	0.0067	4
134	MYSORE	**153**	ASSAM	0.0000	0.0063	4

Box 1: Mate Suitability Index (MSI)

It is a numerical genetic assessment of a male-female pair that incorporates several variables into one ranking (MSI range is 1 to 7, with 1 being the most genetically beneficial).

The default value in the table is the *MSI* (Mate Suitability Index) value for each male –female pair. *MSI* is a composite score that integrates four genetic components into a single index:

Delta GD (dGD): Change in gene diversity (GD) of the population if one offspring is produced by the pair. Positive dGD increases the GD of the population, while negative dGD decreases GD.

Differences in MK values (MKDiff): Difference in the genetic value (mean kinship value) of the male and female. Breeding a pair with a large MKDiff is detrimental because it combines under-represented and over-represented genetic lines.

Inbreeding coefficient (F): Inbreeding coefficient of any offspring resulting from the pair (i.e., the kinship value for the pair). Inbreeding is considered to be detrimental to the fitness of the resulting offspring.

Unknown ancestry: The amount of unknown ancestry in the male and female. Incomplete pedigree information means that the genetic value and relatedness of a pair cannot be accurately calculated.

1 = very beneficial (genetically) to the population;
2 = moderately beneficial,
3 = slightly beneficial;
4 = slightly detrimental,
5 = detrimental, should only be used if demographically necessary
6 = very detrimental (should be considered only if demographic considerations override preservation of genetic diversity)
"-"= very highly detrimental (should not be paired, due to high level of kinship of pair)

Using Pairwise Info
The default table of MSI values for pairs can be used to quickly assess the relative genetic value of a pair, subset of pairs, potential mates for one individual, and many other valuable data when making breeding recommendations. This can be especially helpful to quickly explore options for pairing individuals at one facility that houses numerous individuals of each sex or to quickly identify an alternative suitable mate if a recommended breeding fails.

Source: Traylor-Holzer, K. (ed.). 2011.

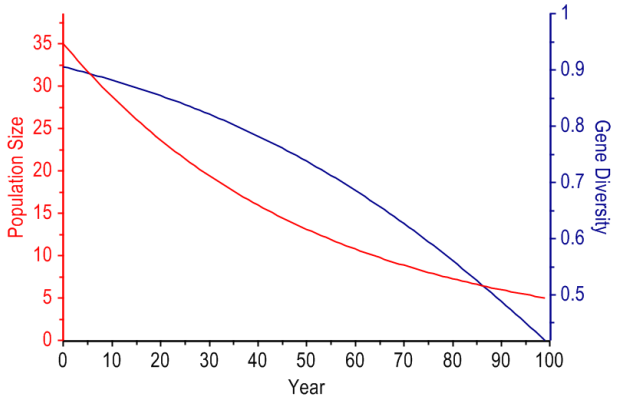
Targets for Population Management

The current captive population of One horned rhinoceros includes 35 (20.15) individuals. It includes 6 (3.3) wild origin specimens; however only 1 female (NSB 89) has reproduced; while the remaining 2 females and all 3 males are yet to contribute to the population. The population is currently declining with a λ of 0.9806 per annum. The population retains 90.56% of the genetic diversity originating from 12 founders; however individuals in the population are closely related (Mean Inbreeding: 0.0425 and Population mean kinship: 0.0944). Achieving conservation goals for the population is thus of critical importance.

Multiple simulations were run using PMx to determine the fate of the current population for assessing the effect of management interventions that result in an increased population growth rate desired for achieving demographic stability and supplementation with effective founders for ensuring genetic viability; over the next 100 years. The outcomes of the scenarios that were run without change and with changes (supplementation with effective founders and increasing the population growth rate) that ensure a genetically viable and demographically stable population over the next 100 years are presented below.

Scenario I:

The simulation was run using the current population variables without supplementation with additional animals while retaining the current population size (N = 35). The outcomes indicate that the population in captivity is likely to continue to decline, though a small population (N = 5) is likely to persist over the next 100 years due to the long life-span of the species. The population variables used and the outcomes of the simulation are presented in Figure 5.



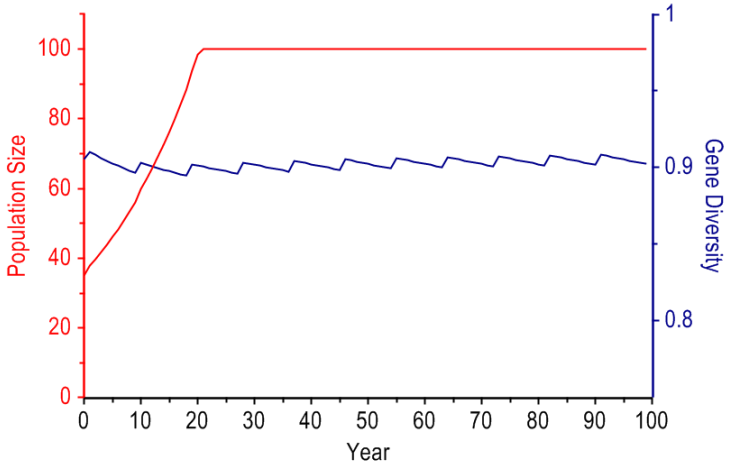
Population Variables:
Generation Length; 16.4
Maximum potential lambda; 0.9806
Current N; 35
Current Ne; 12.9
Ne/N; 0.37
Current Gene Diversity; 0.9056
Maximum N; 35
No founders added

Results:
Can maintain only 41.0%.

Figure 5: Simulation outcomes without supplementation

Scenario II:

The outcomes of the simulation that was run using a maximum potential lambda of 1.0500 and a maximum population size of 100 specimens with supplementation by 1 effective founder every 9 years provided a population that was able to achieve the goals of maintaining 90% of the genetic diversity and a demographically stable population. The population and founder related variables, and the simulation outcome are presented as Figure 6. The increase in population growth rate can be achieved by ensuring that all reproductively active specimens get an opportunity to contribute to the growth of the population. The inclusion of additional effective founders should target lineages that are over-represented to ensure maximum genetic diversity in the captive population.



Population Variables:
Generation Length; 16.4
Maximum potential lambda; 1.0500
Current N; 35
Current Ne; 12.9
Ne/N; 0.37
Current Gene Diversity; 0.9056
Maximum N; 100

Founder Related Variables:
New founders per Addition event; 1
Year to start adding founders; 0
Years between events; 9
Year to stop adding founders; 100
FGE per Founder; 0.40
N per Founder; 1

Results:
Can exceed goals and maintain 90.8%

Figure 6: Simulation outcomes with supplementation

Conclusions and Recommendations

One horned rhinoceros continue to face threats to their long term survival in their natural habitats across their distribution range and are accordingly listed in the Schedule I of the Wildlife Protection Act of India and as Vulnerable in the IUCN Redlist of threatened species. The threats faced by the species remain operational though the populations across their range are showing an increasing trend. Maintenance of demographically stable and genetically viable *ex-situ* populations for insurance continues to be integral to achieving the conservation goals of the species.

A review of the status of the current captive population in Indian zoos based on analysis of available pedigree records indicates that the population is declining ($\lambda = 0.981$). The population is male biased with a large proportion belonging to reproductively active age classes. It retains 90.56% of genetic diversity originating from 12 founders. The population; however, has an unequal representation of founder genome (FGE = 5.29), with specimens related between the level of cousins and first cousins (F = 0.0425; MK = 0.0944) in the current population are threats that need to be addressed urgently.

Simulations run using PMx software indicate that supplementation with 1 effective founder every 9 years and increasing the population growth rate ($\lambda = 1.050$) to achieve a population size of 100 specimens in Indian institutions can ensure that the population remains viable over the next 100 years. Additional causes of concern that need to be addressed for the achievement of *ex-situ* conservation goals of the species are:

- One horned rhinoceros are mega-herbivores that require large enclosures in captivity. The growing captive population would require additional species specific enclosure space for housing.
- The inclusion of new wild origin specimens in the population should be used for pairing with specimens of over-represented lineages to equalize the genetic representation of such lineages while ensuring that the gene pool of the captive population continues to be enriched with wild origin specimens.

Wild origin specimens entering captivity should be assessed for relatedness with both wild origin specimens and the captive population using appropriate molecular genetics tools. Pairing choices and the placements of new animals should be determined based on this assessment.

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Annexure I

Historical Population of One-horned Rhinoceros (*Rhinoceros unicornis*) in Indian Zoos

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
1 MOHAN SENIOR	M	~ 1940	WILD	WILD	INDIA ASSAM P DELHI	~ 1957 13-Dec-57 05-Apr-59 13-Apr-70	Capture Transfer Transfer Death
2 RAJESH	M	~ 1940	WILD	WILD	INDIA ASSAM P	~ 1978 03-Mar-78 18-Jan-87	Capture Transfer Death
3 PADMINI SR	F	~ 1948	WILD	WILD	INDIA ASSAM	~ 1958 05-Oct-58 28-Oct-64	Capture Transfer Death
4 MONY	M	~ 1950	WILD	WILD	INDIA ASSAM TRIVANDRU	???? ???? 29-May-56 16-Feb-87	Capture Transfer Transfer Death
5 GEETA	F	~ 1951	WILD	WILD	INDIA ASSAM PARIS	~ 1960 19-Mar-60 ????	Capture Transfer Ltf
6 DEEPALI SR	F	~ 1952	WILD	WILD	INDIA ASSAM NZP-WASH	~ 1962 29-Oct-62 15-Nov-63 28-Dec-63	Capture Transfer Transfer Death
7 SHIVAJI	M	~ 1955	WILD	WILD	INDIA ASSAM	~ 1960 24-Sep-60 23-Sep-84	Capture Transfer Death
8 PADMINI JR	F	~ 1956	WILD	WILD	INDIA ASSAM	~ 1965 29-Sep-65 19-Oct-82	Capture Transfer Death
9 MOHAN JUNIOR	M	07-Apr-60	WILD	5	ASSAM DELHI	07-Apr-60 01-Dec-65 05-Jul-88	Birth Transfer Death
10 SNEHA	F	12-Jun-61	WILD	105	CALCUTTA	12-Jun-61 14-Aug-82	Birth Death
11 RANGI	F	~ 1962	WILD	WILD	INDIA ASSAM DELHI	???? ???? 28-Mar-68 10-Nov-84	Capture Transfer Transfer Death
12 RAJKUMAR	M	~ 1962	WILD	WILD	INDIA ASSAM HYDERABAD	~ 1962 28-Jun-62 16-Jun-64 19-Aug-83	Capture Transfer Transfer Death
13 PADMA	F	~ 1963	WILD	WILD	INDIA ASSAM HYDERABAD	???? ???? 26-Jun-68	Capture Transfer Ltf
14 29607 RAJKUMARI	F	10-Apr-63	WILD	6	ASSAM NZP-WASH	10-Apr-63 16-Dec-63 09-Sep-80	Birth Transfer Death
15 100288 S1857 JAPARI	F	10-Jul-63	7	3	ASSAM SANDIEGOZ SD-WAP GULF BREZ	10-Jul-63 28-Feb-65 26-Apr-72 07-Nov-95 09-Jan-04	Birth Transfer Transfer Transfer Death

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
16 KOSHA	M	~ Jun 1964	WILD	WILD	INDIA ASSAM	~ 1964 28-Oct-64 13-Nov-64	Capture Transfer Death
17 RUKIMINI 92900	F	~ Apr 1967	WILD	WILD	INDIA ASSAM LOSANGELE	~ 1967 23-Dec-67 25-Nov-69 10-Nov-88	Capture Transfer Transfer Death
18 LAKHIMI	F	~ 1968	WILD	WILD	INDIA ASSAM	~ 1968 28-Feb-68 23-Mar-70	Capture Transfer Death
19 KALAMUKHI 10	F	~ 1968	WILD	WILD	INDIA ASSAM BARODA MYSORE	~ 1968 01-Aug-68 13-Apr-69 19-Jan-90	Capture Transfer Transfer Ltf
20 KUMAR	M	~ Jul 1968	WILD	WILD	INDIA ASSAM	~ 1969 23-Jul-69 23-Mar-70	Capture Transfer Death
21 M4769 184002 SASADEV	M	~ 1969	WILD	WILD	INDIA ASSAM ANTWERP PLANCKNDL	~ 1970 30-Jul-70 23-Mar-71 24-Nov-78 16-Oct-88	Capture Transfer Transfer Transfer Death
22 184002 SANTU	M	~ 1969	WILD	WILD	INDIA ASSAM BROWNSVIL	~ 1971 28-Jun-71 29-Aug-73 03-Dec-73	Capture Transfer Transfer Death
23 2 MEGHNAD/BIHU	M	~ 1969	WILD	WILD	INDIA ASSAM CALCUTTA	~ 1974 12-Feb-74 11-Mar-74 13-Jan-03	Capture Transfer Transfer Death
24 BHISMA	M	~ May 1969	WILD	WILD	INDIA ASSAM	~ 1969 26-Jul-69 27-Dec-69	Capture Transfer Death
25 KUMARI	F	10-Jul-69	WILD	WILD	INDIA ASSAM	~ 1969 20-Jul-69 24-Jul-70	Capture Transfer Death
26 DABBU/AGNI	M	~ 1970	WILD	WILD	INDIA ASSAM DELHI	~ 1982 05-May-82 23-Mar-83 24-Apr-01	Capture Transfer Transfer Death
27 SHAKUNTALA	F	~ 1971	WILD	WILD	INDIA ASSAM CHATBIR Z	~ 1978 15-Jun-78 29-Jul-78 25-May-86	Capture Transfer Transfer Death
28 L259 ROOPA	F	28-Jan-71	9	11	DELHI WHIPSNADE	28-Jan-71 06-Feb-73 04-Nov-08	Birth Transfer Death
29 KRISHNA/SAMB	M	12-Sep-71	7	8	ASSAM NAGOYA	12-Sep-71 02-Oct-74 06-Jul-08	Birth Transfer Death
30 RAJESH	M	25-Nov-71	12	13	HYDERABAD	25-Nov-71 11-Aug-83	Birth Death
31 GANESH JUNIO	M	~ 1972	WILD	WILD	INDIA ASSAM	~ 1982 15-Jul-82 19-Nov-06	Capture Transfer Death

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
32 MAYURI	F	~ 1973	WILD	WILD	INDIA ASSAM CALCUTTA	~ 1974 22-Jan-74 11-Mar-74 ~ 2004	Capture Transfer Transfer Death
33 MAYANGKUMARI	F	~ Apr 1973	WILD	WILD	INDIA ASSAM NY BRONX	~ 1973 14-Aug-73 25-Sep-74	Capture Transfer Ltf
34 302 MAYUNG	F	~ May 1973	WILD	WILD	INDIA ASSAM KANPUR LUCKNOW HYDERABAD	~ 1973 11-Aug-73 04-Mar-77 30-Apr-97 23-Sep-99	Capture Transfer Transfer Transfer Ltf
35 751512 RADHA	F	16-Jun-73	WILD	WILD	INDIA ASSAM NY BRONX	~ 1973 21-Jun-73 30-Jan-75 12-Jul-76	Capture Transfer Transfer Death
36 CHITRALEKHA	F	~ 1974	WILD	WILD	INDIA ASSAM PATNA RANCHI	~ 1974 21-Jul-74 25-May-79 04-Dec-96 ~ Sep 2008	Capture Transfer Transfer Transfer Death
37 301 LACHIT	M	23-May-74	7	8	ASSAM KANPUR	23-May-74 04-Mar-77 08-Aug-92	Birth Transfer Death
38 4001 NUMALI	F	~ 1972	WILD	WILD	INDIA ASSAM NANDANKAN	~ 1972 16-Sep-72 08-Jun-74 28-May-07	Capture Transfer Transfer Death
39 ANJALI	F	~ 1975	WILD	WILD	INDIA ASSAM	09-Aug-75 10-Aug-75 20-Aug-77	Capture Transfer Death
40 RAM/MUNNI	M	~ 1975	WILD	WILD	INDIA ASSAM MYSORE	~ 1980 24-Jan-80 23-Jan-85 02-Aug-02	Capture Transfer Transfer Death
41	M	~ 1975	WILD	WILD	INDIA ASSAM	~ 1976 02-Feb-76 07-Mar-76	Capture Transfer Death
42 SHAYAM	M	~ May 1975	WILD	WILD	INDIA ASSAM NANDANKAN IN TRANSI	~ 1975 02-Jun-75 04-Apr-76 22-Apr-76	Capture Transfer Transfer Death
43 BALRAM/ GANESH	M	17-Oct-75	WILD	WILD	INDIA ASSAM CHATBIR Z	~ 1977 17-Oct-77 14-Dec-77 03-Jul-93	Capture Transfer Transfer Death
44 LAXMAN	M	~ 1976	WILD	WILD	INDIA ASSAM	~ 1980 27-Jan-80 16-Jun-13	Capture Transfer Death
45	F	~ Mar 1976	WILD	WILD	INDIA ASSAM LUCKNOW	~ 1976 06-Apr-76 17-Oct-79 19-Dec-83	Capture Transfer Transfer Death
46 SANJAI	M	01-Nov-76	WILD	WILD	INDIA ASSAM LUCKNOW	~ 1976 13-Nov-76 17-Oct-79 18-Jan-80	Capture Transfer Transfer Death

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
47 NANDAN	M	~ 1977	WILD	WILD	INDIA NANDANKAN ASSAM	~ 1977 02-Dec-79 28-Sep-16	Capture Transfer Death
48 KAMAL	M	~ 1977	WILD	WILD	INDIA ASSAM	~ 1982 06-Feb-82 07-Feb-82	Capture Transfer Death
49 PAT-2 KANCHA\BIJOY	M	~ Apr 1977	WILD	WILD	INDIA PATNA	~ 1977 25-May-79 15-Dec-11	Capture Transfer Death
50 GEETA/LAXMI	F	09-Jan-78	7	8	ASSAM	09-Jan-78 11-Jan-98	Birth Death
51 KRISHNA JUNI	M	~ 1978	WILD	WILD	INDIA ASSAM KANPUR LUCKNOW	~ 1978 24-Mar-78 17-Oct-79 23-May-82 01-Jan-85	Capture Transfer Transfer Transfer Death
52 PRABHAT	M	~ Aug 1978	WILD	WILD	INDIA ASSAM	~ 1978 09-Nov-78 24-Nov-78	Capture Transfer Death
53 LADDU/VEERU	M	12-Nov-78	12	13	HYDERABAD	12-Nov-78 06-Aug-01	Birth Death
54 462 G4844 GOMOTI	F	09-Jan-79	23	10	CALCUTTA KOLN SINGAPORE	09-Jan-79 10-Mar-86 02-May-97	Birth Transfer Ltf
55 10009 SHIVA	M	~ Mar 1978	WILD	WILD	INDIA VEERMATA DELHI	???? 04-Mar-85 21-Aug-13 18-Jun-14	Capture Transfer Transfer Death
56	F	09-Mar-79	43	27	CHATBIR Z	09-Mar-79 09-Mar-79	Birth Death
57 PARBATI	F	~ Jul 1979	WILD	WILD	INDIA ASSAM	~ 1980 20-Jan-80 18-Jun-83	Capture Transfer Death
58 JHON\PALITRA	M	~ Apr 1980	WILD	WILD	INDIA ASSAM	~ 1980 23-Aug-80 22-Jan-08	Capture Transfer Death
59 RAMU SENIOR	M	~ May 1980	WILD	WILD	INDIA ASSAM MADRAS	~ 1980 03-Sep-80 17-Apr-85 07-Jul-89	Capture Transfer Transfer Death
60 GINI\TARALI	F	~ 1980	WILD	WILD	INDIA ASSAM	~ 1980 23-Aug-80 ????	Capture Transfer Death
61	F	13-Nov-80	43	27	CHATBIR Z DELHI	13-Nov-80 05-May-82 02-Jun-86	Birth Transfer Death
62 RAJU	M	~ 1981	WILD	WILD	INDIA PATNA	~ 1982 28-Mar-82 02-Apr-95	Capture Transfer Death
63 5 SRINIVAS	M	15-May-81	12	13	HYDERABAD	15-May-81 06-Aug-01	Birth Death
64 RUPA	F	~ Jun 1981	WILD	WILD	INDIA ASSAM	~ 1981 03-Jul-81 11-Oct-81	Capture Transfer Death

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
65 MOHINI/RUBY	F	~ 1982	WILD	WILD	INDIA ASSAM DELHI	~ 1982 04-Jun-82 12-Dec-90 25-Mar-01	Capture Transfer Transfer Death
66 DALIMI	F	~ Apr 1982	WILD	WILD	INDIA ASSAM	~ 1982 02-May-82 27-Oct-82	Capture Transfer Death
67 SHYAM JUNIOR	M	09-Jun-82	7	8	ASSAM	09-Jun-82 23-Sep-98	Birth Death
68 RASHMI/SAWAK	F	01-Oct-82	37	34	KANPUR YOKOHAMA	01-Oct-82 31-Mar-85 04-Jan-95	Birth Transfer Death
69	M	15-Feb-83	43	27	CHATBIR Z	15-Feb-83 02-Mar-83	Birth Death
70 SABITRI	F	~ Mar 1983	WILD	WILD	INDIA ASSAM	~ 1983 09-Apr-83 30-Apr-83	Capture Transfer Death
71 5 DEBRAJ	M	04-Jun-84	23	32	CALCUTTA	04-Jun-84 13-Nov-00	Birth Death
72 305 LOHIT	M	06-Aug-84	37	34	KANPUR DUDHWA DUDHWA LUCKNOW	06-Aug-84 27-Apr-92 25-Nov-92 06-Apr-95	Birth Transfer Capture Transfer
73	M	11-Dec-84	43	27	CHATBIR Z	11-Dec-84 21-Dec-84	Birth Death
74 SUCHILA	F	~ Dec 1985	WILD	WILD	INDIA ASSAM	~ 1986 27-Feb-86 28-Feb-86	Capture Transfer Death
75 RAJA/PRINCE	M	09-May-86	43	27	CHATBIR Z	09-May-86	Birth
76 RATUL	M	~ Jan 1987	WILD	WILD	INDIA ASSAM GORUMARA	~ 1987 25-Aug-87 17-Oct-95	Capture Transfer Release
77 100059 BISHNU 0006CDC673	M	11-May-87	44	50	ASSAM	11-May-87 05-Feb-18	Birth Death
78 306 MOHIT	M	17-Jun-87	37	34	KANPUR HYDERABAD	17-Jun-87 01-Mar-03	Birth Ltf
79 RAMU	M	~ Mar 1988	WILD	WILD	INDIA ASSAM TRIVANDRU	~ 1988 02-Sep-88 19-May-93	Capture Transfer Transfer
80 PAT-4 HARTALI	F	08-Jul-88	62	36	PATNA	08-Jul-88	Birth
81 JADU	M	26-Jul-88	WILD	WILD	INDIA ASSAM TRIVANDRU	~ 1989 26-Jul-89 19-May-93	Capture Transfer Ltf
82 MAHESH	M	30-Mar-89	44	50	ASSAM	30-Mar-89 19-Apr-15	Birth Death
83 MADU	M	~ Jun 1989	WILD	WILD	INDIA ASSAM JALDAPARA	25-Jul-89 26-Jul-89 17-Oct-95	Capture Transfer Release

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
84 DHAN	M	~ 1989	WILD	WILD	INDIA ASSAM	~ 1989 26-Jul-89 04-Sep-89	Capture Transfer Death
85 307 ROHIT	M	20-Jun-89	37	34	KANPUR	20-Jun-89	Birth
86 KANAK	M	~ 1989	WILD	WILD	INDIA ASSAM	~ 1989 25-Jun-89 26-Jun-89	Capture Transfer Death
87 PRAKASH	M	~ Mar 1990	WILD	WILD	INDIA	~ 1990 22-Apr-90	Capture Death
88 RH-1 PRADEEP	M	~ 1990	WILD	WILD	INDIA ASSAM SEPAHIJAL	~15 Aug 1990 20-Aug-90 14-Oct-94 ~ Sep 2014	Capture Transfer Transfer Death
89 BAGHEKHAITI 0006CDC8A2	F	~ 1990	WILD	WILD	INDIA ASSAM	~ 1991 10-Aug-91	Capture Transfer
90 MONOMALI	F	30-Apr-91	WILD	WILD	INDIA ASSAM	~ 1991 06-Aug-91 17-Aug-91	Capture Transfer Death
91 MUDIT	M	05-Jul-91	37	34	KANPUR	05-Jul-91 31-Dec-02	Birth Death
92 PAT-5 CHOTKI/RANI	F	06-Jul-91	62	36	PATNA	06-Jul-91 21-Mar-08	Birth Death
93 PAT13 AYODHYA/AMAR	M	27-Dec-92	26	65	DELHI PATNA	27-Dec-92 21-Oct-05	Birth Transfer
94	F	25-Nov-94	58	60	ASSAM	25-Nov-94 25-Nov-94	Birth Death
95 HANUMAN	M	~ 1995	WILD	WILD	INDIA ASSAM	~ 1995 21-Mar-95 27-Nov-95	Capture Transfer Death
96 100074 RITA	F	22-Jan-95	44	50	ASSAM TRIVANDRU	22-Jan-95 26-Oct-03	Birth Ltf
97 RANGA	M	~ 1995	WILD	WILD	INDIA ASSAM ASSAM	~ 1995 11-Jun-95 05-Nov-95	Capture Transfer Death
98 MEGHDOOT	M	28-Aug-95	26	65	DELHI	28-Aug-95 06-Mar-99	Birth Death
99 TARUN	M	29-Apr-96	78	34	KANPUR LUCKNOW	29-Apr-96 30-Apr-97 19-May-97	Birth Transfer Death
100 100003 MAHESWARI	F	27-Nov-97	26	65	DELHI	27-Nov-97	Birth
101	F	15-Jun-99	58	60	ASSAM	15-Jun-99 15-Jun-99	Birth Death
102 MADAN	M	????	UNK	UNK	UNKNOWN ASSAM LOSANGELE	???? ???? 04-Dec-65	Birth Transfer Ltf
103 BABUL	M	????	WILD	WILD	INDIA ASSAM	~ 1988 16-Sep-88 24-Sep-88	Capture Transfer Death

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
104 LOHAMANI	M	~ Jul 1998	WILD	WILD	INDIA ASSAM	~ 1998 26-Oct-98 15-Mar-03	Capture Transfer Death
105 LAUIE/RANI	F	~ 1955	WILD	WILD	INDIA ASSAM CALCUTTA HAMURA	???? ???? 06-Jun-61 16-Jul-61 13-Dec-91	Capture Transfer Transfer Transfer Death
106 GOTANGI	F	????	WILD	WILD	INDIA ASSAM OMAHA	~ 1968 29-Jul-68 23-Jan-70 31-Jan-70	Capture Transfer Transfer Death
107 RAJA	M	19-Dec-93	49	36	PATNA DELHI	19-Dec-93 22-Mar-05 22-Sep-07	Birth Transfer Death
108 RANI	F	26-Jun-94	62	80	PATNA KANPUR	26-Jun-94 06-Oct-97 21-Mar-08	Birth Transfer Death
109 BAJRANGI	M	23-Oct-97	49	80	PATNA	23-Oct-97 17-Jul-99	Birth Death
110	M	02-Jul-00	26	65	DELHI	02-Jul-00 02-Jul-00	Birth Death
111 607123 BHOPO 00-000B-D432	M	29-Sep-00	49	80	PATNA SANDIEGOZ	29-Sep-00 12-May-07	Birth Ltf
112 PORI	F	04-Jun-02	77	89	ASSAM	04-Jun-02	Birth
113 MANU	F	22-Jun-02	78	108	KANPUR	22-Jun-02	Birth Ltf
114 PAT-10 AKANCHA/GAURI	F	08-Aug-02	49	80	PATNA	08-Aug-02	Birth
115 GOYONA	F	15-Feb-00	UNK	UNK	SANDIEGOZ DELHI	15-Feb-00 29-Apr-07 29-Sep-07	Birth Transfer Death
116 PAT-16 GAIRI	F	23-Jul-01	ISB106	ISB209	SANDIEGOZ PATNA	23-Jul-01 09-May-07 09-Dec-14	Birth Transfer Death
117 RUSTAM	M	31-May-03	107	92	PATNA SANDIEGOZ	31-May-03 09-May-07	Birth Ltf
118 MANU	F	22-Jun-03	85	108	KANPUR	22-Jun-03	Birth
119 BRAHMAPUTRA	M	10-Nov-03	93	100	DELHI SANDIEGOZ	10-Nov-03 07-May-07	Birth Ltf
120 PAT12 GANESH	M	19-Sep-04	107	80	PATNA	19-Sep-04	Birth
121 NAKUL	M	~ 1997	WILD	WILD	INDIA KANPUR VISAKAPAT	10-Jan-05 12-Jan-05 06-Apr-13	Capture Transfer Ltf
123 PAT14 SURAJ	M	06-Nov-05	49	92	PATNA HYDERABAD	06-Nov-05 24-Aug-11	Birth Transfer
124 ANJUHA	F	10-Nov-05	93	100	DELHI	10-Nov-05	Birth

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
125 PAT17 LALI	F	03-Dec-05	ISB190	116	SANDIEGOZ PATNA	03-Dec-05 09-May-07	Birth Transfer
126 HARSH	M	28-Mar-06	85	108	KANPUR	28-Mar-06	Birth
127 PAT-15 SARASWATI	F	24-Jan-07	49	80	PATNA HYDERABAD	24-Jan-07 24-Aug-11	Birth Transfer
128 100008	M	17-Sep-07	UNK	115	DELHI	17-Sep-07 17-Sep-07	Birth Death
129 PAT-18 SHAKTIRAJ	M	30-Oct-07	ISB190	116	PATNA	30-Oct-07	Birth
130 PAT-19 ELECTION	F	06-Apr-09	49	80	PATNA	06-Apr-09	Birth
131 PAT20 VIRAT	M	25-May-11	49	80	PATNA MYSORE	25-May-11 20-Jul-14	Birth Transfer
132 PAT21	F	10-Jun-11	93	114	PATNA	10-Jun-11 10-Jun-11	Birth Death
133 PAT22 JAMBO	M	11-Nov-11	93	92	PATNA	11-Nov-11	Birth
134 PAT23 M01124 DOLLY	F	11-May-13	93	114	PATNA MYSORE	11-May-13 20-Jul-14	Birth Transfer
135 PAT-24 VIDHUT	M	06-Sep-13	93	116	PATNA	06-Sep-13	Birth
136 PAT-25 BABLI	F	16-Sep-13	93	80	PATNA	16-Sep-13 09-Aug-15	Birth Death
137 PAT-26	M	16-Feb-14	93	125	PATNA	16-Feb-14 19-Feb-14	Birth Death
138	M	27-May-13	85	118	KANPUR	27-May-13	Birth
145 SAIVIJAY	M	05-Jul-12	93	127	HYDERABAD	05-Jul-12	Birth
146 RAMU	M	25-Sep-15	123	127	PATNA	25-Sep-15	Birth
147 KAN-14 KRISHNA	M	04-Sep-15	85	118	KANPUR	04-Sep-15	Birth
148 100006 RAJA JUNIOR	M	11-Nov-08	107	100	DELHI	11-Nov-08 28-Apr-12	Birth Death
149 DUBLY	F	10-Apr-63	WILD	6	INDIA ASSAM	10-Apr-63 10-Apr-63	Capture Transfer
149	F	16-Nov-13	UNK	UNK	INDIA ASSAM U.S.A.	10-Apr-63 10-Apr-63 15-Nov-63	Capture Transfer Ltf
150 JOYMATI	F	10-Apr-91	WILD	WILD	INDIA ASSAM	~25 Jul 1991 10-Aug-91 19-Sep-91	Capture Transfer Death
151	F	05-Jun-10	44	89	ASSAM	05-Jun-10	Birth

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
12 10					MYSORE	06-Sep-13	Transfer
152 RANI	F	~ 1972	WILD	WILD	INDIA ASSAM	~26 Sep 2012 07-Oct-12 18-Sep-14	Capture Transfer Death
153 SANATAN	M	01-Sep-13	77	89	ASSAM	01-Sep-13	Birth
154 000R7 NAG-SANKAR	M	~ 2006	WILD	WILD	INDIA ASSAM	???? 03-Jul-16	Capture Transfer
155 RPAT27	M	08-Jul-17	93	130	PATNA	08-Jul-17	Birth
156 RPAT28	F	26-Jul-17	120	125	PATNA	26-Jul-17	Birth
157 000R4 GAONBURHA	M	~ Jul 2015	WILD	WILD	INDIA ASSAM	???? 12-Oct-17	Capture Transfer
158 000R6 SHANTI	F	~ Jul 2016	WILD	WILD	INDIA ASSAM	???? 12-Oct-17	Capture Transfer
159 000R5 BAGORI	F	~ Feb 2017	WILD	WILD	INDIA ASSAM	???? 12-Oct-17	Capture Transfer
IN1 KASI	M	????	WILD	WILD	INDIA ASSAM MYSORE	???? ???? 24-Apr-65 30-Apr-79	Capture Transfer Transfer Death
IN2 560003 RANI	F	????	WILD	WILD	INDIA ASSAM MYSORE	???? ???? 04-Aug-56 07-May-92	Capture Transfer Transfer Death
IN3 7720 901264 VINU	M	16-Apr-71	IN1	IN2	MYSORE GELSNKRKN TORONTO NY BRONX	16-Apr-71 28-Aug-75 28-Jul-76 30-May-90	Birth Transfer Transfer Ltf
IN4 LACIT	M	????	WILD	WILD	INDIA ASSAM VEERMATA	???? ???? 14-Apr-52 14-Sep-80	Capture Transfer Transfer Death
IN5 JAYA	M	????	WILD	WILD	INDIA ASSAM NAGOYA	~ 1974 03-Jan-74 02-Oct-74	Capture Transfer Ltf
IN6 KUSHAL	F	~ 1953	WILD	WILD	INDIA MADRAS	~ 1953 09-Jun-53 15-Jun-80	Capture Transfer Death
IN7 INDIRA	F	19-Jul-75	IN1	IN2	MYSORE GELSNKRKN TORONTO	19-Jul-75 25-Jun-76 27-Apr-79	Birth Transfer Ltf
IN8 JAISINGH	M	????	WILD	WILD	INDIA LUCKNOW	~ 1959 30-Mar-59 06-May-79	Capture Transfer Death
IN9 ROSY	F	????	WILD	WILD	INDIA LUCKNOW	~ 1944 02-Apr-44 02-Apr-73	Capture Transfer Death
TOTALS: 162 (91.71.0)							

Annexure II

Living Population of One-horned Rhinoceros (*Rhinoceros uicornis*) in Indian Zoos

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
Assam State Zoo Cum Botanical Garden, Guwahati							
89 BAGHEKHAITI 0006CDC8A2	F	~ 1990	WILD	WILD	INDIA ASSAM	~ 1991 10-Aug-91	Capture Transfer
112 PORI	F	04-Jun-02	77	89	ASSAM	04-Jun-02	Birth
153 SANATAN	M	01-Sep-13	77	89	ASSAM	01-Sep-13	Birth
154 000R7 NAG-SANKAR	M	~ 2006	WILD	WILD	INDIA ASSAM	???? 03-Jul-16	Capture Transfer
157 000R4 GAONBURHA	M	~ Jul 2015	WILD	WILD	INDIA ASSAM	???? 12-Oct-17	Capture Transfer
158 000R6 SHANTI	F	~ Jul 2016	WILD	WILD	INDIA ASSAM	???? 12-Oct-17	Capture Transfer
159 000R5 BAGORI	F	~ Feb 2017	WILD	WILD	INDIA ASSAM	???? 12-Oct-17	Capture Transfer
Total: 7 (4.3)							
M. C. Zoological Park, Chatbir							
75 RAJA/PRINCE	M	09-May-86	43	27	CHATBIR Z	09-May-86	Birth
Total: 1 (1.0)							
National Zoological Park Delhi							
100 100003 MAHESWARI	F	27-Nov-97	26	65	DELHI	27-Nov-97	Birth
124 ANJUHA	F	10-Nov-05	93	100	DELHI	10-Nov-05	Birth
Total: 2 (0.2)							
Nehru Zoological Park, Hyderabad							
123 PAT14 SURAJ	M	06-Nov-05	49	92	PATNA HYDERABAD	06-Nov-05 24-Aug-11	Birth Transfer
127 PAT-15 SARASWATI	F	24-Jan-07	49	80	PATNA HYDERABAD	24-Jan-07 24-Aug-11	Birth Transfer
145 SAIVIJAY	M	05-Jul-12	93	127	HYDERABAD	05-Jul-12	Birth
Total: 3 (2.1)							
Kanpur Zoological Park, Kanpur							
85	M	20-Jun-89	37	34	KANPUR	20-Jun-89	Birth

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
307 ROHIT							
118 MANU	F	22-Jun-03	85	108	KANPUR	22-Jun-03	Birth
126 HARSH	M	28-Mar-06	85	108	KANPUR	28-Mar-06	Birth
138	M	27-May-13	85	118	KANPUR	27-May-13	Birth
147 KAN-14 KRISHNA	M	04-Sep-15	85	118	KANPUR	04-Sep-15	Birth
Total: 5 (4.1)							
Nawab Wazid Ali Shah Zoological Garden, Lucknow							
72 305 LOHIT	M	06-Aug-84	37	34	KANPUR DUDHWA DUDHWA LUCKNOW	06-Aug-84 27-Apr-92 25-Nov-92 06-Apr-95	Birth Transfer Capture Transfer
Total: 1 (1.0)							
Sri Chamarajendra Zoological Gardens, Mysore							
131 PAT20 VIRAT	M	25-May-11	49	80	PATNA MYSORE	25-May-11 20-Jul-14	Birth Transfer
134 PAT23 M01124 DOLLY	F	11-May-13	93	114	PATNA MYSORE	11-May-13 20-Jul-14	Birth Transfer
151 12 10	F	05-Jun-10	44	89	ASSAM MYSORE	05-Jun-10 06-Sep-13	Birth Transfer
Total: 3 (1.2)							
Sanjay Gandhi Biological Park, Patna							
80 PAT-4 HARTALI	F	08-Jul-88	62	36	PATNA	08-Jul-88	Birth
93 PAT13 AYODHYA/AMAR	M	27-Dec-92	26	65	DELHI PATNA	27-Dec-92 21-Oct-05	Birth Transfer
114 PAT-10 AKANCHA/GAURI	F	08-Aug-02	49	80	PATNA	08-Aug-02	Birth
120 PAT12 GANESH	M	19-Sep-04	107	80	PATNA	19-Sep-04	Birth
125 PAT17 LALI	F	03-Dec-05	ISB190	116	SANDIEGOZ PATNA	03-Dec-05 09-May-07	Birth Transfer
129 PAT-18 SHAKTIRAJ	M	30-Oct-07	ISB190	116	PATNA	30-Oct-07	Birth
130 PAT-19	F	06-Apr-09	49	80	PATNA	06-Apr-09	Birth

Stud# Local ID Name	Sex	Birth Date	Sire	Dam	Location	Date	Event
ELECTION							
133 PAT22 JAMBO	M	11-Nov-11	93	92	PATNA	11-Nov-11	Birth
135 PAT-24 VIDHUT	M	06-Sep-13	93	116	PATNA	06-Sep-13	Birth
146 RAMU	M	25-Sep-15	123	127	PATNA	25-Sep-15	Birth
155 RPAT27	M	08-Jul-17	93	130	PATNA	08-Jul-17	Birth
156 RPAT28	F	26-Jul-17	120	125	PATNA	26-Jul-17	Birth
Total: 12 (7.5)							
Thiruvananthapuram Zoo, Thiruvananthapuram							
79 RAMU	M	~ Mar 1988	WILD	WILD	INDIA ASSAM TRIVANDRU	~ 1988 02-Sep-88 19-May-93	Capture Transfer Transfer
Total: 1 (1.0)							
Total Living: 35 (20.15)							

Annexure III

Pedigree Chart Report of One-horned Rhnoceros Studbook

```
==========================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:      1
==========================================================================
                  WILD                                    WILD
                                \           /             Sex: Male
                                 \         /      Birth Date:      ~ 1940
                                  \       /    Last Location: DELHI     (dead)
                                dam\     /sire    House Name: MOHAN SENIOR
                                    \   /             Tattoo:
                                     \ /            Tag/Band:
                                     1

==========================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:      2
==========================================================================
                  WILD                                    WILD
                                \           /             Sex: Male
                                 \         /      Birth Date:      ~ 1940
                                  \       /    Last Location: ASSAM P   (dead)
                                dam\     /sire    House Name: RAJESH
                                    \   /             Tattoo:
                                     \ /            Tag/Band:
                                     2

==========================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:      3
==========================================================================
                  WILD                                    WILD
                                \           /             Sex: Female
                                 \         /      Birth Date:      ~ 1948
                                  \       /    Last Location: ASSAM     (dead)
                                dam\     /sire    House Name: PADMINI SR
                                    \   /             Tattoo:
                                     \ /            Tag/Band:
                                     3

==========================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:      4
==========================================================================
                  WILD                                    WILD
                                \           /             Sex: Male
                                 \         /      Birth Date:      ~ 1950
                                  \       /    Last Location: TRIVANDRU (dead)
                                dam\     /sire    House Name: MONY
                                    \   /             Tattoo:
                                     \ /            Tag/Band:
                                     4

==========================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:      5
==========================================================================
                  WILD                                    WILD
                               \            /
                                \           /             Sex: Female
                                 \         /      Birth Date:      ~ 1951
                                  \       /    Last Location: PARIS
                                dam\     /sire    House Name: GEETA
                                    \   /             Tattoo:
                                     \ /            Tag/Band:
                                     5
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                        Studbook Number:      6
================================================================================
                WILD                                    WILD
                                  \           /         Sex: Female
                                   \         /      Birth Date:      ~ 1952
                                    \       /    Last Location: NZP-WASH  (dead)
                                  dam\     /sire    House Name: DEEPALI SR
                                      \   /             Tattoo:
                                       \/             Tag/Band:
                                       6
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                        Studbook Number:      7
================================================================================
                WILD                                    WILD
                                  \           /         Sex: Male
                                   \         /      Birth Date:      ~ 1955
                                    \       /    Last Location: ASSAM     (dead)
                                  dam\     /sire    House Name: SHIVAJI
                                      \   /             Tattoo:
                                       \/             Tag/Band:
                                       7
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                        Studbook Number:      8
================================================================================
                WILD                                    WILD
                                  \           /         Sex: Female
                                   \         /      Birth Date:      ~ 1956
                                    \       /    Last Location: ASSAM     (dead)
                                  dam\     /sire    House Name: PADMINI JR
                                      \   /             Tattoo:
                                       \/             Tag/Band:
                                       8
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                        Studbook Number:      9
================================================================================
       WILD                WILD
             dam\     /sire
                 \   /
                  \/
                  5    +                                WILD
                 GEETA
                                  \           /         Sex: Male
                                   \         /      Birth Date:  7 Apr 1960
                                    \       /    Last Location: DELHI     (dead)
                                  dam\     /sire    House Name: MOHAN JUNIOR
                                      \   /             Tattoo:
                                       \/             Tag/Band:
+ Wild-caught...                       9
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                        Studbook Number:     10
================================================================================
       WILD                WILD
             dam\     /sire
                 \   /
                  \/
                  105   +                               WILD
                 LAUIE/RA
                                  \           /         Sex: Female
                                   \         /      Birth Date: 12 Jun 1961
                                    \       /    Last Location: CALCUTTA  (dead)
                                  dam\     /sire    House Name: SNEHA
                                      \   /             Tattoo:
                                       \/             Tag/Band:
                                       10
```

+ Wild-caught...

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     11
================================================================================
                WILD                                        WILD
                                  \           /             Sex: Female
                                   \         /      Birth Date:      ~ 1962
                                    \       /    Last Location: DELHI     (dead)
                                  dam\     /sire    House Name: RANGI
                                      \   /              Tattoo:
                                       \/              Tag/Band:
                                       11
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     12
================================================================================
                WILD                                        WILD
                                  \           /             Sex: Male
                                   \         /      Birth Date:      ~ 1962
                                    \       /    Last Location: HYDERABAD (dead)
                                  dam\     /sire    House Name: RAJKUMAR
                                      \   /              Tattoo:
                                       \/              Tag/Band:
                                       12
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     13
================================================================================
                WILD                                        WILD
                                  \           /             Sex: Female
                                   \         /      Birth Date:      ~ 1963
                                    \       /    Last Location: HYDERABAD
                                  dam\     /sire    House Name: PADMA
                                      \   /              Tattoo:
                                       \/              Tag/Band:
                                       13
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     14
================================================================================
       WILD               WILD
             dam\    /sire
                 \  /
                  \/
                  6    +                                    WILD
                DEEPALI
                                  \           /             Sex: Female
                                   \         /      Birth Date: 10 Apr 1963
                                    \       /    Last Location: NZP-WASH  (dead)
                                  dam\     /sire    House Name: RAJKUMARI
                                      \   /              Tattoo:
                                       \/              Tag/Band:
+ Wild-caught...                       14
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     15
================================================================================
       WILD               WILD               WILD                WILD
             dam\    /sire                         dam\    /sire
                 \  /                                 \  /
                  \/                                   \/
                  3    +                               7    +
                PADMINI                             SHIVAJI
                                  \           /             Sex: Female
                                   \         /      Birth Date: 10 Jul 1963
                                    \       /    Last Location: GULF BREZ (dead)
                                  dam\     /sire    House Name: JAPARI
                                      \   /              Tattoo:
                                       \/              Tag/Band:
                                       15
```

+ Wild-caught...

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     16
================================================================================
                WILD                                      WILD
                                 \          /             Sex: Male
                                  \        /      Birth Date:  ~ Jun 1964
                                   \      /    Last Location: ASSAM     (dead)
                                 dam\    /sire    House Name: KOSHA
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                     16

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                     Studbook Number:     17
================================================================================
                WILD                                      WILD
                                 \          /             Sex: Female
                                  \        /      Birth Date:  ~ Apr 1967
                                   \      /    Last Location: LOSANGELE (dead)
                                 dam\    /sire    House Name: RUKIMINI
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                     17

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     18
================================================================================
                WILD                                      WILD
                                 \          /             Sex: Female
                                  \        /      Birth Date:      ~ 1968
                                   \      /    Last Location: ASSAM     (dead)
                                 dam\    /sire    House Name: LAKHIMI
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                     18

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     19
================================================================================
                WILD                                      WILD
                                 \          /             Sex: Female
                                  \        /      Birth Date:      ~ 1968
                                   \      /    Last Location: MYSORE
                                 dam\    /sire    House Name: KALAMUKHI
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                     19

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                  Studbook Number:     20
================================================================================
                WILD                                      WILD
                                 \          /             Sex: Male
                                  \        /      Birth Date:  ~ Jul 1968
                                   \      /    Last Location: ASSAM     (dead)
                                 dam\    /sire    House Name: KUMAR
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                     20

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     21
================================================================================
                WILD                                      WILD
                                 \          /             Sex: Male
                                  \        /      Birth Date:      ~ 1969
                                   \      /    Last Location: PLANCKNDL (dead)
                                 dam\    /sire    House Name: SASADEV
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                     21
```

```
==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     22
==============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Male
                                  \        /          Birth Date:      ~ 1969
                                   \      /    Last Location: BROWNSVIL (dead)
                                 dam\    /sire    House Name: SANTU
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      22
```

```
==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     23
==============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Male
                                  \        /          Birth Date:      ~ 1969
                                   \      /    Last Location: CALCUTTA  (dead)
                                 dam\    /sire    House Name: MEGHNAD/BIHUA
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      23
```

```
==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     24
==============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Male
                                  \        /          Birth Date:  ~ May 1969
                                   \      /    Last Location: ASSAM     (dead)
                                 dam\    /sire    House Name: BHISMA
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      24
```

```
==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                   Studbook Number:     25
==============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Female
                                  \        /          Birth Date: 10 Jul 1969
                                   \      /    Last Location: ASSAM     (dead)
                                 dam\    /sire    House Name: KUMARI
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      25
```

```
==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                   Studbook Number:     26
==============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Male
                                  \        /          Birth Date:      ~ 1970
                                   \      /    Last Location: DELHI     (dead)
                                 dam\    /sire    House Name: DABBU/AGNI
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      26
```

```
==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     27
==============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Female
                                  \        /          Birth Date:      ~ 1971
                                   \      /    Last Location: CHATBIR Z (dead)
                                 dam\    /sire    House Name: SHAKUNTALA/SUND
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      27
```

```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     28
 ================================================================================
                                        WILD      WILD
                                         dam\    /sire
                                             \  /
                                              \/
        WILD                WILD               5    +             WILD
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                   11   +                                  9
                                  \          /             Sex: Female
                                   \        /      Birth Date: 28 Jan 1971
                                    \      /    Last Location: WHIPSNADE (dead)
                                  dam\    /sire    House Name: ROOPA
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      28

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     29
 ================================================================================
        WILD                WILD               WILD                WILD
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                   8    +                                  7    +
                PADMINI                                 SHIVAJI
                                  \          /             Sex: Male
                                   \        /      Birth Date: 12 Sep 1971
                                    \      /    Last Location: NAGOYA    (dead)
                                  dam\    /sire    House Name: KRISHNA/SAMBER
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      29

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     30
 ================================================================================
        WILD                WILD               WILD                WILD
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                   13   +                                  12   +
                  PADMA                                 RAJKUMAR
                                  \          /             Sex: Male
                                   \        /      Birth Date: 25 Nov 1971
                                    \      /    Last Location: HYDERABAD (dead)
                                  dam\    /sire    House Name: RAJESH
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      30

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                     Studbook Number:     31
 ================================================================================
                   WILD                                  WILD
                                  \          /             Sex: Male
                                   \        /      Birth Date:      ~ 1972
                                    \      /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: GANESH JUNIOR
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       31
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     32
================================================================================
                WILD                                    WILD
                                \           /           Sex: Female
                                 \         /      Birth Date:      ~ 1973
                                  \       /    Last Location: CALCUTTA  (dead)
                                dam\    /sire    House Name: MAYURI/KADAMBIN
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     32

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     33
================================================================================
                WILD                                    WILD
                                \           /           Sex: Female
                                 \         /      Birth Date:  ~ Apr 1973
                                  \       /    Last Location: NY BRONX
                                dam\    /sire    House Name: MAYANGKUMARI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     33

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     34
================================================================================
                WILD                                    WILD
                                \           /           Sex: Female
                                 \         /      Birth Date:  ~ May 1973
                                  \       /    Last Location: HYDERABAD
                                dam\    /sire    House Name: MAYUNG
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     34

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     35
================================================================================
                WILD                                    WILD
                                \           /           Sex: Female
                                 \         /      Birth Date: 16 Jun 1973
                                  \       /    Last Location: NY BRONX  (dead)
                                dam\    /sire    House Name: RADHA
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     35

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     36
================================================================================
                WILD                                    WILD
                                \           /           Sex: Female
                                 \         /      Birth Date:      ~ 1974
                                  \       /    Last Location: RANCHI    (dead)
                                dam\    /sire    House Name: CHITRALEKHA/KAN
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     36
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     37
================================================================================
       WILD                WILD                WILD                WILD
             dam\    /sire                       dam\    /sire
                 \  /                                \  /
                  \/                                  \/
                  8    +                              7    +
                PADMINI                             SHIVAJI
                                \          /            Sex: Male
                                 \        /      Birth Date: 23 May 1974
                                  \      /    Last Location: KANPUR    (dead)
                                dam\    /sire    House Name: LACHIT
                                    \  /             Tattoo:
                                     \/            Tag/Band:
+ Wild-caught...                     37

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     38
================================================================================
                WILD                                WILD
                                \          /            Sex: Female
                                 \        /      Birth Date:      ~ 1972
                                  \      /    Last Location: NANDANKAN (dead)
                                dam\    /sire    House Name: NUMALI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     38

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     39
================================================================================
                WILD                                WILD
                                \          /            Sex: Female
                                 \        /      Birth Date:      ~ 1975
                                  \      /    Last Location: ASSAM     (dead)
                                dam\    /sire    House Name: ANJALI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     39

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     40
================================================================================
                WILD                                WILD
                                \          /            Sex: Male
                                 \        /      Birth Date:      ~ 1975
                                  \      /    Last Location: MYSORE    (dead)
                                dam\    /sire    House Name: RAM/MUNNI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     40

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     41
================================================================================
                WILD                                WILD
                                \          /            Sex: Male
                                 \        /      Birth Date:      ~ 1975
                                  \      /    Last Location: ASSAM     (dead)
                                dam\    /sire    House Name:
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     41
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     42
================================================================================
                WILD                                        WILD
                                    \           /           Sex: Male
                                     \         /      Birth Date:  ~ May 1975
                                      \       /    Last Location: IN TRANSI (dead)
                                    dam\     /sire    House Name: SHAYAM
                                        \   /             Tattoo:
                                         \ /            Tag/Band:
                                         42
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     43
================================================================================
                WILD                                        WILD
                                    \           /           Sex: Male
                                     \         /      Birth Date: 17 Oct 1975
                                      \       /    Last Location: CHATBIR Z (dead)
                                    dam\     /sire    House Name: BALRAM\GANESH
                                        \   /             Tattoo:
                                         \ /            Tag/Band:
                                         43
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     44
================================================================================
                WILD                                        WILD
                                    \           /           Sex: Male
                                     \         /      Birth Date:      ~ 1976
                                      \       /    Last Location: ASSAM     (dead)
                                    dam\     /sire    House Name: LAXMAN
                                        \   /             Tattoo:
                                         \ /            Tag/Band:
                                         44
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     45
================================================================================
                WILD                                        WILD
                                    \           /           Sex: Female
                                     \         /      Birth Date:  ~ Mar 1976
                                      \       /    Last Location: LUCKNOW   (dead)
                                    dam\     /sire    House Name:
                                        \   /             Tattoo:
                                         \ /            Tag/Band:
                                         45
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     46
================================================================================
                WILD                                        WILD
                                    \           /           Sex: Male
                                     \         /      Birth Date:  1 Nov 1976
                                      \       /    Last Location: LUCKNOW   (dead)
                                    dam\     /sire    House Name: SANJAI
                                        \   /             Tattoo:
                                         \ /            Tag/Band:
                                         46
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     47
================================================================================
                WILD                                        WILD
                                    \           /           Sex: Male
                                     \         /      Birth Date:      ~ 1977
                                      \       /    Last Location: ASSAM     (dead)
                                    dam\     /sire    House Name: NANDAN
                                        \   /             Tattoo:
                                         \ /            Tag/Band:
                                         47
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     48
================================================================================
                 WILD                                      WILD
                                  \           /            Sex: Male
                                   \         /      Birth Date:      ~ 1977
                                    \       /    Last Location: ASSAM     (dead)
                                  dam\     /sire    House Name: KAMAL
                                      \   /             Tattoo:
                                       \/             Tag/Band:
                                       48

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                     Studbook Number:     49
================================================================================
                 WILD                                      WILD
                                  \           /            Sex: Male
                                   \         /      Birth Date:  ~ Apr 1977
                                    \       /    Last Location: PATNA     (dead)
                                  dam\     /sire    House Name: KANCHA\BIJOY
                                      \   /             Tattoo:
                                       \/             Tag/Band:
                                       49

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     50
================================================================================
       WILD                WILD                WILD                WILD
             dam\    /sire                             dam\    /sire
                 \  /                                      \  /
                  \/                                        \/
                  8    +                                    7    +
               PADMINI                                   SHIVAJI
                                  \           /            Sex: Female
                                   \         /      Birth Date:  9 Jan 1978
                                    \       /    Last Location: ASSAM     (dead)
                                  dam\     /sire    House Name: GEETA/LAXMI
                                      \   /             Tattoo:
                                       \/             Tag/Band:
+ Wild-caught...                      50

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                     Studbook Number:     51
================================================================================
                 WILD                                      WILD
                                  \           /            Sex: Male
                                   \         /      Birth Date:      ~ 1978
                                    \       /    Last Location: LUCKNOW   (dead)
                                  dam\     /sire    House Name: KRISHNA JUNIOR
                                      \   /             Tattoo:
                                       \/             Tag/Band:
                                       51

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     52
================================================================================
                 WILD                                      WILD
                                  \           /            Sex: Male
                                   \         /      Birth Date:  ~ Aug 1978
                                    \       /    Last Location: ASSAM     (dead)
                                  dam\     /sire    House Name: PRABHAT
                                      \   /             Tattoo:
                                       \/             Tag/Band:
                                       52
```

```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     53
 ================================================================================
        WILD                 WILD                WILD                 WILD
              dam\    /sire                            dam\    /sire
                   \  /                                 \  /
                    \/                                   \/
                    13   +                               12   +
                   PADMA                                RAJKUMAR
                                  \          /            Sex: Male
                                   \        /      Birth Date: 12 Nov 1978
                                    \      /    Last Location: HYDERABAD (dead)
                                  dam\    /sire    House Name: LADDU/VEERU
                                       \  /            Tattoo:
                                        \/           Tag/Band:
+ Wild-caught...                        53

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     54
 ================================================================================
   WILD      WILD
    dam\    /sire
         \  /
          \/
        105   +              WILD                WILD                 WILD
       LAUIE/RA
              dam\    /sire                            dam\    /sire
                   \  /                                 \  /
                    \/                                   \/
                    10                                   23   +
                   SNEHA                                MEGHNAD/
                                  \          /            Sex: Female
                                   \        /      Birth Date:  9 Jan 1979
                                    \      /    Last Location: SINGAPORE
                                  dam\    /sire    House Name: GOMOTI
                                       \  /            Tattoo:
                                        \/           Tag/Band:
+ Wild-caught...                        54

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     55
 ================================================================================
                   WILD                                 WILD
                                  \          /            Sex: Male
                                   \        /      Birth Date:  ~ Mar 1978
                                    \      /    Last Location: DELHI     (dead)
                                  dam\    /sire    House Name: SHIVA
                                       \  /            Tattoo:
                                        \/           Tag/Band:
                                        55

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     56
 ================================================================================
        WILD                 WILD                WILD                 WILD
              dam\    /sire                            dam\    /sire
                   \  /                                 \  /
                    \/                                   \/
                    27   +                               43   +
                  SHAKUNTA                             BALRAM\G
                                  \          /            Sex: Female
                                   \        /      Birth Date:  9 Mar 1979
                                    \      /    Last Location: CHATBIR Z (dead)
                                  dam\    /sire    House Name:
                                       \  /            Tattoo:
                                        \/           Tag/Band:
                                        56

 + Wild-caught...
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     57
================================================================================
                WILD                                      WILD
                                  \           /           Sex: Female
                                   \         /      Birth Date:  ~ Jul 1979
                                    \       /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: PARBATI
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       57

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     58
================================================================================
                WILD                                      WILD
                                  \           /           Sex: Male
                                   \         /      Birth Date:  ~ Apr 1980
                                    \       /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: JHON\PALITRA
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       58

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     59
================================================================================
                WILD                                      WILD
                                  \           /           Sex: Male
                                   \         /      Birth Date:  ~ May 1980
                                    \       /    Last Location: MADRAS    (dead)
                                  dam\    /sire    House Name: RAMU SENIOR
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       59

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     60
================================================================================
                WILD                                      WILD
                                  \           /           Sex: Female
                                   \         /      Birth Date:      ~ 1980
                                    \       /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: GINI\TARALI
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       60

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     61
================================================================================
       WILD                WILD                WILD                WILD
             dam\    /sire                             dam\    /sire
                 \  /                                      \  /
                  \/                                        \/
                  27   +                                    43   +
                SHAKUNTA                                 BALRAM\G
                                  \           /           Sex: Female
                                   \         /      Birth Date: 13 Nov 1980
                                    \       /    Last Location: DELHI     (dead)
                                  dam\    /sire    House Name:
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       61

+ Wild-caught...
```

```
===============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     62
===============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Male
                                  \        /          Birth Date:      ~ 1981
                                   \      /    Last Location: PATNA     (dead)
                                 dam\    /sire    House Name: RAJU
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                      62

===============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     63
===============================================================================
       WILD                WILD                WILD                WILD
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
                  13   +                                  12   +
                 PADMA                                  RAJKUMAR
                                 \          /                Sex: Male
                                  \        /          Birth Date: 15 May 1981
                                   \      /    Last Location: HYDERABAD (dead)
                                 dam\    /sire    House Name: SRINIVAS
                                     \  /             Tattoo:
                                      \/            Tag/Band:
+ Wild-caught...                      63

===============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     64
===============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Female
                                  \        /          Birth Date:  ~ Jun 1981
                                   \      /    Last Location: ASSAM     (dead)
                                 dam\    /sire    House Name: RUPA
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                      64

===============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     65
===============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Female
                                  \        /          Birth Date:      ~ 1982
                                   \      /    Last Location: DELHI     (dead)
                                 dam\    /sire    House Name: MOHINI/RUBY
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                      65

===============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     66
===============================================================================
                 WILD                                        WILD
                                 \          /                Sex: Female
                                  \        /          Birth Date:  ~ Apr 1982
                                   \      /    Last Location: ASSAM     (dead)
                                 dam\    /sire    House Name: DALIMI
                                     \  /             Tattoo:
                                      \/            Tag/Band:
                                      66
```

```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     67
 ================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                       dam\    /sire
                   \  /                                \  /
                    \/                                  \/
                    8    +                              7    +
                 PADMINI                             SHIVAJI
                                  \          /           Sex: Male
                                   \        /      Birth Date:  9 Jun 1982
                                    \      /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: SHYAM JUNIOR
                                       \  /            Tattoo:
                                        \/           Tag/Band:
+ Wild-caught...                        67

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     68
 ================================================================================
                                          WILD      WILD      WILD      WILD
                                           dam\    /sire      dam\    /sire
                                                \  /               \  /
                                                 \/                 \/
        WILD                WILD                 8    +             7    +
                                               PADMINI            SHIVAJI
              dam\    /sire                       dam\    /sire
                   \  /                                \  /
                    \/                                  \/
                    34   +                             37
                   MAYUNG                             LACHIT
                                  \          /           Sex: Female
                                   \        /      Birth Date:  1 Oct 1982
                                    \      /    Last Location: YOKOHAMA  (dead)
                                  dam\    /sire    House Name: RASHMI/SAWAKO
                                       \  /            Tattoo:
                                        \/           Tag/Band:
+ Wild-caught...                        68

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     69
 ================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                       dam\    /sire
                   \  /                                \  /
                    \/                                  \/
                    27   +                             43   +
                 SHAKUNTA                           BALRAM\G
                                  \          /           Sex: Male
                                   \        /      Birth Date: 15 Feb 1983
                                    \      /    Last Location: CHATBIR Z (dead)
                                  dam\    /sire    House Name:
                                       \  /            Tattoo:
                                        \/           Tag/Band:
+ Wild-caught...                        69

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     70
 ================================================================================
                   WILD                                 WILD
                                  \          /           Sex: Female
                                   \        /      Birth Date:  ~ Mar 1983
                                    \      /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: SABITRI
                                       \  /            Tattoo:
                                        \/           Tag/Band:
                                        70
```

```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     71
 ================================================================================
        WILD                 WILD                WILD                 WILD
              dam\    /sire                            dam\    /sire
                   \  /                                  \  /
                    \/                                    \/
                    32   +                                23   +
                  MAYURI/K                              MEGHNAD/
                                  \          /            Sex: Male
                                   \        /      Birth Date:  4 Jun 1984
                                    \      /    Last Location: CALCUTTA  (dead)
                                  dam\    /sire    House Name: DEBRAJ
                                       \  /            Tattoo:
                                        \/           Tag/Band:
+ Wild-caught...                        71

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     72
 ================================================================================
                                          WILD      WILD      WILD      WILD
                                           dam\    /sire      dam\    /sire
                                                \  /               \  /
                                                 \/                 \/
        WILD                 WILD                8    +             7    +
                                               PADMINI            SHIVAJI
              dam\    /sire                            dam\    /sire
                   \  /                                  \  /
                    \/                                    \/
                    34   +                                37
                   MAYUNG                                LACHIT
                                  \          /            Sex: Male
                                   \        /      Birth Date:  6 Aug 1984
                                    \      /    Last Location: LUCKNOW
                                  dam\    /sire    House Name: LOHIT
                                       \  /            Tattoo:
                                        \/           Tag/Band:
+ Wild-caught...                        72

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     73
 ================================================================================
        WILD                 WILD                WILD                 WILD
              dam\    /sire                            dam\    /sire
                   \  /                                  \  /
                    \/                                    \/
                    27   +                                43   +
                 SHAKUNTA                              BALRAM\G
                                  \          /            Sex: Male
                                   \        /      Birth Date: 11 Dec 1984
                                    \      /    Last Location: CHATBIR Z (dead)
                                  dam\    /sire    House Name:
                                       \  /            Tattoo:
                                        \/           Tag/Band:
+ Wild-caught...                        73

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     74
 ================================================================================
                  WILD                                  WILD
                                  \          /            Sex: Female
                                   \        /      Birth Date:  ~ Dec 1985
                                    \      /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: SUCHILA
                                       \  /            Tattoo:
                                        \/           Tag/Band:
                                        74
```

```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     75
 ================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                       dam\    /sire
                   \  /                                \  /
                    \/                                  \/
                    27   +                              43   +
                  SHAKUNTA                            BALRAM\G
                                  \          /            Sex: Male
                                   \        /      Birth Date:  9 May 1986
                                    \      /    Last Location: CHATBIR Z
                                  dam\    /sire    House Name: RAJA/PRINCE
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      75

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     76
 ================================================================================
                 WILD                                    WILD
                                  \          /            Sex: Male
                                   \        /      Birth Date:  ~ Jan 1987
                                    \      /    Last Location: GORUMARA
                                  dam\    /sire    House Name: RATUL
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       76

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     77
 ================================================================================
   WILD      WILD      WILD      WILD
    dam\    /sire      dam\    /sire
         \  /               \  /
          \/                 \/
          8    +             7    +             WILD                WILD
       PADMINI             SHIVAJI
              dam\    /sire                       dam\    /sire
                   \  /                                \  /
                    \/                                  \/
                    50                                  44   +
                  GEETA/LA                            LAXMAN
                                  \          /            Sex: Male
                                   \        /      Birth Date: 11 May 1987
                                    \      /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: BISHNU
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      77

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     78
 ================================================================================
                                        WILD      WILD      WILD      WILD
                                         dam\    /sire      dam\    /sire
                                              \  /               \  /
                                               \/                 \/
        WILD                WILD                8    +             7    +
                                              PADMINI             SHIVAJI
              dam\    /sire                       dam\    /sire
                   \  /                                \  /
                    \/                                  \/
                    34   +                              37
                  MAYUNG                              LACHIT
                                  \          /            Sex: Male
                                   \        /      Birth Date: 17 Jun 1987
                                    \      /    Last Location: HYDERABAD
                                  dam\    /sire    House Name: MOHIT
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      78
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     79
================================================================================
                WILD                                      WILD
                                  \          /            Sex: Male
                                   \        /      Birth Date:  ~ Mar 1988
                                    \      /    Last Location: TRIVANDRU
                                  dam\    /sire    House Name: RAMU
                                      \  /             Tattoo:
                                      \/             Tag/Band:
                                      79

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     80
================================================================================
       WILD               WILD               WILD               WILD
             dam\    /sire                        dam\    /sire
                 \  /                                 \  /
                  \/                                   \/
                  36   +                               62   +
               CHITRALE                                RAJU
                                  \          /            Sex: Female
                                   \        /      Birth Date:  8 Jul 1988
                                    \      /    Last Location: PATNA
                                  dam\    /sire    House Name: HARTALI
                                      \  /             Tattoo:
                                      \/             Tag/Band:
+ Wild-caught...                     80

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     81
================================================================================
                WILD                                      WILD
                                  \          /            Sex: Male
                                   \        /      Birth Date: 26 Jul 1988
                                    \      /    Last Location: TRIVANDRU
                                  dam\    /sire    House Name: JADU
                                      \  /             Tattoo:
                                      \/             Tag/Band:
                                      81

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     82
================================================================================
  WILD      WILD      WILD      WILD
   dam\    /sire      dam\    /sire
       \  /                \  /
        \/                  \/
        8    +              7    +             WILD               WILD
      PADMINI            SHIVAJI
             dam\    /sire                          dam\    /sire
                 \  /                                 \  /
                  \/                                   \/
                  50                                   44   +
               GEETA/LA                                LAXMAN
                                  \          /            Sex: Male
                                   \        /      Birth Date: 30 Mar 1989
                                    \      /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: MAHESH
                                      \  /             Tattoo:
                                      \/             Tag/Band:
+ Wild-caught...                     82
```

```
==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     83
==============================================================================
                 WILD                                    WILD
                                 \          /                Sex: Male
                                  \        /          Birth Date:  ~ Jun 1989
                                   \      /    Last Location: JALDAPARA
                                 dam\    /sire    House Name: MADU
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      83

==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     84
==============================================================================
                 WILD                                    WILD
                                 \          /                Sex: Male
                                  \        /          Birth Date:      ~ 1989
                                   \      /    Last Location: ASSAM     (dead)
                                 dam\    /sire    House Name: DHAN
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      84

==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     85
==============================================================================
                                          WILD      WILD      WILD      WILD
                                           dam\    /sire       dam\    /sire
                                               \  /                \  /
                                                \/                  \/
       WILD              WILD                    8    +              7    +
                                               PADMINI             SHIVAJI
             dam\    /sire                              dam\    /sire
                 \  /                                       \  /
                  \/                                         \/
                  34   +                                     37
                 MAYUNG                                      LACHIT
                                 \          /                Sex: Male
                                  \        /          Birth Date: 20 Jun 1989
                                   \      /    Last Location: KANPUR
                                 dam\    /sire    House Name: ROHIT
                                     \  /                Tattoo:
                                      \/               Tag/Band:
+ Wild-caught...                      85

==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     86
==============================================================================
                 WILD                                    WILD
                                 \          /                Sex: Male
                                  \        /          Birth Date:      ~ 1989
                                   \      /    Last Location: ASSAM     (dead)
                                 dam\    /sire    House Name: KANAK
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      86

==============================================================================
Taxon Name: RHINOCEROS UNICORNIS                   Studbook Number:     87
==============================================================================
                 WILD                                    WILD
                                 \          /                Sex: Male
                                  \        /          Birth Date:  ~ Mar 1990
                                   \      /    Last Location: INDIA     (dead)
                                 dam\    /sire    House Name: PRAKSH
                                     \  /                Tattoo:
                                      \/               Tag/Band:
                                      87
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     88
================================================================================
                WILD                                    WILD
                                \           /           Sex: Male
                                 \         /      Birth Date:      ~ 1990
                                  \       /    Last Location: SEPAHIJAL (dead)
                                dam\    /sire    House Name: PRADEEP/SUNDER
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     88

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     89
================================================================================
                WILD                                    WILD
                                \           /           Sex: Female
                                 \         /      Birth Date:      ~ 1990
                                  \       /    Last Location: ASSAM
                                dam\    /sire    House Name: BAGHEKHAITI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     89

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     90
================================================================================
                WILD                                    WILD
                               \            /
                                \           /           Sex: Female
                                 \         /      Birth Date: 30 Apr 1991
                                  \       /    Last Location: ASSAM     (dead)
                                dam\    /sire    House Name: MONOMALI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                     90

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     91
================================================================================
                                        WILD      WILD      WILD      WILD
                                         dam\    /sire      dam\    /sire
                                             \  /               \  /
                                              \/                 \/
       WILD                WILD               8    +             7    +
                                           PADMINI             SHIVAJI
              dam\    /sire                       dam\    /sire
                  \  /                                \  /
                   \/                                  \/
                   34   +                              37
                  MAYUNG                              LACHIT
                                \           /           Sex: Male
                                 \         /      Birth Date:  5 Jul 1991
                                  \       /    Last Location: KANPUR    (dead)
                                dam\    /sire    House Name: MUDIT
                                    \  /             Tattoo:
                                     \/            Tag/Band:
+ Wild-caught...                     91
```

```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     92
 ================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                       dam\    /sire
                  \  /                                \  /
                   \/                                  \/
                   36   +                              62   +
                CHITRALE                               RAJU
                                  \          /            Sex: Female
                                   \        /      Birth Date:  6 Jul 1991
                                    \      /    Last Location: PATNA     (dead)
                                  dam\    /sire    House Name: CHOTKI/RANI
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                       92

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     93
 ================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                       dam\    /sire
                  \  /                                \  /
                   \/                                  \/
                   65   +                              26   +
                MOHINI/R                            DABBU/AG
                                  \          /            Sex: Male
                                   \        /      Birth Date: 27 Dec 1992
                                    \      /    Last Location: PATNA
                                  dam\    /sire    House Name: AYODHYA/AMAR
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                       93

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     94
 ================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                       dam\    /sire
                  \  /                                \  /
                   \/                                  \/
                   60   +                              58   +
                GINI\TAR                            JHON\PAL
                                  \          /            Sex: Female
                                   \        /      Birth Date: 25 Nov 1994
                                    \      /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name:
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                       94

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     95
 ================================================================================
                 WILD                                   WILD
                                  \          /            Sex: Male
                                   \        /      Birth Date:      ~ 1995
                                    \      /    Last Location: ASSAM     (dead)
                                  dam\    /sire    House Name: HANUMAN
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       95
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     96
================================================================================
  WILD      WILD      WILD      WILD
   dam\    /sire      dam\    /sire
       \  /               \  /
        \/                 \/
        8    +             7    +            WILD                WILD
             dam\    /sire                        dam\    /sire
                 \  /                                 \  /
                  \/                                   \/
                  50                                   44   +
                                  \          /         Sex: Female
                                   \        /      Birth Date: 22 Jan 1995
                                    \      /    Last Location: TRIVANDRU
                                  dam\    /sire    House Name: RITA
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                       96

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     97
================================================================================
                 WILD                                  WILD
                                  \          /         Sex: Male
                                   \        /      Birth Date:      ~ 1995
                                    \      /    Last Location: INDIA     (dead)
                                  dam\    /sire    House Name: RANGA
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       97

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     98
================================================================================
       WILD                WILD                WILD                WILD
             dam\    /sire                             dam\    /sire
                 \  /                                      \  /
                  \/                                        \/
                  65   +                                    26   +
                MOHINI/R                                  DABBU/AG
                                  \          /         Sex: Male
                                   \        /      Birth Date: 28 Aug 1995
                                    \      /    Last Location: DELHI     (dead)
                                  dam\    /sire    House Name: MEGHDOOT
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                       98

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:     99
================================================================================
                                                                 ^          ^
                                                                 |          |
                                          WILD      WILD       8    +     7    +
                                           dam\    /sire       dam\    /sire
                                               \  /                \  /
                                                \/                  \/
       WILD                WILD                34  *+                37
             dam\    /sire                             dam\    /sire
                 \  /                                      \  /
                  \/                                        \/
                  34  *+                                    78
                                  \          /         Sex: Male
                                   \        /      Birth Date: 29 Apr 1996
                                    \      /    Last Location: LUCKNOW   (dead)
                                  dam\    /sire    House Name: TARUN
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                       99
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

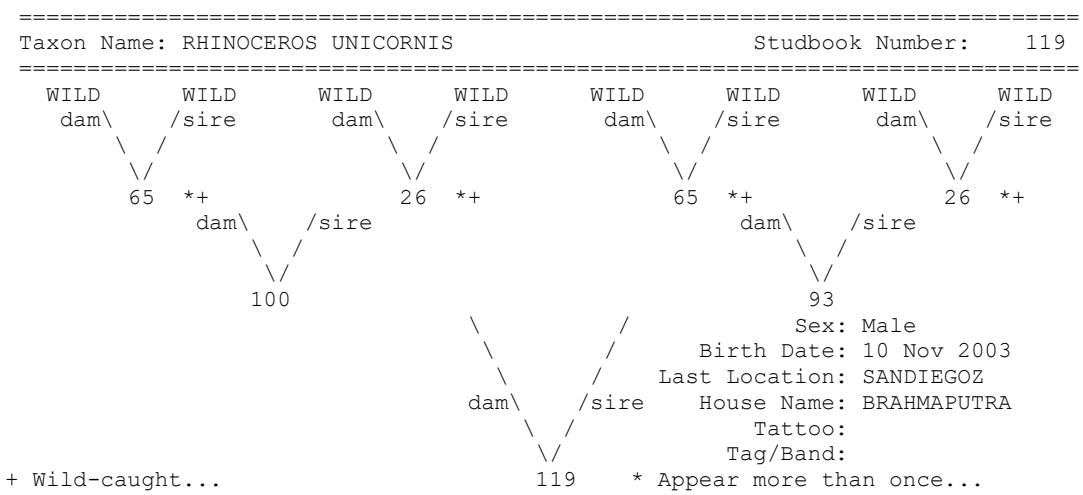
```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    100
 ================================================================================
        WILD                 WILD                 WILD                 WILD
              dam\    /sire                              dam\    /sire
                  \  /                                       \  /
                   \/                                         \/
                   65   +                                     26   +
                MOHINI/R                                    DABBU/AG
                                    \          /             Sex: Female
                                     \        /      Birth Date: 27 Nov 1997
                                      \      /     Last Location: DELHI
                                    dam\    /sire    House Name: MAHESWARI
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                         100

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    101
 ================================================================================
        WILD                 WILD                 WILD                 WILD
              dam\    /sire                              dam\    /sire
                  \  /                                       \  /
                   \/                                         \/
                   60   +                                     58   +
                GINI\TAR                                    JHON\PAL
                                    \          /             Sex: Female
                                     \        /      Birth Date: 15 Jun 1999
                                      \      /     Last Location: ASSAM     (dead)
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                         101

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    102
 ================================================================================
                 UNK                                         UNK
                                    \          /             Sex: Male
                                     \        /      Birth Date:    ????
                                      \      /     Last Location: LOSANGELE
                                    dam\    /sire    House Name: MADAN
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                        102

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    103
 ================================================================================
                 WILD                                        WILD
                                    \          /             Sex: Male
                                     \        /      Birth Date:    ????
                                      \      /     Last Location: ASSAM     (dead)
                                    dam\    /sire    House Name: BABUL
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                        103

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                     Studbook Number:    104
 ================================================================================
                 WILD                                        WILD
                                    \          /             Sex: Male
                                     \        /      Birth Date:  ~ Jul 1998
                                      \      /     Last Location: ASSAM     (dead)
                                    dam\    /sire    House Name: LOHAMANI
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                        104
```

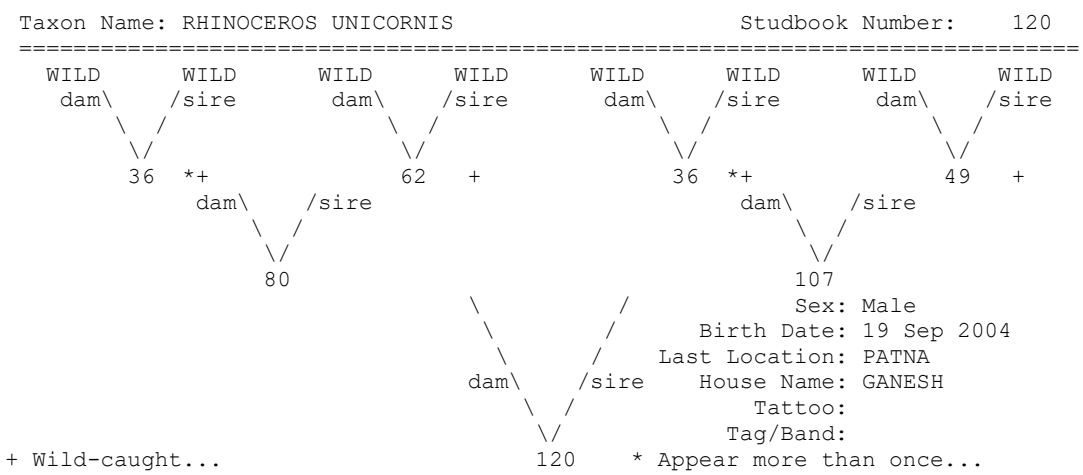
```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    105
================================================================================
                WILD                                    WILD
                                \           /           Sex: Female
                                 \         /      Birth Date:      ~ 1955
                                  \       /    Last Location: HAMURA    (dead)
                                dam\    /sire    House Name: LAUIE/RANI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                    105

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    106
================================================================================
                WILD                                    WILD
                                \           /           Sex: Female
                                 \         /      Birth Date:    ????
                                  \       /    Last Location: OMAHA     (dead)
                                dam\    /sire    House Name: GOTANGI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                    106

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    107
================================================================================
       WILD                WILD                WILD                WILD
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
                  36   +                                  49   +
                CHITRALE                                KANCHA\B
                                \           /           Sex: Male
                                 \         /      Birth Date: 19 Dec 1993
                                  \       /    Last Location: DELHI     (dead)
                                dam\    /sire    House Name: RAJA
                                    \  /             Tattoo:
                                     \/            Tag/Band:
+ Wild-caught...                    107

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    108
================================================================================
  WILD      WILD      WILD      WILD
   dam\    /sire      dam\    /sire
       \  /                \  /
        \/                  \/
        36   +              62  *+              WILD                WILD
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
                  80                                      62  *+
                                \           /           Sex: Female
                                 \         /      Birth Date: 26 Jun 1994
                                  \       /    Last Location: KANPUR    (dead)
                                dam\    /sire    House Name: RANI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
+ Wild-caught...                    108    * Appear more than once...
```

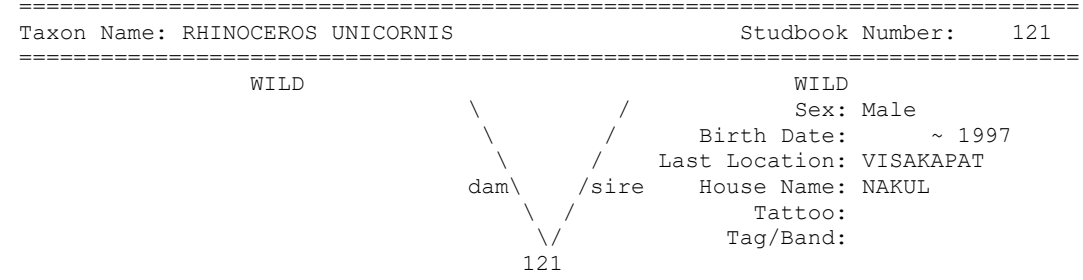
```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                  Studbook Number:    109
 ================================================================================
   WILD      WILD      WILD      WILD
    dam\    /sire      dam\    /sire
        \  /               \  /
         \/                 \/
         36   +             62   +            WILD                WILD
              dam\    /sire                         dam\    /sire
                  \  /                                  \  /
                   \/                                    \/
                   80                                    49   +
                                    \          /         Sex: Male
                                     \        /      Birth Date: 23 Oct 1997
                                      \      /    Last Location: PATNA     (dead)
                                    dam\    /sire    House Name: BAJRANGI
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                        109

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    110
 ================================================================================
        WILD               WILD               WILD                WILD
              dam\    /sire                         dam\    /sire
                  \  /                                  \  /
                   \/                                    \/
                   65   +                                26   +
                                    \          /         Sex: Male
                                     \        /      Birth Date:  2 Jul 2000
                                      \      /    Last Location: DELHI     (dead)
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                        110

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    111
 ================================================================================
   WILD      WILD      WILD      WILD
    dam\    /sire      dam\    /sire
        \  /               \  /
         \/                 \/
         36   +             62   +            WILD                WILD
              dam\    /sire                         dam\    /sire
                  \  /                                  \  /
                   \/                                    \/
                   80                                    49   +
                                    \          /         Sex: Male
                                     \        /      Birth Date: 29 Sep 2000
                                      \      /    Last Location: SANDIEGOZ
                                    dam\    /sire    House Name: BHOPO
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                        111
```

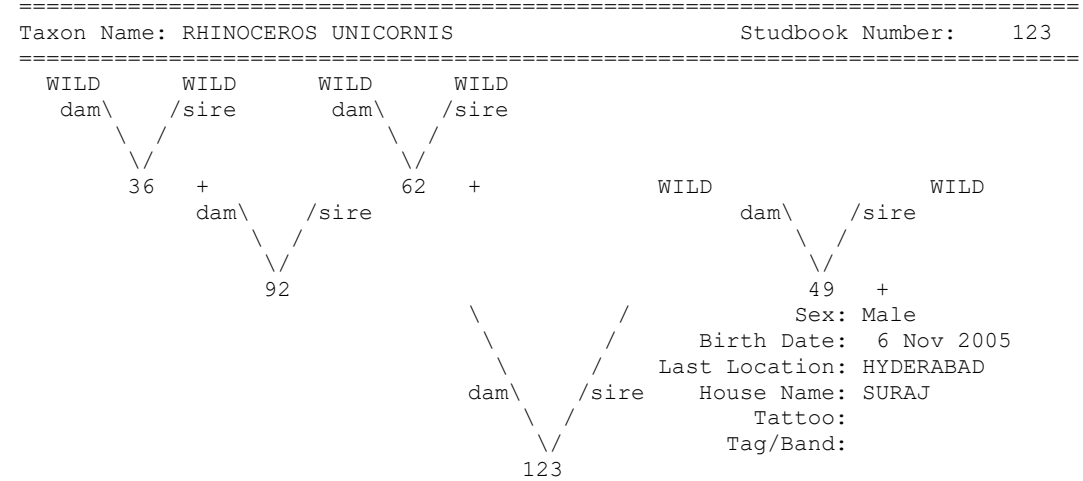
```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    112
 ================================================================================
                                          ^         ^
                                          |         |
                                        8    +    7    +   WILD      WILD
                                        dam\    /sire       dam\    /sire
                                            \  /                \  /
                                             \/                  \/
        WILD                WILD             50                  44   +
              dam\    /sire                        dam\    /sire
                  \  /                                 \  /
                   \/                                   \/
                   89   +                               77
                                  \          /          Sex: Female
                                   \        /       Birth Date:  4 Jun 2002
                                    \      /     Last Location: ASSAM
                                  dam\    /sire    House Name: PORI
                                      \  /            Tattoo:
                                       \/           Tag/Band:
+ Wild-caught...                      112    ^ Pedigree continues beyond top of page...

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                       Studbook Number:    113
 ================================================================================
      ^         ^                                                 ^         ^
      |         |                                                 |         |
    36   +    62  *+   WILD      WILD      WILD      WILD       8    +    7    +
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
         80                  62  *+              34   +              37
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                  108                                      78
                                  \          /          Sex: Female
                                   \        /       Birth Date: 22 Jun 2002
                                    \      /     Last Location: KANPUR
                                  dam\    /sire    House Name: MANU
                                      \  /            Tattoo:
                                       \/           Tag/Band:
+ Wild-caught...                      113    * Appear more than once...
 ^ Pedigree continues beyond top of page...

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    114
 ================================================================================
   WILD      WILD      WILD      WILD
    dam\    /sire       dam\    /sire
        \  /                \  /
         \/                  \/
         36   +              62   +             WILD                WILD
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                   80                                      49   +
                                  \          /          Sex: Female
                                   \        /       Birth Date:  8 Aug 2002
                                    \      /     Last Location: PATNA
                                  dam\    /sire    House Name: AKANCHA/GAURI
                                      \  /            Tattoo:
                                       \/           Tag/Band:
+ Wild-caught...                      114
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    115
================================================================================
                 UNK                                      UNK
                                  \          /            Sex: Female
                                   \        /      Birth Date: 15 Feb 2000
                                    \      /    Last Location: DELHI     (dead)
                                  dam\    /sire    House Name: GOYONA
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                     115

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    116
================================================================================
                ISB209                                   ISB106
                                  \          /            Sex: Female
                                   \        /      Birth Date: 23 Jul 2001
                                    \      /    Last Location: PATNA     (dead)
                                  dam\    /sire    House Name: GAIRI
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                     116

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    117
================================================================================
  WILD      WILD      WILD      WILD      WILD      WILD      WILD      WILD
   dam\    /sire      dam\    /sire      dam\    /sire      dam\    /sire
       \  /               \  /               \  /               \  /
        \/                 \/                 \/                 \/
        36  *+             62   +             36  *+             49   +
             dam\    /sire                          dam\    /sire
                 \  /                               \  /
                  \/                                 \/
                  92                                 107
                                  \          /            Sex: Male
                                   \        /      Birth Date: 31 May 2003
                                    \      /    Last Location: SANDIEGOZ
                                  dam\    /sire    House Name: RUSTAM
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      117    * Appear more than once...

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    118
================================================================================
     ^         ^                                                  ^         ^
     |         |                                                  |         |
   36   +    62  *+   WILD      WILD      WILD      WILD       8    +    7    +
   dam\    /sire      dam\    /sire      dam\    /sire      dam\    /sire
       \  /               \  /               \  /               \  /
        \/                 \/                 \/                 \/
        80                 62  *+             34   +             37
             dam\    /sire                          dam\    /sire
                 \  /                               \  /
                  \/                                 \/
                 108                                 85
                                  \          /            Sex: Female
                                   \        /      Birth Date: 22 Jun 2003
                                    \      /    Last Location: KANPUR
                                  dam\    /sire    House Name: MANU
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                     118
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

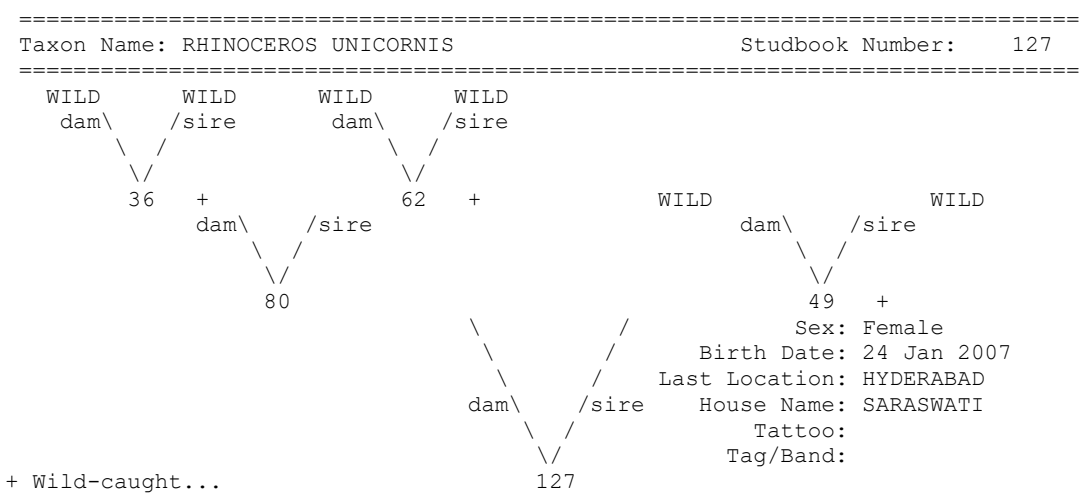

Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 119
WILD dam\ /sire
65 *+
26 *+
100
93
Sex: Male
Birth Date: 10 Nov 2003
Last Location: SANDIEGOZ
House Name: BRAHMAPUTRA
Tattoo:
Tag/Band:
119
+ Wild-caught...
* Appear more than once...

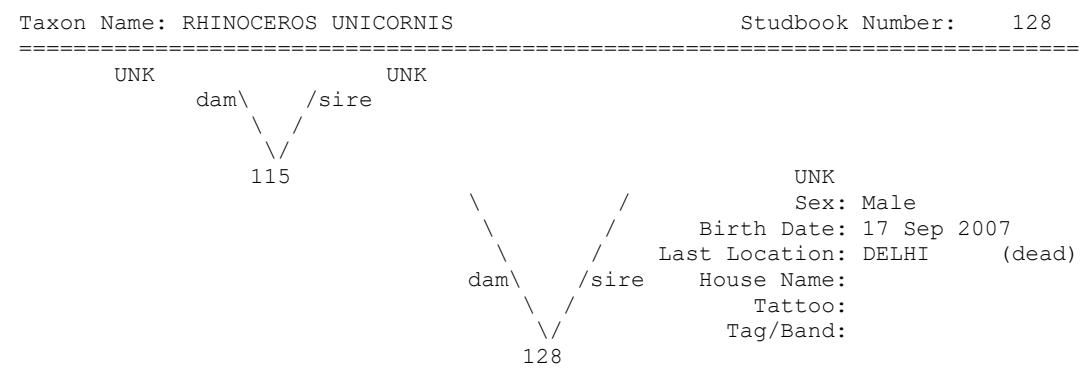

Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 120
WILD dam\ /sire
36 *+
62 +
36 *+
49 +
80
107
Sex: Male
Birth Date: 19 Sep 2004
Last Location: PATNA
House Name: GANESH
Tattoo:
Tag/Band:
120
+ Wild-caught...
* Appear more than once...

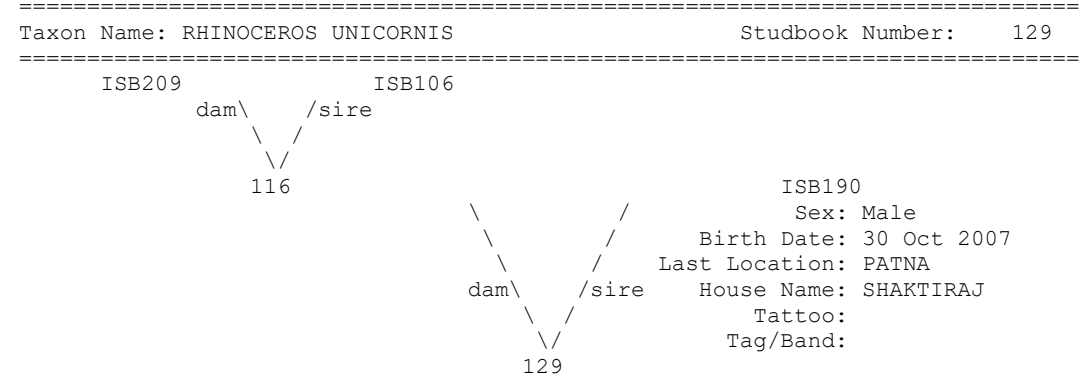

Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 121
WILD
Sex: Male
Birth Date: ~ 1997
Last Location: VISAKAPAT
House Name: NAKUL
Tattoo:
Tag/Band:
121

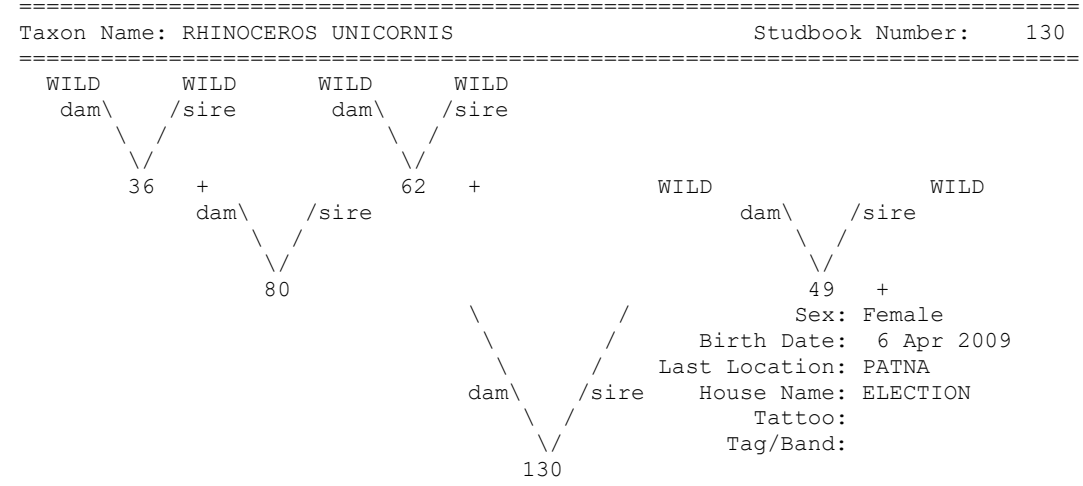

Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 123
WILD dam\ /sire
36 +
62 +
WILD
WILD
92
49 +
Sex: Male
Birth Date: 6 Nov 2005
Last Location: HYDERABAD
House Name: SURAJ
Tattoo:
Tag/Band:
123
+ Wild-caught...

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    124
================================================================================
  WILD      WILD      WILD      WILD      WILD      WILD      WILD      WILD
   dam\    /sire      dam\    /sire      dam\    /sire      dam\    /sire
       \  /               \  /               \  /               \  /
        \/                 \/                 \/                 \/
        65  *+             26  *+             65  *+             26  *+
            dam\    /sire                          dam\    /sire
                \  /                               \  /
                 \/                                 \/
                 100                                93
                                \          /        Sex: Female
                                 \        /      Birth Date: 10 Nov 2005
                                  \      /    Last Location: DELHI
                                 dam\    /sire    House Name: ANJUHA
                                     \  /            Tattoo:
                                      \/           Tag/Band:
+ Wild-caught...                      124    * Appear more than once...

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    125
================================================================================
      ISB209             ISB106
            dam\    /sire
                \  /
                 \/
                 116                                   ISB190
                                \          /            Sex: Female
                                 \        /      Birth Date:  3 Dec 2005
                                  \      /    Last Location: PATNA
                                 dam\    /sire    House Name: LALI
                                     \  /            Tattoo:
                                      \/           Tag/Band:
                                     125

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                    Studbook Number:    126
================================================================================
     ^         ^                                                ^         ^
     |         |                                                |         |
   36   +    62  *+   WILD      WILD      WILD      WILD       8    +    7    +
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /               \  /               \  /               \  /
        \/                 \/                 \/                 \/
        80                 62  *+             34   +             37
            dam\    /sire                          dam\    /sire
                \  /                               \  /
                 \/                                 \/
                 108                                85
                                \          /        Sex: Male
                                 \        /      Birth Date: 28 Mar 2006
                                  \      /    Last Location: KANPUR
                                 dam\    /sire    House Name: HARSH
                                     \  /            Tattoo:
                                      \/           Tag/Band:
                                     126

+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```


Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 127
WILD dam\ /sire
WILD dam\ /sire
WILD dam\ /sire
WILD dam\ /sire
36 + 62 + WILD WILD
80 49 +
Sex: Female
Birth Date: 24 Jan 2007
Last Location: HYDERABAD
House Name: SARASWATI
Tattoo:
Tag/Band:
127
+ Wild-caught...

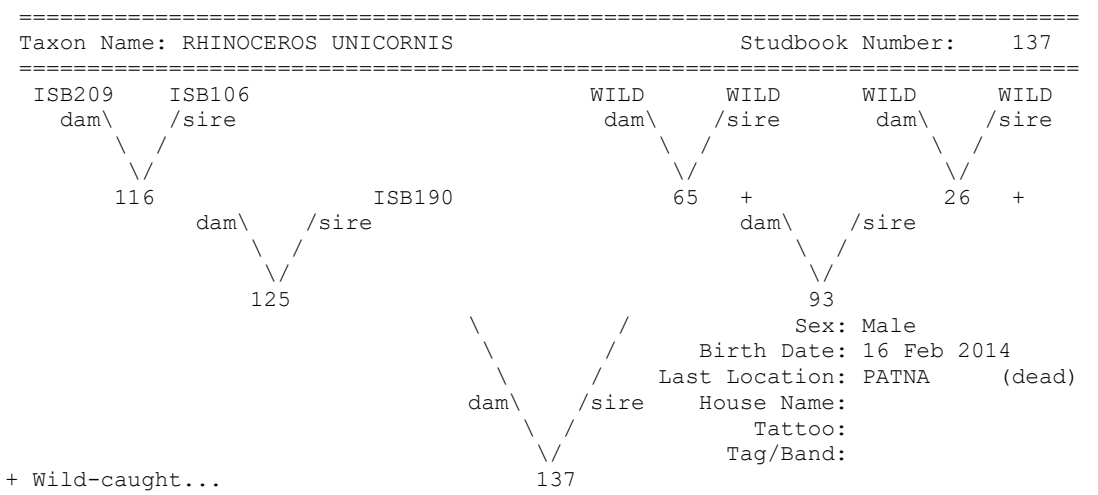

Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 128
UNK UNK
dam\ /sire
115
UNK
Sex: Male
Birth Date: 17 Sep 2007
Last Location: DELHI (dead)
House Name:
Tattoo:
Tag/Band:
128

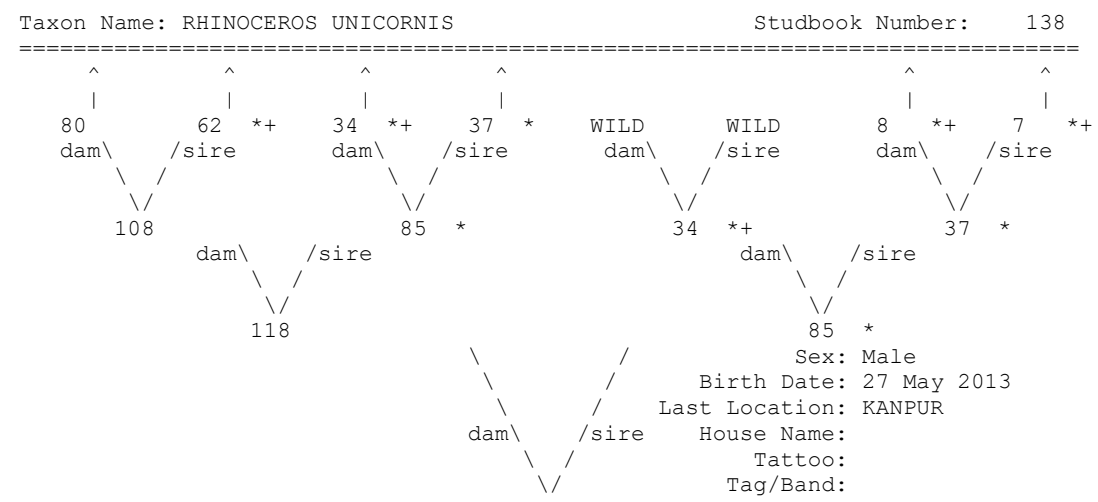

Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 129
ISB209 ISB106
dam\ /sire
116
ISB190
Sex: Male
Birth Date: 30 Oct 2007
Last Location: PATNA
House Name: SHAKTIRAJ
Tattoo:
Tag/Band:
129

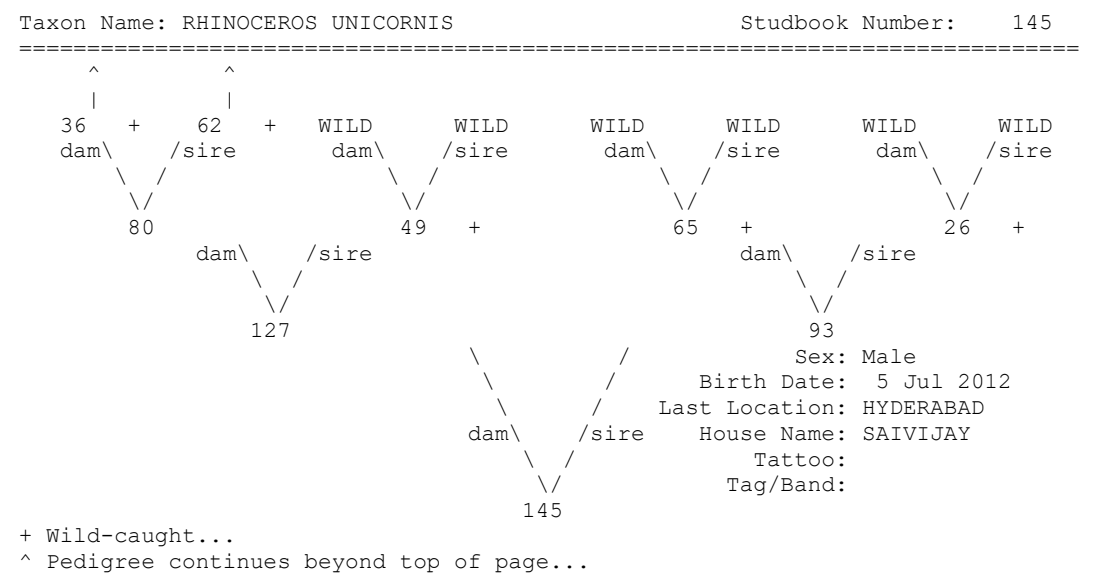

Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 130
WILD dam\ /sire
WILD dam\ /sire
WILD dam\ /sire
WILD dam\ /sire
36 + 62 + WILD WILD
80 49 +
Sex: Female
Birth Date: 6 Apr 2009
Last Location: PATNA
House Name: ELECTION
Tattoo:
Tag/Band:
130
+ Wild-caught...

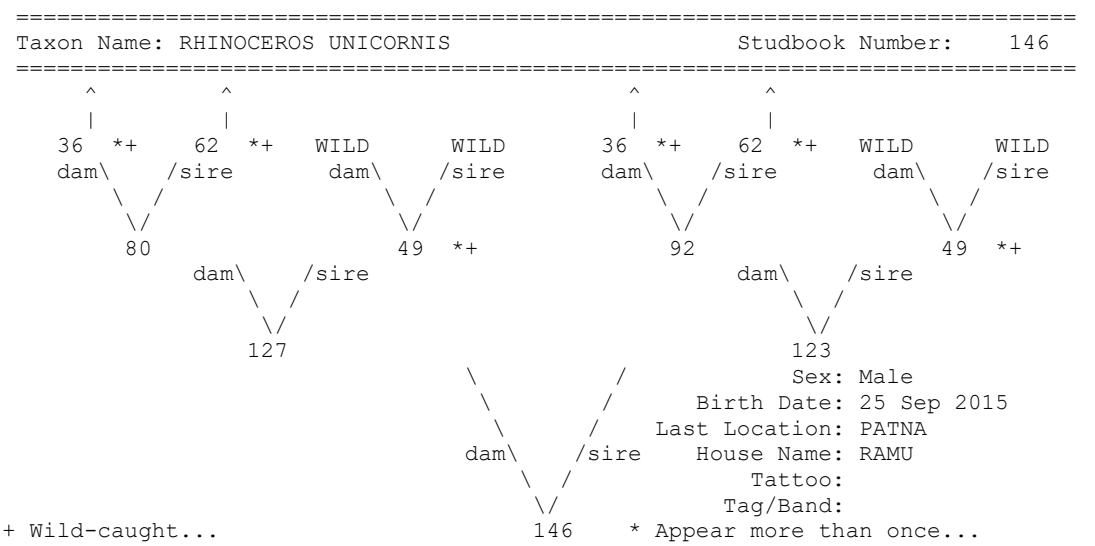
```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    131
 ================================================================================
   WILD      WILD      WILD      WILD
    dam\    /sire      dam\    /sire
        \  /               \  /
         \/                 \/
         36   +             62   +             WILD               WILD
              dam\    /sire                          dam\    /sire
                  \  /                                   \  /
                   \/                                     \/
                   80                                     49   +
                                    \          /           Sex: Male
                                     \        /      Birth Date: 25 May 2011
                                      \      /    Last Location: MYSORE
                                    dam\    /sire    House Name: VIRAT
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                        131

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    132
 ================================================================================
      ^         ^
      |         |
    36   +    62   +   WILD      WILD      WILD      WILD      WILD      WILD
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
         80                  49   +              65   +              26   +
              dam\    /sire                          dam\    /sire
                  \  /                                   \  /
                   \/                                     \/
                  114                                     93
                                    \          /           Sex: Female
                                     \        /      Birth Date: 10 Jun 2011
                                      \      /    Last Location: PATNA     (dead)
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                        132
^ Pedigree continues beyond top of page...

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    133
 ================================================================================
   WILD      WILD      WILD      WILD      WILD      WILD      WILD      WILD
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
         36   +              62   +              65   +              26   +
              dam\    /sire                          dam\    /sire
                  \  /                                   \  /
                   \/                                     \/
                   92                                     93
                                    \          /           Sex: Male
                                     \        /      Birth Date: 11 Nov 2011
                                      \      /    Last Location: PATNA
                                    dam\    /sire    House Name: Jambo
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                        133

 + Wild-caught...
```

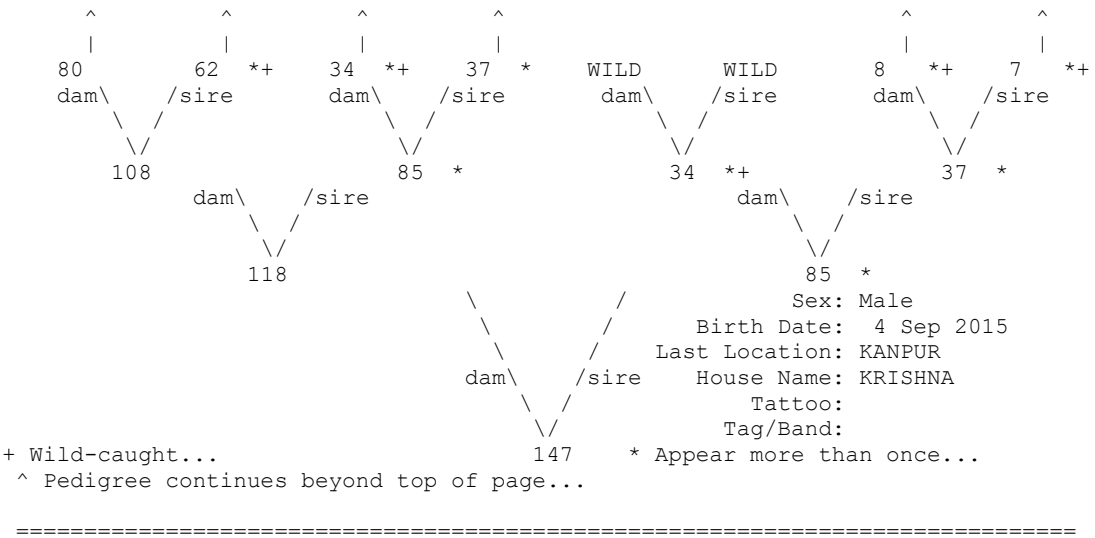
```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    134
 ================================================================================
      ^         ^
      |         |
    36   +    62   +   WILD      WILD      WILD      WILD      WILD      WILD
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
         80                  49   +              65   +              26   +
              dam\    /sire                            dam\    /sire
                  \  /                                     \  /
                   \/                                       \/
                  114                                       93
                                  \          /              Sex: Female
                                   \        /      Birth Date: 11 May 2013
                                    \      /    Last Location: MYSORE
                                  dam\    /sire    House Name: DOLLY
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      134
^ Pedigree continues beyond top of page...

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    135
 ================================================================================
                                          WILD      WILD      WILD      WILD
                                           dam\    /sire       dam\    /sire
                                               \  /                \  /
                                                \/                  \/
       ISB209              ISB106                65   +              26   +
              dam\    /sire                            dam\    /sire
                  \  /                                     \  /
                   \/                                       \/
                  116                                       93
                                  \          /              Sex: Male
                                   \        /      Birth Date:  6 Sep 2013
                                    \      /    Last Location: PATNA
                                  dam\    /sire    House Name: VIDHUT
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      135

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    136
 ================================================================================
   WILD      WILD      WILD      WILD      WILD      WILD      WILD      WILD
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
         36   +              62   +              65   +              26   +
              dam\    /sire                            dam\    /sire
                  \  /                                     \  /
                   \/                                       \/
                   80                                       93
                                  \          /              Sex: Female
                                   \        /      Birth Date: 16 Sep 2013
                                    \      /    Last Location: PATNA     (dead)
                                  dam\    /sire    House Name: BABLI
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                      136

 + Wild-caught...
```

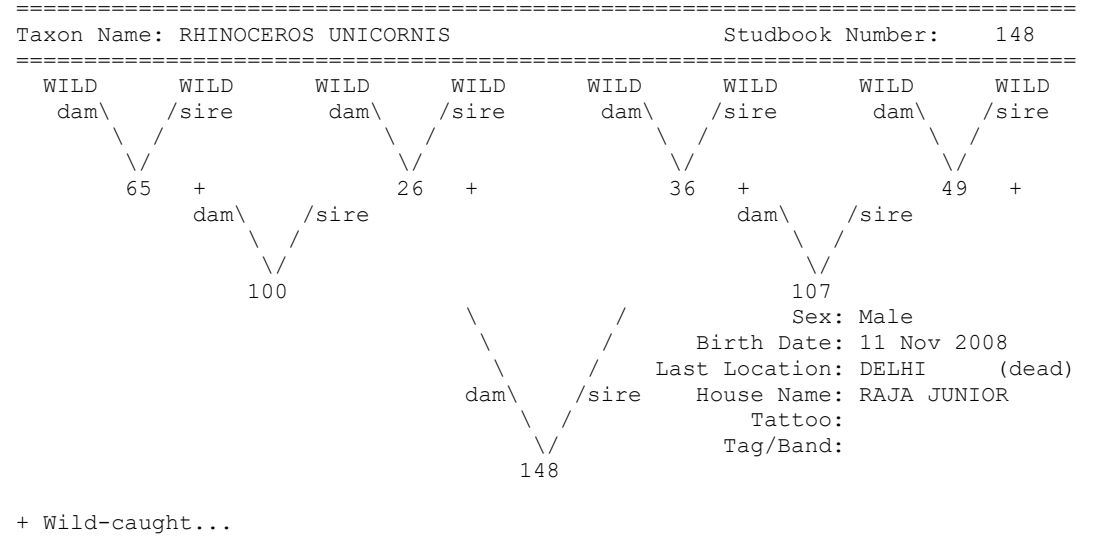

Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 137
ISB209 ISB106 WILD WILD WILD WILD
dam\ /sire dam\ /sire dam\ /sire
116 ISB190 65 + 26 +
dam\ /sire dam\ /sire
125 93
Sex: Male
Birth Date: 16 Feb 2014
Last Location: PATNA (dead)
dam\ /sire House Name:
Tattoo:
Tag/Band:
137
+ Wild-caught...


Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 138
80 62 *+ 34 *+ 37 * WILD WILD 8 *+ 7 *+
dam\ /sire dam\ /sire dam\ /sire dam\ /sire
108 85 * 34 *+ 37 *
dam\ /sire dam\ /sire
118 85 *
Sex: Male
Birth Date: 27 May 2013
Last Location: KANPUR
dam\ /sire House Name:
Tattoo:
Tag/Band:
138 * Appear more than once...
+ Wild-caught...
^ Pedigree continues beyond top of page...


Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 145
36 + 62 + WILD WILD WILD WILD WILD WILD
dam\ /sire dam\ /sire dam\ /sire dam\ /sire dam\ /sire dam\ /sire
80 49 + 65 + 26 +
dam\ /sire dam\ /sire
127 93
Sex: Male
Birth Date: 5 Jul 2012
Last Location: HYDERABAD
dam\ /sire House Name: SAIVIJAY
Tattoo:
Tag/Band:
145
+ Wild-caught...
^ Pedigree continues beyond top of page...


Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 146
36 *+ 62 *+ WILD WILD 36 *+ 62 *+ WILD WILD
dam\ /sire dam\ /sire dam\ /sire dam\ /sire
80 49 *+ 92 49 *+
dam\ /sire dam\ /sire
127 123
Sex: Male
Birth Date: 25 Sep 2015
Last Location: PATNA
House Name: RAMU
Tattoo:
Tag/Band:
+ Wild-caught... 146 * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 147
80 62 *+ 34 *+ 37 * WILD WILD 8 *+ 7 *+
dam\ /sire dam\ /sire dam\ /sire dam\ /sire
108 85 * 34 *+ 37 *
dam\ /sire dam\ /sire
118 85 *
Sex: Male
Birth Date: 4 Sep 2015
Last Location: KANPUR
House Name: KRISHNA
Tattoo:
Tag/Band:
+ Wild-caught... 147 * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: RHINOCEROS UNICORNIS
Studbook Number: 148
WILD WILD WILD WILD WILD WILD WILD WILD
dam\ /sire dam\ /sire dam\ /sire dam\ /sire
65 + 26 + 36 + 49 +
dam\ /sire dam\ /sire
100 107
Sex: Male
Birth Date: 11 Nov 2008
Last Location: DELHI (dead)
House Name: RAJA JUNIOR
Tattoo:
Tag/Band:
148
+ Wild-caught...

```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    149
 ================================================================================
        WILD                WILD
              dam\    /sire
                  \  /
                   \/
                   6    +                                WILD
                                \          /            Sex: Female
                                 \        /      Birth Date: 10 Apr 1963
                                  \      /    Last Location: U.S.A.
                                dam\    /sire    House Name: DUBLY
                                    \  /             Tattoo:
                                     \/            Tag/Band:
+ Wild-caught...                     149

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    149
 ================================================================================
                 UNK                                      UNK
                                \          /            Sex: Female
                                 \        /      Birth Date: 16 Nov 2013
                                  \      /    Last Location: U.S.A.
                                dam\    /sire    House Name: DUBLY
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                    149

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    150
 ================================================================================
                 WILD                                     WILD
                                \          /            Sex: Female
                                 \        /      Birth Date: 10 Apr 1991
                                  \      /    Last Location: ASSAM     (dead)
                                dam\    /sire    House Name: joymati
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                    150

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    151
 ================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                            dam\    /sire
                  \  /                                     \  /
                   \/                                       \/
                   89   +                                   44   +
                                \          /            Sex: Female
                                 \        /      Birth Date:  5 Jun 2010
                                  \      /    Last Location: MYSORE
                                dam\    /sire    House Name:
                                    \  /             Tattoo:
                                     \/            Tag/Band:
+ Wild-caught...                     151

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    152
 ================================================================================
                 WILD                                     WILD
                                \          /            Sex: Female
                                 \        /      Birth Date:      ~ 1972
                                  \      /    Last Location: ASSAM     (dead)
                                dam\    /sire    House Name: RANI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                    152
```

```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    153
 ================================================================================
                                              ^         ^
                                              |         |
                                             8    +    7    +   WILD      WILD
                                             dam\    /sire       dam\    /sire
                                                 \  /                \  /
                                                  \/                  \/
        WILD                 WILD                 50                  44   +
              dam\    /sire                             dam\    /sire
                   \  /                                    \  /
                    \/                                      \/
                    89   +                                  77
                                      \          /          Sex: Male
                                       \        /      Birth Date:  1 Sep 2013
                                        \      /    Last Location: ASSAM
                                      dam\    /sire    House Name: SANATAN
                                          \  /             Tattoo:
                                           \/            Tag/Band:
+ Wild-caught...                          153
^ Pedigree continues beyond top of page...

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    154
 ================================================================================
                  WILD                                    WILD
                                      \          /          Sex: Male
                                       \        /      Birth Date:      ~ 2006
                                        \      /    Last Location: ASSAM
                                      dam\    /sire    House Name: NAG-SANKAR
                                          \  /             Tattoo:
                                           \/            Tag/Band: 0006CDB50C
                                          154

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    155
 ================================================================================
      ^         ^
      |         |
    36   +    62   +   WILD      WILD      WILD      WILD      WILD      WILD
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
         80                  49   +              65   +              26   +
              dam\    /sire                            dam\    /sire
                   \  /                                    \  /
                    \/                                      \/
                   130                                      93
                                      \          /          Sex: Male
                                       \        /      Birth Date:  8 Jul 2017
                                        \      /    Last Location: PATNA
                                      dam\    /sire    House Name:
                                          \  /             Tattoo:
                                           \/            Tag/Band:
+ Wild-caught...                          155
^ Pedigree continues beyond top of page...
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    156
================================================================================
                                                ^         ^         ^         ^
                                                |         |         |         |
 ISB209    ISB106                             36  *+    62   +    36  *+    49   +
   dam\    /sire                              dam\    /sire       dam\    /sire
       \  /                                       \  /                \  /
        \/                                         \/                  \/
       116                ISB190                   80                  107
            dam\    /sire                               dam\    /sire
                \  /                                       \  /
                 \/                                         \/
                 125                                        120
                                \          /                Sex: Female
                                 \        /      Birth Date: 26 Jul 2017
                                  \      /    Last Location: PATNA
                                dam\    /sire    House Name:
                                    \  /             Tattoo:
                                     \/            Tag/Band:
+ Wild-caught...                     156    * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    157
================================================================================
                WILD                                       WILD
                                \          /                Sex: Male
                                 \        /      Birth Date:  ~ Jul 2015
                                  \      /    Last Location: ASSAM
                                dam\    /sire    House Name: GAONBURHA
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                    157

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    158
================================================================================
                WILD                                       WILD
                                \          /                Sex: Female
                                 \        /      Birth Date:  ~ Jul 2016
                                  \      /    Last Location: ASSAM
                                dam\    /sire    House Name: SHANTI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                    158

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    159
================================================================================
                WILD                                       WILD
                                \          /                Sex: Female
                                 \        /      Birth Date:  ~ Feb 2017
                                  \      /    Last Location: ASSAM
                                dam\    /sire    House Name: BAGORI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                    159

================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    IN1
================================================================================
                WILD                                       WILD
                                \          /                Sex: Male
                                 \        /      Birth Date:    ????
                                  \      /    Last Location: MYSORE    (dead)
                                dam\    /sire    House Name: KASI
                                    \  /             Tattoo:
                                     \/            Tag/Band:
                                    IN1
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    IN2
================================================================================
                 WILD                                      WILD
                                  \          /             Sex: Female
                                   \        /      Birth Date:    ????
                                    \      /    Last Location: MYSORE    (dead)
                                  dam\    /sire    House Name: RANI
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                      IN2
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    IN3
================================================================================
       WILD                WILD                WILD                WILD
             dam\    /sire                             dam\    /sire
                 \  /                                      \  /
                  \/                                        \/
                 IN2   +                                   IN1   +
                                  \          /             Sex: Male
                                   \        /      Birth Date: 16 Apr 1971
                                    \      /    Last Location: NY BRONX
                                  dam\    /sire    House Name: VINU
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                      IN3
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    IN4
================================================================================
                 WILD                                      WILD
                                  \          /             Sex: Male
                                   \        /      Birth Date:    ????
                                    \      /    Last Location: VEERMATA  (dead)
                                  dam\    /sire    House Name: LACIT
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                      IN4
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    IN5
================================================================================
                 WILD                                      WILD
                                  \          /             Sex: Male
                                   \        /      Birth Date:    ????
                                    \      /    Last Location: NAGOYA
                                  dam\    /sire    House Name: JAYA
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                      IN5
```

```
================================================================================
Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    IN6
================================================================================
                 WILD                                      WILD
                                  \          /             Sex: Female
                                   \        /      Birth Date:      ~ 1953
                                    \      /    Last Location: MADRAS    (dead)
                                  dam\    /sire    House Name: KUSHAL
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                      IN6
```

```
 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    IN7
 ================================================================================
        WILD                 WILD                WILD                 WILD
              dam\    /sire                            dam\    /sire
                  \  /                                     \  /
                   \/                                       \/
                  IN2   +                                  IN1   +
                                    \          /            Sex: Female
                                     \        /      Birth Date: 19 Jul 1975
                                      \      /    Last Location: TORONTO
                                    dam\    /sire    House Name: INDIRA
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                         IN7

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    IN8
 ================================================================================
                  WILD                                     WILD
                                    \          /            Sex: Male
                                     \        /      Birth Date:    ????
                                      \      /    Last Location: LUCKNOW   (dead)
                                    dam\    /sire    House Name: JAISINGH
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                        IN8

 ================================================================================
 Taxon Name: RHINOCEROS UNICORNIS                      Studbook Number:    IN9
 ================================================================================
                  WILD                                     WILD
                                    \          /            Sex: Female
                                     \        /      Birth Date:    ????
                                      \      /    Last Location: LUCKNOW   (dead)
                                    dam\    /sire    House Name: ROSY
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                        IN9
```

Annexure IV

Location Glossary - One-Horned Rhinoceros (*Rhinoceros unicornis*)

Mnemonic	Zoo Name
ANTWERP	Zoo of Antwerp Royal Zoological Society of Antwerp, Antwerp, Belgium, B2018
ASSAM	Assam State Zoo, Guwahati M/S Cinderella Restaurant Annex, Guwahati, Assam, India, 781006
BARODA	Shri SayajiBaug Zoo Municipal Corp, Baroda, Gujarat, India
BROWNSVIL	Gladys Porter Zoo 500 Ringgold St., Brownsville, Texas, USA, 78520
CALCUTTA	Kolkata /Alipore Zool. Garden Kolkata, West Bengal, India, 700 027
CHATBIR Z	M.C. Zoological Park, Chat-bir SCO No 839-40, Sector-22-A, Chandigarh, Punjab, India, 160 022
DELHI	National Zoological Park, New Delhi Mathura Rd., Near PuranaQuilla, New Delhi, India, 110 003
DUDHWA	Dudhwa National Park
GELSNKRKN	Ruhr Zoo Gelsenkirchen Bleckstrasse 64, Gelsenkirchen, N Rhine-westph, Germany, 45889
GORUMARA	Gorumara National Park Divisional Forest Officer, Jalpaiguri, West Bengal, India
GULF BREZ	The ZOO, Northwest Florida 5701 Gulf Breeze Pkwy., Gulf Breeze, Florida, USA, 32563
HAMURA	Hamura Zoological Park 4122, Hane, Hamura City, Tokyo, Japan, 205-0012
YDERABAD	Nehru Zoological Park Bahadurpura, Hyderabad 500 064 A., Andhra Pradesh, India
INDIA	INDIA South Central Asia, Asian Region
JALDAPARA	Jaldapara Wildlife Sanctuary Divisional Forest Officer, Jalpaiguri, West Bengal, India
KANPUR	Kanpur Zoological Park Allen Forest Azadnagar, Kanpur, Uttar Predesh, India, 208002

Mnemonic	Zoo Name
KOLN	Cologne Zoo RiehlerStrasse 173, Koeln, N Rhine-westph, Germany, D-50735
LOSANGELE	Los Angeles Zoo & Botanical Gardens 5333 Zoo Dr., Los Angeles, California, USA, 90027
LUCKNOW	NawabWazid Ali Shah Zoological Garden, Lucknow 226001, Uttar Predesh, India
MADRAS	Arignar Anna Zoological Park Arignar Anna Zool. Park, Chennai, Madras, Tamil Nadu, India, 600 048
MYSORE	Sri Chamarajendra Zool. Garden Gar. Rd., Mysore 570 010, Karnataka, South India
NAGOYA	Nagoya Higashiyama Zoo 3-70 Higashiyamamotomachi, Nagoya, Aichi, Japan, 464-0804
NANDANKAN	Nandankanan Biological Park Janpath, Saheed Nagar, Bhubaneswar 751 007, India
NY BRONX	Bronx Zoo/Wildlife Conservation Society 2300 Southern Blvd., Bronx, New York, USA, 10460-1099
NZP-WASH	Smithsonian National Zoological Park 3001 Connecticut Avenue NW, Washington, District Of Columbia, USA, 20008-2537
OMAHA	Omaha's Henry Doorly Zoo 3701 South 10th St., Omaha, Nebraska, USA, 68107-2200
ONTHE WAY	In transit
PARIS	Paris (inc. Ile-de-France) France, Cont Europe, European Region
PATNA	Sanjay Gandhi Biological Park, Patna.
PLANCKNDL	Wild Animal Park Mechelen Planckendael Royal Zool. Society of Antwerp, Mechelen (muizen), Belgium, B2812
RANCHI	Bhagwan Birsa Biological Park, Ranchi
SANDIEGOZ	Zoological Society of San Diego PO Box 120551, San Diego, California, USA, 92112-0551
SD-WAP	San Diego Wild Animal Park 15500 San Pasqual Valley Rd, Escondido, California, USA, 92027
SINGAPORE	Singapore Zoological Gardens 80 Mandai Lake Road, Singapore, Singapore, 729826
TORONTO	Toronto Zoo 361A Old Finch Ave., Scarborough, Ontario, Canada, M1B 5K7

Mnemonic	Zoo Name
TRIPURA	Sepahijala Zoological Park, Agartala India, South Central A, Asian Region
TRIVANDRU	Thiruvananthapuram Zoo, Thiruvananthapuram Kerala, India, 91 62275
VEERMATA	Veermata Jijabai Bhosle Udyan Ambedkar Road, Mumbai (Bombay), Maharashtra, India, 400027
VISAKAPAT	Indira Gandhi Zoological Park Visakapatnam, A P, India, 530 001
WHIPSNADE	Whipsnade Wild Animal Park Zoological Society of London, Dunstable, Beds, England, United Kingdom, LU6 2LF
YOKOHAMA	Nogeyama Zoological Gardens of Yokoham 63-10Oimatsu-cho, Yokohama, Kanagawa, Japan, 220-0032