NATIONAL STUDBOOK

GAUR (*Bos gaurus gaurus*) II Edition

Published as a part of the Central Zoo Authority sponsored project titled
"Development and maintenance of studbooks for selected endangered species in Indian zoos"

Data: Till May 2015

Published: June 2015

भारतीय वन्यजीव संस्थान
Wildlife Institute of India

केन्द्रीय चिड़ियाघर प्राधिकरण
Central Zoo Authority

NATIONAL STUDBOOK
GAUR (*Bos gaurus gaurus*) II Edition

Published as a part of the Central Zoo Authority sponsored project titled
"Development and maintenance of studbooks for selected endangered species in Indian zoos"

Project personnel

Junior Research Fellow
Ms. Nilofer Begum

Project Consultant
Anupam Srivastav, Ph.D.

Principal Investigator
Dr. Parag Nigam

Co-Investigator
Shri. P.C. Tyagi, IFS

Wildlife Institute of India (2015) National Studbook of Gaur (*Bos gaurus gaurus*), Wildlife Institute of India, Dehradun and Central Zoo Authority, New Delhi. (TR-009/2015) pages 106.

For correspondence:
Principal Investigator, Studbook Project,
Wildlife Institute of India,
PO Box 18, Dehradun, 248001
Uttarakhand, India

FOREWORD

Habitat loss, fragmentation and degradation coupled with poaching are limiting the growth of wild populations of several species; increasingly rendering them vulnerable to extinction. For species threatened with extinction in their natural habitats *ex-situ* conservation offers an opportunity for ensuring their long-term survival. This 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. As a part of this endeavor 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 II edition of the studbook of Gaur *(Bos gaurus)* in Indian zoos. The recommendations contained in the studbook will form the basis for the long term management of the species in captivity. It is hoped that the zoos will adopt the recommendations and keep the WII informed of changes in their populations on a regular basis to enable the timely update of the studbook.

(Vinod Ranjan, I.F.S.)
Member Secretary
Central Zoo Authority

ACKNOWLEDGEMENTS

This report is a part of the assignment to the Wildlife Institute of India, Dehradun by the Central Zoo Authority, New Delhi on the development and maintenance of studbooks of selected endangered species in Indian zoos.

The authors are thankful to the Central Zoo Authority for the financial support in carrying out the assignment. We are grateful to the Member Secretary, CZA for facilitating this work. The authors also thank Dr. Brij Kishore Gupta, Evaluation and Monitoring Officer, Dr Devender Singh, Scientific Officer and the support staff of the Central Zoo Authority for facilitating this work.

The valuable advice and support provided by Dr. V.B. Mathur, Director, WII and Dr. P.K. Mathur, Dean Faculty of Wildlife Sciences, is duly acknowledged. Thanks are also due to Mr. Mukesh Arora for formatting this document.

Authors sincerely acknowledge the support from zoo directors, biologists, curators and veterinarians from the following contributing zoos for providing pedigree information that led to the successful development of the studbook.

1. Arignar Anna Zoological Park, Chennai
2. Bannerghatta Biological Garden-National Park, Bangalore
3. Bhagwan Birsa Munda Biological Park, Ranchi
4. Bondla Zoo, Goa
5. Indira Gandhi Zoological Park, Visakapatnam
6. Mahendra Chaudhury Zoological Park, Chhatbir
7. Museums & Zoos, Thiruvananthapuram Zoo, Thiruvananthapuram
8. National Zoological Park, New Delhi
9. Nehru Zoological Park, Hyderabad
10. Rajiv Gandhi Zoological Park & Wildlife Research Centre, Pune
11. Sakkarbaug Zoo, Junagadh
12. Sanjay Gandhi Biological Park, Patna
13. Sepahijala Zoological Park, Sepahijala
14. Sri Chamarajendra Zoological Gardens, Mysore
15. Sri Venkateswara Zoological Park, Tirupati
16. Van Vihar National Park, Bhopal

Authors

Contents

Species Biology

Taxonomy

Phylum	Chordata
Class	Mammalia
Order	Cetartiodactyla
Family	Bovidae
Sub-family	Bovinae
Genus	*Bos*
Species	*Bos gaurus* (H. Smith 1824)
Common name	Gaur

The Indian bison is a large sized animal belonging to a phylogenitically young group of mammals, the Bovinae. There has been an inconsistency in the nomenclatural treatment of the wild and domestic Gaur with several nomenclatural systems being proposed by different authors (Gentry *et al.* 2004). The ruling by the International Commission on Zoological Nomenclature (2003), validating the usage of the first available specific name for wild progenitor species has resolved this confusion. Accordingly, the wild species of Gaur is recognized as *Bos gaurus*, while the domestic form (Mithun, Mithan or Gayal) is referred to as *Bos frontalis*.

The genus *Bos* includes six extant species including *B. gaurus* (gaur), (Wilson and Reeder 2005), confined to the Oriental Region (Schaller 1967). Many subspecies of gaur have been described; however, the two currently recognized sub-species are *Bos gaurus gaurus*, occurring in India Nepal, and Myanmar and *Bos gaurus laosiensis* (Heude 1901) from southern China, Lao PDR, Viet Nam, Cambodia, Thailand north of the Isthmus of Kra and in West Malaysia (Srikosamatara and Suteethorn 1994). Recent work by Groves (2003) also supports this division.

Further, analysis of skull and horn measurements suggest that the Gaur in north-east India are likely to be intermediate between the Indian and South-east Asian specimens but with more similarity to the south-east Asian variety (cited in Duckworth *et al.* 2008). In consideration of these phenotypic differences, *B. g. gaurus* and *B. g. laosiensis* have been provisionally accepted by IUCN as the two sub-species of Gaur, pending further research required to determine the taxonomy of this species.

Morphology

Gaurs' are the tallest living wild cattle and distinctly sexually dimorphic. The pelage of adult bulls is shiny black, short-haired with a gray boss between horns, and rusty-coloured hair on the inner sides of thighs and forelegs, while the

Table 1: Morphometrics of Gaur*

Features	Males	Females
Shoulder height	1.7 – 2.0 m	
Body length	2.5 – 3.0 m	
Tail length	0.7 – 1.0 m	
Body weight	600 – 1000 kg	450 – 800 kg
Pelage	Black	Dark brown

* various sources

cows have a dark brown pelage. The presence of a distinct muscular crest between shoulders and a large dewlap hanging between the forelegs and smaller one under the chin distinguishes adult bulls from cows (Krishnan 1972).

Horns are present in both sexes. In males the horns are longer, placed wider apart on the poll, spreading outwards and with the sharps tips pointing upwards while in females the horns are placed closer together and curve inwards and are less pointed. The white-to-black colour ratio on gaurs' horns characterizes the age of the individuals. Males above 8 years have horns that are over 85% white, worn at the ends, and heavily corrugated closer to the head. Similarly, females with more than 80% of white on the horns are older than 10 years (Ahrestani 2011).

At birth, gaurs stand 70 cm at the shoulder, have a pale orange-brown body coat but lack the characteristic white stockings that only appear with change to a dark brown pelage at three months of age. With advancing age the coat colour of bulls turn black while that of cows remain dark-brown. Until the age of 15 months, both the sexes are similar in height and size and although the horns of males are longer, they do not differ in shape from those of females and besides the scrotum, no other visible morphological difference is distinguishable between the sexes. It is from the age of 15 months onwards that the sexes are differentiable by the size and shape of horns (Ahrestani 2011).

Geographical Distribution

The historical distribution of Gaur ranged throughout mainland south and south-east Asia and Sri Lanka. At present, Gaur is distributed in South and South-east Asia from India to peninsular Malaysia, occurring in India, Nepal, Bhutan, Bangladesh, Myanmar, Thailand, China, Laos, Cambodia, Vietnam and Peninsular Malaysia but extinct in Sri Lanka (Grubb 2005). In India, the distribution of Gaur is highly fragmented and is confined to the Western Ghats, Central Indian highlands and the foot hills of Himalayas, including the hills south of Brahmaputra River.

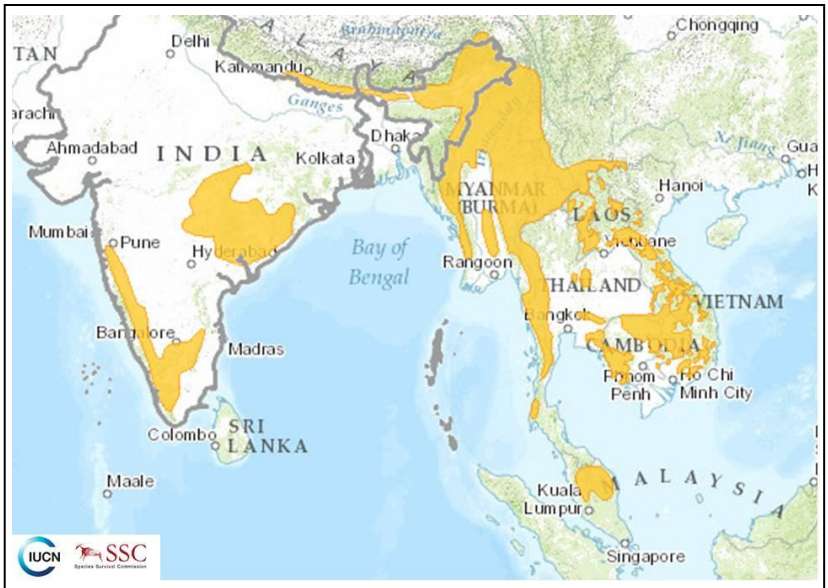


Figure 1: Geographic range of *Bos gaurus gaurus* (Duckworth *et al.* 2008)

Habitat

The species inhabits forest tracts in hilly terrain with abundant sources of forage and water (Schaller 1967); from sea level up to at least 2,800 m msl (Wood 1937, Wharton 1968, Choudhury 2002). In India the species inhabits evergreen, semi-evergreen and moist-deciduous forests and dry deciduous forests at the periphery of their preferred habitats (Schaller 1967). The preference for hilly terrain is attributed to the conversion of plains and other low-lying areas to croplands and pastures, forcing the species towards areas with low human densities (Schaller 1967, Wharton 1968).

Preference for different habitats have been observed; riparian forests are usually preferred due to the availability of water sources (perennial streams and artificial waterholes) while open mixed forests are avoided during all seasons, due to the shortage of food and water (Sankar *et al.* 2013). Among all other forest types, continuous tracts of mixed bamboo forest, providing rich sources of forage, are preferred (Paliwal and Mathur 2012). Agricultural lands are usually avoided by gaur due to anthropogenic disturbances while meadows and low-lying areas are frequented during most part of the year with the exception in monsoon when areas with steep slope are preferred (Schaller 1967, Sankar *et al*. 2013). They prefer burnt areas due to the availability of regenerating green grass (Paliwal and Mathur 2012).

The daily distance covered has been reported as 3.2 – 4.8 km/day in Kanha by Schaller (1967) while the home range size has been varyingly reported to range from 78 km^2 in Kanha (Schaller 1967) to 13 km^2 in Taman Negara National Park, Malaysia (Weigum 1972) and is influenced by habitat conditions. The overall individual home ranges for both sexes were however, reported to be much larger in relocated gaur in the Bandhavgarh Tiger Reserve (135 to 142 km^2 for males and 32 to 169 km^2 for females) (Sankar *et. al.* 2013).

Feeding ecology

A polyphagous feeding habit has been reported for this species enabling them to colonize a wide range of vegetation types (Ashokkumar *et al.* 2011). A total of 151 species of food plants were identified to be consumed by gaurs in the Parambikulam Wildlife Sanctuary that supports a vegetation type ranging from evergreen to moist deciduous (Easa 1998). In the tropical dry deciduous forest of Mudumalai, Gaurs have been observed to feed on 155 species of plants with majority of food plants belonging to *Poaceae*, Fabaceae, Asteraceae and *Malvaceae*. In the tropical dry and moist deciduous forests of Pench, a total of 78 species of plants belonging to 28 families were recorded in the diet of gaur (Sankar *et al.* 2000) with the family *Leguminoseae* accounting for the highest proportion (18%), followed by the family *Gramineae* (15%).

They are known to avoid fully mature grasses and woody plants for most of the year (Krishnan 1972; Gad and Shyama 2011); however, coarse leaves, buds, bark and fruits are consumed when green grass is not available (Krishnan 1972, Brander 1923; Schaller 1967; Ranjitsinh 1997; Pasha *et al.* 2002). A probable reason being the increased quantity of poor quality food in their diet during dry seasons requiring a high fibrous diet that increases digestive efficiency by increasing the retention time of food in the gut (Owen 1988) and also by increasing the turnover rate of the rumen content (Bell 1971). Salt licks are periodically visited and they are obligatory drinkers visiting water bodies twice a day during summer.

Activity and ranging pattern

The movement, activity and ranging pattern of gaur is influenced by factors such as seasonal variations in vegetation composition, group size, availability of water and rutting behaviour (Schaller 1967). Gaurs' are predominantly diurnal but have been reported to be nocturnal in areas of high human disturbance (Ashokkumar *et al.* 2011). They exhibit bimodal diurnal, feeding and movement peaks during morning and evening hours. The noon time heat is avoided by animals moving towards vegetation cover and resting and ruminating (Ashokkumar *et al.* 2011).

Social interactions are common both in the early morning hours and during resting period after intensive feeding (Easa 1998). Defecation, urination and nursing occur throughout the day. While vocalization by both sexes occurs during the early and late hours of the day during rutting season, vocal communication by females is particularly observed at the time of aggregation, when the members of family units come closer (Easa 1998). Vigilant behaviour is more common during feeding hours when the individual stands in a posture with its head raised, ears erected and directing its head towards source of danger (Ashokkumar *et al.* 2011).

Social and breeding behaviour

Gaurs' are gregarious in nature with matrilineal societies (Ashokkumar *et al.* 2010) adult females usually lead the herds (Krasinski 1978). The group structure is fluid and dynamic and the observed social associations are solitary males, bull groups and mixed herds (Areendran 2007, Ashokkumar *et al.* 2010). The group size of mixed herds ranges from 1 to 16 animals (Brander 1923, Karanth and Sunquist 1992, Sankar *et al.* 2000) and occasionally ranges up to 47 individuals (Ashokkumar *et al.* 2004). Highest groups size has been observed during winter followed by monsoon and summer (Sankar *et al.* 2000; Ashokkumar *et al.* 2010). The herd constitutes of several adult females, juveniles, and calves; while the number of adult males changes with the time of year. The sex ratio at birth is equal (Schaller 1967); however, the adult sex ratio shows a female bias (Karanth and Sunquist 1992; Easa 1998; Vairavel 1998) attributed to sex differential mortality (Easa 1998).

Mature males and females associate during the rutting season (Areendran 2007) that varies between November and March in southern India (Morris 1937, Ashokkumar *et al.,* 2004) and in Central India during December to January (Brander 1923). While in Kanha National Park, during April (Schaller 1967).

Social behavioural gestures include licking of group members, nursing calves, fighting and playing. Vocalizations reported include snorting, *phoo/pffhong* calls when alert and *moo* calls at the time of feeding (Ashokkumar *et al.* 2011). During rut the males produce high pitched and far carrying rutting calls. Sexual behaviour by gaur bulls includes rutting, flehmen, tending and mounting. The cows usually move away from the herd before giving birth and conceal the calf in hiding places for a short period of time, thereby, reducing predation risks to the highly conspicuous golden brown coloured calf to some extent (Easa 1998). Calves become active within a few minutes of birth (Gokula 1997) and suckle for 5-8 months. Since calves remain with their mothers for two years, cows do not breed again until the third year.

Table 2: Life-history traits of Gaur

Age at sexual maturity	26 months (Ahrestani *et al.* 2011)
Mating season	November and March (in south India) (Morris 1937) December to January (in central India) (Brander 1923)
Mean age at first conception	37.6 months (Ahrestani *et al.* 2011)
Gestation period	~ 9.5 months (Hubback 1937, Schaller 1967).
Maximum longevity	24 years (female) (Ahrestani *et al.* 2011) 23.6 years (male) (Crandall 1964)
Oldest age at conception	18 years (Ahrestani *et al.* 2011)

Threats and Conservation Actions

The species is threatened by habitat loss, degradation and poaching (Choudhury, 2002; Areendran 2007; Duckworth *et al.* 2008); competition from domestic livestock (Pasha *et al*. 2004); disease outbreaks in livestock (Salter 1983; Ranjitsinh 1997; Davidar 1997)

They are categorized as "Vulnerable" in the IUCN Red List of Threatened Species, 2009. It is protected under Schedule I of the Wildlife Protection Act 1972 of India and is listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which bans all international trade of gaur products.

Conservation actions to ensure the long term survival of the species include livestock vaccination programs, control of cattle grazing and ensuring protection (Ashokkumar *et al.* 2011). Additional efforts include translocation to Bandahvagarh where the species went locally extinct in 1996 were undertaken in 2011 and are summarised in Pabla *et al*. (2011) and Nigam *et al*. (2014).

Status in Captivity

The global captive population of Gaur, recorded in ZIMS includes 131 individuals (65.64.2) distributed among 21 institutions in Asia, Europe and North America (data current as on 25 March 2015). This data is yet to be updated by the holding institutions in India and a tentative estimation of the number of individuals kept in these zoos would add another 33 individuals, thus leading to a total population size of about 164 individuals. The Indian captive population comprises of 99 individuals.

Table 3: Status of Gaur in Indian zoos

Location	**Total no. of Individuals (M.F.U)**	**Living Individuals (M.F.U)**	**Time span during which Gaurs were kept (years)**	**Births (M.F.U)**	**Deaths (M.F.U)**
Bannerghatta	13.13.0	3.3.0	1970-15 (46)	12.6.0	8.8.0
Chatbir	3.5.3	1.3.3	2006-15 (10)	1.2.3	2.2.0
Delhi	4.4.0	4.2.0	1990-15 (26)	2.0.0	0.0.0
Hyderabad	9.13.0	4.5.0	1987-15 (29)	5.10.0	3.6.0
Junagadh	1.2.0	1.1.0	2011-15 (5)	0.1.0	0.1.0
Madras	17.9.0	8.7.0	1987-15 (29)	14.7.0	9.1.0
Mysore	41.44.1	14.10.1	1988-15 (28)	40.41.1	14.12.0
Patna	1.2.0	1.2.0	2014-15 (2)	0.0.0	0.0.0

Location	Total no. of Individuals (M.F.U)	Living Individuals (M.F.U)	Time span during which Gaurs were kept (years)	Births (M.F.U)	Deaths (M.F.U)
Pune	2.1.0	1.1.0	2009-15 (7)	1.0.0	1.0.0
Ranchi	2.2.0	2.2.0	2009-15 (7)	1.1.0	0.0.0
Sepahijala	1.0.0	0.0.0	2001-06 (6)	0.0.0	1.0.0
Tirupati	1.2.0	1.2.0	2011-15 (5)	0.0.0	0.0.0
Trivandrum	1.1.0	1.1.0	2011-15 (5)	0.0.0	0.0.0
Usgown	10.4.0	5.2.0	1985-15 (31)	10.3.0	2.0.0
Vanvihar	2.2.0	1.1.0	2011-15 (5)	1.0.0	1.1.0
Visakapatnam	2.4.0	2.4.0	2000-15 (16)	0.0.0	0.0.0

Methods

Data on individual history was collected by means of questionnaires, zoo visits and from the websites of CZA and ZIMS (Zoological Information Management System). Questionnaires were sent to the institutions housing Gaurs 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 Data Quality

The second edition of the National Studbook of Gaur is a chronological record of the population in Indian zoos. This edition lists data that is current through May 2015 and includes all information made available by holding zoos. The quality of data available with reference to the analysis carried out is summarized in Figure 2. A total of 178 individuals are registered in the Studbook as per records provided by holding zoos. Complete information on birth as well as death dates (*i.e.,* ages) were known for 166 animals. Birth dates were known for 1 wild-conceived and 157 captive-born individuals, while birth date estimates were known for 9 wild-born individuals. Complete parentage records were available for 139 including 141 with sire IDs and 139 with dam IDs. Acquisition dates of wild-born individuals were known for 14 out of 15 specimens while death dates were known for 67 out of 72 mortalities.

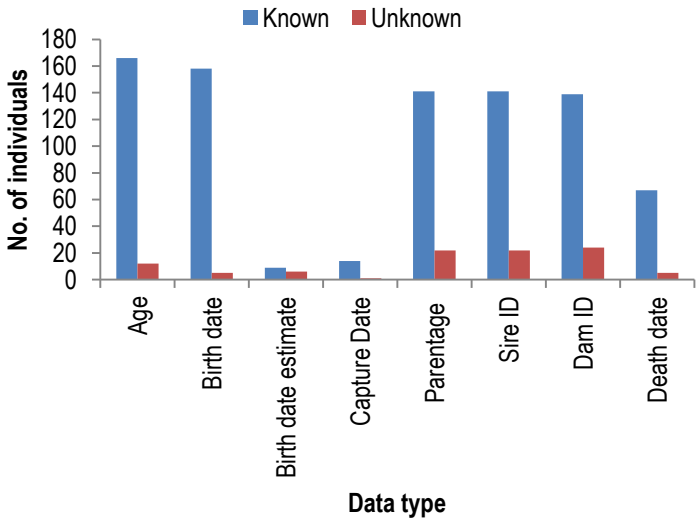


Figure 2: Data quality for captive specimens of Gaur

ANALYSIS

Demographic Analysis

Historical population: Census trends

The population since its inception consists of a total of of 178 individuals (95.80.4). These include one (1.0.0) wild-conceived, 15 (7.8.0) wild-born and 163 (87.42.4) captive-born individuals. Figure 3 represents the origin-based census trend over the years, showing a rapid increase in the number of captive-born animals in the population. Post 1999, the growth in population was an outcome of increased captive births with a few wild born individuals entering the population. Since 2012, however, the population has reached a plateau with births matching deaths resulting in the population stabilizing at the current level of 99(49.46.4).

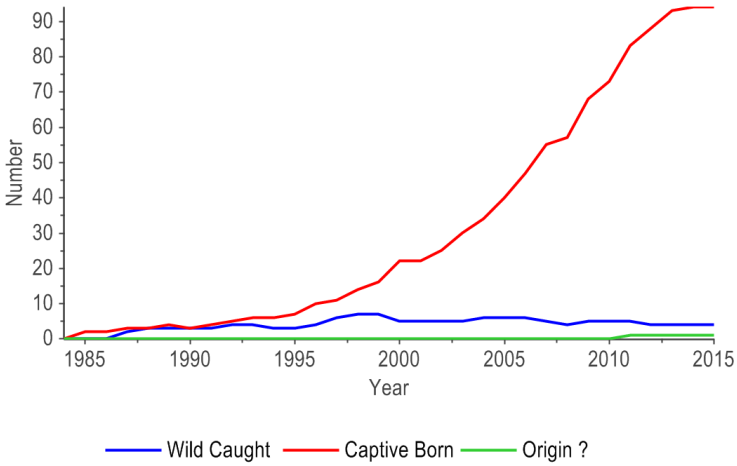


Figure 3: Origin-based census trends

The sex-based census trend for the population is represented in Figure 4. The sex-ratio of the population favoured males marginally during most of its history in captivity. During 1996-2001 the population had a sex ratio that favoured females owing to an increased number of female births (9.13) and acquisitions from the wild (2.3). The historical population is summarized in table 4 and detailed information of events and transactions for each specimen is presented in Appendix I.

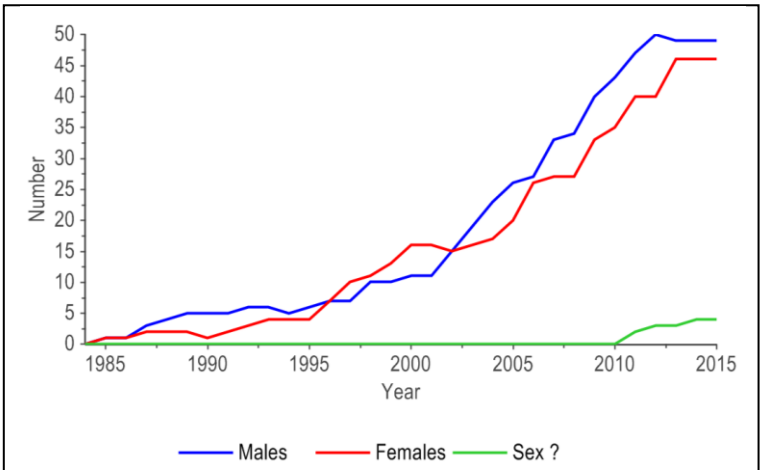


Figure 4: Sex-based census trends

Table 4: Summary of the historical captive population

	Males	Females	Unknown	Total
Total studbook size	94	80	4	178
Total number of acquisitions from wild	7	8	0	15
Total number of births	86	72	4	162
Total number of wild conceived	1	0	0	1
Total number of deaths	42	31	0	73
Total number of lost to follow up (Ltf)	3	3	0	6
Total number of breeding individuals	25	35	0	60
Wild-born that have bred	3	6	0	9
Captive-born that have bred	22	29	0	51

Living population

The living captive population of Gaurs includes 99 animals (49.46.4) housed at eight institutions. It consists of 1 (1.0.0) wild-conceived, 4 wild-born (1.3) and 94 captive-born individuals (47.43.4). The details of the living population are summarized in table 5 and the individuals are listed in Appendix II.

Age structure

The population consists mostly of adults and young animals that have recently attained sexual maturity (at 26 months of age). However, limited number of births in the year 2014 has resulted in only one individual in the yearling stage. The age structure of the current population shown in Figure 5 indicates a young reproductively active population capable of rapid growth. It also indicates an overall, balanced sex ratio. Further the individuals in the reproductively active age classes include a large number of proven breeders (n=32) and several individuals in the pre-reproductive age classes (n=13) ensure that with appropriate population management interventions, utilizing breeding recommendations included this edition a sustainable population of the species can be maintained in captivity.

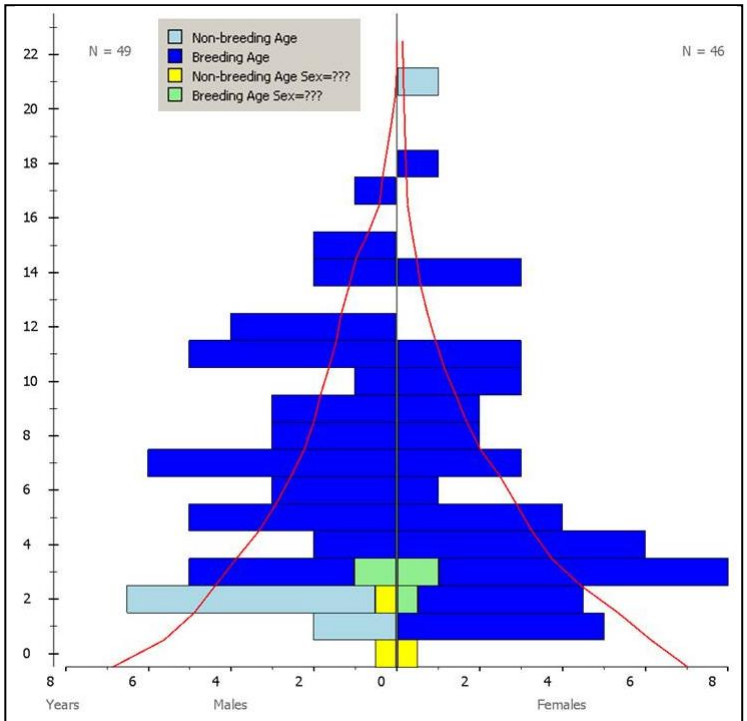


Figure 5: Age structure of the Gaur population
* unknown sex individuals are considered 0.5 of each sex

Table 5: Summary of the living captive population

	Males	Females	Unknown	Total
Total no. of living individuals	49	46	4	99
Total number of wild-born individuals	1	3	0	4
Total number of captive-born individuals	47	43	4	94
Total number of wild-conceived individuals	1	0	0	1
Total number of breeding individuals	14	18	0	32
Wild-born that have bred	0	3	0	3
Captive-born that have bred	14	15	0	29

Population growth rates and projections

The parameters shown in table 6 indicate the rate of change in the population (r, λ and Ro), the mean generation time (T). The Gaur population has a growth of the 8.5 % in males and 10.6% in females, while the lambda is also greater than one for both sexes. The mean generation time for males has been 9.4 years

Table 6: Life Table Summary

Demographic variables	Males	Females	Total
r	0.085	0.106	0.095
λ	1.088	1.112	1.100
Ro	2.214	2.171	2.192
T years	9.4	7.3	8.4
N 20 years	371.5	402.2	773.6

and 7.3 years for females for the captive population. The projected population after 20 years based on the current population characteristics suggests of a rapid increase in population size leading to 773(371.402) specimens in captivity. This large size is a result of the current population growth rate and the longevity of the species.

Genetic Analysis

Genetic summary of the Gaur population

Since the entry of the species in captivity, 15 wild origin animals of which 9 founders have contributed the captive population. Of these animals, three founders are currently alive. The population also includes 1 potential founder. Table 7 summarizes the current genetic parameters of the population. The population has a gene diversity (83.43%) lower than the target 90%, a mean inbreeding of 0.2275 and population mean kinship of 0.1657, suggestive of breeding between closely related individuals in the population.

Table 7: Genetic summary

Genetic variables	Values
Founders	9
Living Animals	99
Percent Ancestry Known	87%
Gene Diversity	0.8343
Gene Value	0.8311
Founder Genome Equivalents	3.02
Mean Inbreeding	0.2275
Ne/N	0.3349

An analysis of the founder statistics indicates unequal founder contribution with two animals (numbers 00008 and 00009) having a highly biased representation resulting in the majority of descendants (72 each) in the living population. In contrast the remaining founders have contributed 1 to 24 descendants in the extant population. The genetic diversity retained by the population equals 3.02 founder genome equivalents indicating that the population has retained only a limited amount of genetic diversity available to it by way of wild origin individuals present (N = 15). The population additionally has a mean inbreeding of 0.2275 that indicates reproductive activity between closely related individuals. The Ne/N ratio of 0.3349 or effective population size (Ne) 27 individuals suggests that the population includes a significant number of reproductively active specimens that can ensure the maintenance of demographically stable population.

Breeding Recommendations

Species included in captive breeding programmes are managed to ensure their genetic viability and demographic stability over an extended period of time. Demographic analysis carried out suggests that the population has achieved its demographic goals and is maintaining the desired growth rates. The population however, needs to be intensively managed to attain and maintain genetic viability. Regulated mating choices that are based on lack of; or minimal relatedness between breeding pairs can ensure the maintenance of current level of genetic diversity in the population. Pairing choices based on Mate Suitability Index (MSI) described in table 8 below; is a part of the toolkit of PMx software (Ballou *et al.* 2011) used to determine the pairing choices for the captive Indian Gaur population. The pairing recommendations made are summarized in table 8. While making mating choices it is suggested that pairs that have the least MSI score be preferred over pairs that have higher scores. Each dam has been paired several likely sires, the holding zoos may exercise suitable mating choices based on ease of availability of the possible sires and mutual compatibility of animals.

Table 8: Pairing options for the captive Gaur population

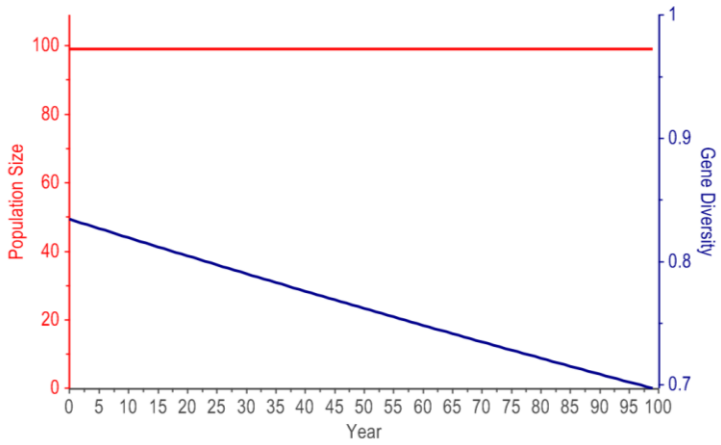
Dam ID	Possible Sires	MSI	Mate Suitability Index
00024	00077, 00135, 00148	1	**Mate Suitability Index (MSI)**
	00168, 00170	2	It is a numerical genetic assessment of a male-female pair that incorporates several variables into one ranking (MSI range is 1 to 7, with 1 being the most genetically beneficial).
	00047, 00099	3	
00026	00170	3	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:
00053	00170	3	
00059	00168, 00170	3	**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.
00062	00135, 00148	1	**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.
	00047, 00099	3	**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.
00066	00170	3	**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.
00078	00034, 00047, 00099,00047, 00099	2	1 = very beneficial (genetically) to the population;
00089	00168, 00170	3	2 = moderately beneficial,
00091	00135, 00148	1	3 = slightly beneficial;
	00047, 00099	3	4 = slightly detrimental,
00092	00168, 00170	3	5 = detrimental, should only be used if demographically necessary
00105	00168, 00170	3	6 = very detrimental (should be considered only if demographic considerations override preservation of genetic diversity)
00106	00168, 00170	3	"-"= very highly detrimental (should not be paired, due to high level of kinship of pair)
00107	00168, 00170	3	**Using Pairwise Info**
00115	00135, 00148	1	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.
	00047,00099	3	
00141	00077, 00135	1	**Source: Traylor-Holzer, K. (ed.). 2011.**
	00168, 170	2	
00144	00168, 170	3	
00149	00168, 170	3	
00150	00168, 170	3	
00155	00047, 00099, 00135, 00148	2	
	00034, 00048, 00080, 00083, 00102, 00153	3	
00156	00047, 00099, 00135, 00148	2	
	00034, 00048, 00080, 00083, 00102, 00153	3	
00171	00168, 00170	3	
00181	00047, 00099, 00135, 00148	2	
	00034, 00048, 00080, 00083, 00102, 00153	3	

Targets for Population Management

The species is listed as vulnerable in the IUCN Red list of threatened species and is susceptible to extinction due to habitat fragmentation and poaching. Maintenance of insurance population in captivity that is genetically viable and demographically stable populations thus offers an option for its long term survival. The maintenance of sustainable captive populations is dependent on our capability to identify the minimum size required to be maintained in captivity and the supplementation by wild origin animals required to maintain genetic viability. Multiple simulations run using the goals tab of the PMx Software (Ballou *et. al.* 2011) provide an insight to fate of the current population after 100 years and that of the

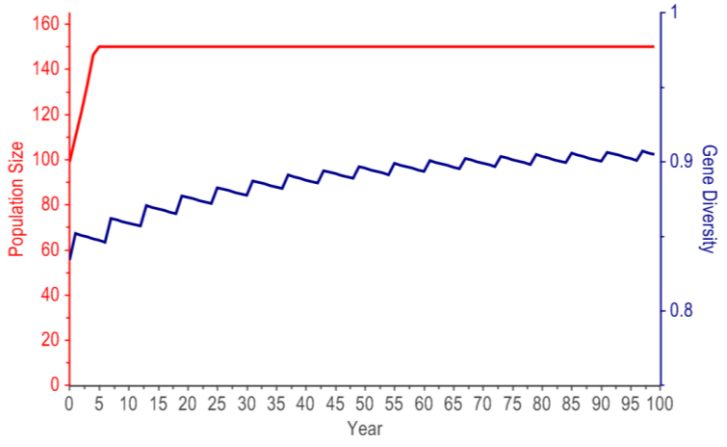
population with supplementation of wild origin animals. Presented here are outcomes of two simulations with a maximum population size of 150 specimens maintained in captivity.

Scenario I: Without supplementation

Simulation Output	Population Variables
 **Figure 6:** Simulation outcomes without supplementation	Generation Length; 8.4 Maximum potential lambda; 1.0998 Current N; 99 Current Ne; 33.2 Ne/N; 0.33 Current Gene Diversity; 0.8343 Maximum N; 150 No founders added Results: Can maintain only 69.6%.

Scenario 2: With Supplementation

Supplementation of 1 wild origin individual every sixth year for the next 100 years (figure 7).

Simulation Output	Population Variables
 **Figure 7:** Simulation outcomes with supplementation	Generation Length; 8.4 Maximum potential lambda; 1.0998 Current N; 99 Current Ne; 33.2 Ne/N; 0.33 Current Gene Diversity; 0.8343 Maximum N; 150 **Founder Related Variables** New founders per Addition event; 1 Year to start adding founders; 0 Years between events; 6 Year to stop adding founders; 100 FGE per Founder; 0.40 **Results:** Can maintain 90.4% Can maintain 90.0% till 103 years

Conclusions

Gaur is a wild cattle species inhabiting diverse forest types in the south and south-east Asian region. The populations of the species are currently facing a decline across their distribution range attributed to habitat loss, degradation and poaching. It has accordingly been categorized as Vulnerable in the IUCN Red List of Threatened Species. The captive population of Gaur in Indian zoos is an insurance population that can be used to supplementation/reintroduction if need arises. It is therefore imperative to ensure that the population is genetically viable and demographically stable and capable of providing surpluses if needed.

The captive population of Gaur living in Indian zoos includes 99 specimens and has shown rapid growth in size. The population while being demographically stable is undergoing loss of genetic diversity. The loss in genetic diversity is ascribed to the limited number of founders used in the breeding programme with a large proportion of the population descending from just two individuals. Maintenance of long-term sustainable populations is therefore dependent on supplementing the current genetic diversity.

I. Pairing of animals as suggested in the pairing recommendations made in the studbook can ensure maintenance of current levels of genetic diversity.

II. Supplementation of the population with wild origin animals that effectively contribute in an equitable manner to the gene pool of the population can ensure increasing the current level (83.43%)of genetic diversity to the desired level (90%).

References:

1. Ahrestani, F. S. (2011). Life-history traits of gaur *Bos gaurus*: a first analysis. *Mammal Rev*. 2 41 (1): 75–84.

2. Areendran, G. 2007. A Study on Vegetation Ecology in Pench Tiger Reserve, Madhya Pradesh with Reference to Gaur *(Bos gaurus),* Ph.D. Thesis, Saurashtra University, India.

3. Ashokkumar, M., Swaminathan, S., Desai, A.A. and Daniel, J.C. (2004). A study on ecology and conservation of Gaur (*Bos frontalis*) in Mudumalai Wildlife Sanctuary and National Park. Nilgiri Wildlife and Environmental Association Report, Ottacamund.

4. Ashokkumar, M., Nagarajan, R. and Desai, A. A. (2010). Group Size and Age-Sex Composition of Asian Elephant and Gaur in Mudumalai Tiger Reserve, Southern India. *Gajah* 32:27-34.

5. Ashokkumar, M., Swaminathan, S., Nagarajan, R. and Desai, A.A. (2011). Distribution, Ecology and Conservation of the Gaur (*Bos gaurus,* H. Smith, 1824). In: V.K. Gupta and A.K. Verma (eds), *Animal Diversity, Natural History and Conservation,* pp. *77-94.* Daya publishing house, New Delhi, India.

6. Ballou, J.D., Lacy, R.C. and Pollak, J.P. (2011). PMx: software for demographic and genetic analysis and management of pedigreed populations (version 1.2). Chicago Zoological Society, Brookfield, IL, USA. Available from: http://www.vortex10.org/PMx.html

7. Bell, R. H. V. (1971). A grazing ecosystem in the Serengeti. *Scientific American* 225:86-93.

8. Brander, A.D. (1923). Wild animals in central India. Edward Arnold. Co. London.

9. Choudhury, A. (2002). Distribution and conservation of the Gaur *Bos gaurus* in the Indian Subcontinent. *Mammal Review* 32: 199-226.

10. Crandall, L.S. (1964). *The Management of Wild Mammals in Captivity*. The University of Chicago Press, Chicago, Illinois, USA.

11. Davidar, E.R.C. (1997). Cheetal Walk-Living in the Wilderness, Oxford University Press, Chennai.

12. Duckworth, J.W., Steinmetz, R., Timmins, R.J., Pattanavibool, A., Than Zaw, Do Tuoc and Hedges, S. (2008). *Bos gaurus*. The IUCN Red List of Threatened Species. Version 2014.3. <www.iucnredlist.org>. Downloaded on 21 March 2015.

13. Easa, P.S. (1998). Habitat utilization of animals in Parambikulam Wildlife Sanctuary with special reference to Gaur. KFRI Research Report 155.

14. Gad, S.D. and Shyama, S.K. (2009). Studies on the food and feeding habits of Gaur *Bos gaurus* H . Smith (Mammalia : Artiodactyla : Bovidae) in two protected areas of Goa. J. Threat. taxa 1(2): 128–130.

15. Gentry, A., Clutton-Brock, J. and Groves, C. P. (2004). The naming of wild animal species and their domestic derivatives. *Journal of Archaeological Science* 31: 645-651.

16. Gokula, V. (1997). Comments on a newly born Gaur (*Bos gaurus*). *Journal of the Bombay Natural History Society,* 94: 394-395.

17. Groves, C. 2003. Taxonomy of ungulates of the Indian Subcontinent. *Journal of the Bombay Natural History Society* 100 (2-3): 341-361.

18. Grubb, P. (2005). Artiodactyla. In: D. E. Wilson and D. M. Reeder (eds), *Mammal Species of the World. A Taxonomic and Geographic Reference (3rd ed)*, pp. 637-722. Johns Hopkins University Press, Baltimore, USA.

19. Hubback, T.R. (1937). The Malayan gaur or seladang. Journal of Mammalogy 18: 267–279.

20. International Commission on Zoological Nomenclature, Opinion 2027 (Case 3010). (2003). Usage of 17 specific names based on wild species which are predated by or contemporary with those based on domestic animals (Lepidoptera, Osteichthyes, Mammalia): conserved. *Bulletin of Zoological Nomenclature* 60: 81-84.

21. ISIS (International Species Information System) (2004). SPARKS 1.54: Single Population Analysis and Records Keeping System. Eagan, MN: International Species Information System. Available from: www.isis.org

22. Karanth, K. U. and Sunquist, M. E. 1992. Population structure, density and biomass of Large herbivores in the tropical forests of Nagarahole, India. *Journal of Tropical Ecology* 8:21-35.

23. Krasinski, Z.A. (1978). Dynamics and structure of the European Bison population in the Bialowieza Primeval Forest. *Acta Theriol.* 23: 3-48.

24. Krishnan, M. (1972). An ecological survey of mammals in India. The Gaur. J. Bombay Nat. Hist. Soc. 69 (2): 322-349.

25. Nigam, P., Sankar, K., Cooper, D., Carlisle, L., and Pabla, H. S. (2014). Capture and translocation of gaur (*Bos gaurus*) in India. In Ecology Evolution and Behaviour of Wild Cattle: implications for conservation; Eds. Melletti, M., and Burton, J. Cambridge University Press, Cambridge, United Kingdom

26. Owen, S. R. N. (1988). Mega herbivores- The influence of very large body size on ecology, Cambridge University Press, Cambridge. U.K.

27. Pabla, H.S., Carlisle, L., Cooper, D., Cooke, J., Nigam, P., Sankar, K., Srivastav, A., Negi, H.S., Patil, C.K., Aggarwal, S., Mishra, A., Gupta, S., Srivastav, A.B., Chauhan, K.S. and Sarath, C. (2011). Reintroduction of Gaur *(Bos gaurus gaurus)* in Bandhavgarh Tiger Reserve, Madhya Pradesh, India. Technical report. 73 p.

28. Paliwal, A. and Mathur, V.B. (2012). Predicting potential distribution of Gaur (*Bos gaurus*) in Tadoba-Andhari Tiger Reserve, Central India. Journal of Life Sciences, 6: 1041-1049.

29. Pasha, M. K. S., Areendran, G., Sankar, K. and Qureshi, Q. (2002). Debarking of teak (*Tectona grandis*) by gaur during summer in a tropical dry deciduous habitat of Central India. *Journal of the Bombay Natural History Society* 99:238-244.

30. Pasha, M. K. S., Sankar, K. Qureshi, Q. and Areendran, G. (2004). Indian bison or gaur (*Bos gaurus* Lambert, 1804). *ENVIS Bulletin* 7: 91–102.

31. Ranjitsinh, M. K. (1997). *Beyond the Tiger: Portraits of Asian Wildlife*. Birajbasi Printers, New Delhi, India.

32. Salter, R.E. (1983). Summary of currently available information on internationally threatened wildlife species in Burma. FAO, Rangoon, Burma.

33. Sankar, K., Qureshi, Q., Pasha, M. K. S. and Areendran, G. (2000). Ecology of gaur *Bos gaurus* in Pench Tiger Reserve, Madhya Pradesh. Final Report. Wildlife Institute of India, Dehra Dun. pp.27.

34. Sankar, K. Pabla, H. S., Patil C. K., Nigam P., Qureshi, Q., Navaneethan B., Manjrekar,M., Virkar, P. S., and Mondal, K . (2013). Home range, habitat use and food habits of re-introduced gaur (*Bos gaurus gaurus*) in Bandhavgarh Tiger Reserve, Central India. *Tropical Conservation Science* 6(1):50-69.

35. Schaller, G. B. (1967). The Deer and the Tiger. A Study of Wildlife in India. University of Chicago Press, Chicago, USA and London, UK.

36. Srikosamatara, S. and Suteethorn, V. (1994). Wildlife Conservation along the Thai-Lao border. *Nat. Hist. Bull. Siam. Soc*. 42: 3-21.

37. Traylor-Holzer, K. (ed.) (2011). *PMx Users Manual, Version 1.0*. IUCN SSC Conservation Breeding Specialist Group, Apple Valley, MN, USA.

38. Vairavel, S. M. (1998). Ecology of gaur (*Bos gaurus H. Smith*) with special reference to habitat utilization in Parambikulum Wildlife Sanctuary, Kerala, India. Ph.D. Thesis, Forest Research Institute, Dehra Dun, India.

39. Weigum, L.E. (1972). The problems in the preservation of the Seladang in the Malaysian National Park. M.Sc. Thesis, Michigan State University, East Lansing, USA.

40. Wharton, C. H. (1968). Man, Fire and Wild Cattle in Southeast Asia. *Proceedings of the Annual Tall Timbers Fire Ecology Conference* 8: 107–167.

41. Wood, H. S. (1937). Observations on the gaur and its shikar. *Journal of the Bengal (Darjeeling) Natural History Society* 12(1): 7-17.

Appendix I

Historical Population of Gaur (*Bos gaurus*) in Indian Zoos

Sl. No.	National Studbook #	Local ID Name Transponder #	Sex	Birth Date	Sire	Dam	Location	Date	Event
1.	00001	RAJAN JR	M	~ 1985	UNK	UNK	USGOWN	~ 1985 27-Sep-03	Birth Death
2.	00002	UNM1	F	~ 1985	UNK	UNK	DACCA DELHI	~ 1985 6-Apr-90	Birth ltf
3.	00003	KESHAVA	M	????	UNK	UNK	BANNERGHA	???? ????	Birth Death
4.	00004	SHEELA	F	????	UNK	UNK	BANNERGHA	???? ????	Birth Death
5.	00005	NONE BG0005 GOVIND	M	????	WILD	WILD	INDIA HYDERABAD	16-Jun-87 16-Jun-87 6-Apr-01	Capture Transfer Death
6.	00006	GANGAWATHI	F	16-Sep-87	UNK	UNK	HYDERABAD	16-Sep-87 7-Mar-99	Birth Death
7.	00007	NONE RANI 311/82	F	~ 1998	WILD	WILD	INDIA BANNERGHA	13-Dec-06 13-Dec-06 23-Jan-12	Capture Transfer Death
8.	00008	NONE M00052 SHERU	M	~ 1984	WILD	WILD	INDIA MYSORE	6-Nov-88 6-Nov-88 2-Aug-00	Capture Transfer Death
9.	00009	NONE RANI I _____ M00053	F	~ 1988	WILD	WILD	INDIA BANNERGHA MYSORE	???? ???? 28-Jan-92 10-Feb-07	Capture Transfer Transfer Death
10.	00010	VARUND	F	3-Apr-89	00003	00004	BANNERGHA	3-Apr-89	Birth ltf
11.	00011	BG0007 TRISUL	M	10-Apr-89	UNK	UNK	HYDERABAD	10-Apr-89 13-Jun-94	Birth Death
12.	00012	BG0006 GANGOTRI	F	25-Nov-91	UNK	UNK	HYDERABAD	25-Nov-91 24-Mar-99	Birth Death
13.	00013	M00114 ARJUN/AZAR 301/73	M	27-Nov-92	00008	00009	MYSORE BANNERGHA	27-Nov-92 ~ 2001 17-Jul-07	Birth Transfer Death
14.	00014	RAMA	M	????	UNK	UNK	BANNERGHA	???? ????	Birth Death
15.	00015	MADHURI I	F	????	UNK	UNK	BANNERGHA	???? ????	Birth Death
16.	00016	BG0009 GOWRI	F	1-Nov-93	00005	00012	HYDERABAD	1-Nov-93 2-Mar-04	Birth Death
17.	00017	RADHA	F	~ 1996	UNK	UNK	HYDERABAD	~ 1996 10-Mar-04	Birth Death
18.	00018	M00055 MADHURI	F	22-Mar-96	00008	00009	MYSORE	22-Mar-96 5-Mar-13	Birth Death
19.	00019	GOPAL	M	10-Nov-96	00005	00016	HYDERABAD	10-Nov-96 2-Mar-04	Birth Death
20.	00020	GANESHA	M	28-Nov-96	00014	00015	BANNERGHA	28-Nov-96	Birth ltf
21.	00021	NONE THUNGE/SANDH M00071 302/74	F	~ 1996	WILD	WILD	INDIA MYSORE BANNERGHA	2-Dec-96 2-Dec-96 13-Dec-01 15-Jun-08	Capture Transfer Transfer Death
22.	00022	M00089 SACHIN	M	28-Feb-94	00008	00009	MYSORE	28-Feb-94 13-Oct-00	Birth Death
23.	00024	ROSY	F	~ 1993	WILD	WILD	INDIA USGOWN	4-Nov-97 4-Nov-97	Capture Transfer

Sl. No.	National Studbook #	Local ID Name Transponder #	Sex	Birth Date	Sire	Dam	Location	Date	Event
24.	00025	M00054 ANIL	M	6-Apr-95	00008	00009	MYSORE	6-Apr-95 10-Jan-07	Birth Death
25.	00026	M00056 MEENA	F	16-Mar-97	00008	00009	MYSORE	16-Mar-97	Birth
26.	00027	GOWHAR	M	12-Jan-98	00005	00016	HYDERABAD VISAKAPAT	12-Jan-98 13-Mar-00	Birth Transfer
27.	00028	NONE MANI 100171	M	~ 1995	WILD	WILD	INDIA MADRAS	24-Mar-98 25-Mar-98 3-Aug-11	Capture Transfer Death
28.	00029	UNAMED	M	31-Aug-98	00001	00024	USGOWN MOLEM	31-Aug-98 9-Dec-99	Birth Release
29.	00030	M00670 GANGE/MANISH 303/75	F	12-Jan-99	00008	00009	MYSORE BANNERGHA	12-Jan-99 13-Dec-01 4-Jan-08	Birth Transfer Death
30.	00031	M00060 SUNDARI	F	7-Mar-99	00008	00018	MYSORE	7-Mar-99 25-Sep-09	Birth Death
31.	00032	REMO	M	26-Oct-99	00001	00024	USGOWN	26-Oct-99	Birth
32.	00033	GAUTAMI	F	11-Dec-99	00005	00016	HYDERABAD	11-Dec-99 23-Aug-03	Birth Death
33.	00034	M00090 LAARA	M	9-May-00	00022	00021	MYSORE	9-May-00	Birth
34.	00035	M00091 ROSE	F	12-Aug-00	00025	00018	MYSORE	12-Aug-00 17-Aug-14	Birth Death
35.	00036	M00092 JASMINE	F	24-Aug-00	00025	00026	MYSORE	24-Aug-00	Birth
36.	00037	M00672 LILLY/MEENA 100170	F	6-Nov-00	00025	00009	MYSORE MADRAS	6-Nov-00 21-Dec-03 2-Sep-09	Birth Transfer Death
37.	00038	PREM BG0010	M	6-Dec-00	00001	00024	USGOWN HYDERABAD	6-Dec-00 19-Sep-09	Birth Transfer
38.	00039	GAYATRI _____	F	22-Dec-00	00005	00016	HYDERABAD VISAKAPAT	22-Dec-00 21-Sep-02	Birth Transfer
39.	00040	RESHMA _____-	F	15-Mar-01	00019	00016	HYDERABAD VISAKAPAT	15-Mar-01 15-Mar-04	Birth Transfer
40.	00041	NONE RABI	M	????	WILD	WILD	INDIA SEPAHIJAL	23-Mar-01 24-Mar-01 ~ 2006	Capture Transfer Death
41.	00042	UNAME2	M	6-Oct-01	00001	00024	USGOWN	6-Oct-01 6-Oct-01	Birth Death
42.	00043	308/79 CHATURTHA	M	~ Jan 2005	00013	00021	BANNERGHA	~ Jan 2005 28-Sep-13	Birth Death
43.	00044	61 RANGANATH	M	9-Apr-02	00020	00015	BANNERGHA	9-Apr-02	Birth ltf
44.	00045	305/77 BALARAMA	M	~ 2002	00013	00030	BANNERGHA	~ 2002 13-Aug-07	Birth Death
45.	00046	VEERU	M	20-Sep-02	00001	00024	USGOWN	20-Sep-02	Birth
46.	00047	304/76 BHEEMA	M	12-Oct-02	00013	00021	BANNERGHA	12-Oct-02	Birth
47.	00048	307/78 BHARAT	M	~ Jan 2003	00013	00030	BANNERGHA	~ Jan 2003	Birth
48.	00049	M00674 BHUVAN	M	27-May-03	00025	00009	MYSORE	27-May-03 27-Jun-08	Birth Death
49.	00050	_____	F	14-Feb-03	00019	00016	HYDERABAD	14-Feb-03 ????	Birth Death
50.	00051	M00057 CHETAN	M	23-Mar-03	00025	00026	MYSORE	23-Mar-03	Birth

Sl. No.	National Studbook #	Local ID Name Transponder #	Sex	Birth Date	Sire	Dam	Location	Date	Event
51.	00052	SHIVA	M	30-Jul-03	00019	00033	HYDERABAD VISAKAPAT	30-Jul-03 29-Jan-04	Birth Transfer
52.	00053	M00093 KALPANA	F	25-Aug-03	00034	00036	MYSORE	25-Aug-03	Birth
53.	00054	RANI	F	4-Sep-03	00001	00024	USGOWN VISAKAPAT	4-Sep-03 17-Sep-09	Birth Transfer
54.	00055	M00094 VIPIN	M	1-Oct-03	00025	00018	MYSORE	1-Oct-03	Birth
55.	00056	306 RAVINDRA	M	2-Jan-04	00013	00021	BANNERGHA	2-Jan-04 29-Aug-08	Birth Death
56.	00057	M00058 AMITH	M	16-Apr-04	00025	00009	MYSORE	16-Apr-04	Birth
57.	00058	M00095 AKILA	F	7-May-04	00034	00035	MYSORE	7-May-04 12-Dec-12	Birth Death
58.	00059	ANJU 00063B3B7D	F	27-Feb-06	00034	00036	MYSORE CHATBIR Z	27-Feb-06 8-Dec-06	Birth Transfer
59.	00060	MADHAN	M	31-Aug-04	UNK	00037	MADRAS	31-Aug-04 26-Aug-06	Birth Death
60.	00061	SOMU	M	9-Sep-04	00032	00024	USGOWN	9-Sep-04	Birth
61.	00062	NONE GEETHA 100172	F	~ Apr 2004	WILD	WILD	INDIA MADRAS	14-Dec-04 15-Dec-04	Capture Transfer
62.	00063	UNM2 VIKRAM 00-063A-D194	M	~ 2000	00025	00018	MYSORE DELHI	~ 2000 12-Sep-06	Birth Transfer
63.	00064	NEELAM 00-063B-4AC8	F	????	00025	00031	MYSORE DELHI	???? 12-Sep-06	Birth Itf
64.	00065	M00059 VIOLAINE	F	23-Mar-05	00025	0009	MYSORE	23-Mar-05	Birth
65.	00066	M00675 PRIYA 280001	F	18-Aug-04	00034	00036	MYSORE DELHI	18-Aug-04 12-Sep-06	Birth Transfer
66.	00067	100173 RATHNAM	M	30-Oct-05	00028	00037	MADRAS	30-Oct-05	Birth
67.	00068	M00677 HARSHITHA 00063B0101	F	5-Jul-05	00034	00026	MYSORE CHATBIR Z	5-Jul-05 8-Dec-06 14-Apr-08	Birth Transfer Death
68.	00069	M00678 00063B28C2 MANOJ	M	16-Jul-05	00034	00035	MYSORE CHATBIR Z	16-Jul-05 8-Dec-06 2-Jan-07	Birth Transfer Death
69.	00070	M00061 PREETHAM	M	17-Feb-06	00025	00031	MYSORE	17-Feb-06	Birth
70.	00071	PINKY	F	26-Feb-06	00032	00054	USGOWN HYDERABAD	26-Feb-06 12-Mar-10	Birth Transfer
71.	00072	M00062 ANUBHAV	M	11-May-06	00025	00009	MYSORE	11-May-06	Birth
72.	00073	M00096 SARITHA 2	F	23-May-06	00025	00018	MYSORE JUNAGADH	23-May-06 25-Feb-11 18-Apr-12	Birth Transfer Death
73.	00074	309/80 KAVERI	F	13-Mar-06	00013	00021	BANNERGHA	13-Mar-06 19-Jan-10	Birth Death
74.	00075	ROSA	F	19-Sep-06	00032	00024	USGOWN	19-Sep-06	Birth
75.	00077	100175 VIJAY	M	10-Apr-07	00028	00062	MADRAS	10-Apr-07	Birth
76.	00078	100174 SUBA	F	3-Jan-07	00028	00037	MADRAS	3-Jan-07	Birth

Sl. No.	National Studbook #	Local ID Name Transponder #	Sex	Birth Date	Sire	Dam	Location	Date	Event
77.	00079	M00063 SHESHAN	M	1-Feb-07	00025	00026	MYSORE JUNAGADH	1-Feb-07 25-Feb-11	Birth Transfer
78.	00080	M00681 ADITHYA	M	3-Jun-07	00034	00058	MYSORE RANCHI	3-Jun-07 15-Jul-09	Birth Transfer
79.	00081	M00682 ASHOKA	M	24-Jun-07	00025	00065	MYSORE CHATBIR Z	24-Jun-07 19-Sep-08	Birth Transfer
80.	00082	M00064 GOWRI 0063B72E5	F	1-Sep-07	00025	00018	MYSORE	1-Sep-07 3-Apr-12	Birth Death
81.	00083	M00097 SIDDHU 00063B0C20	M	25-Sep-07	00034	00031	MYSORE	25-Sep-07	Birth
82.	00084	M00098 HARSHA 00063B0314	M	31-Dec-07	00034	00053	MYSORE	31-Dec-07 9-Sep-13	Birth Death
83.	00085	UNM5	M	14-Dec-07	00063	00066	DELHI	14-Dec-07	Birth
84.	00086	BHIMA	M	30-Dec-07	00032	00024	USGOWN HYDERABAD	30-Dec-07 12-Mar-10	Birth Transfer
85.	00087	M00684 PRAKASH 00-063B-1896 10119	M	13-Mar-08	00057	00026	MYSORE PUNE	13-Mar-08 21-Sep-09	Birth Transfer
86.	00088	100176 LEKSHMI	F	11-Apr-08	00028	00037	MADRAS	11-Apr-08	Birth
87.	00089	M00683 RAGINI	F	9-Jan-08	00034	00035	MYSORE RANCHI	9-Jan-08 15-Jul-09	Birth Transfer
88.	00090	AVINASH	M	13-Mar-08	UNK	00018	MYSORE	13-Mar-08	Birth ltf
89.	00091	100177 SARANYA	F	17-Mar-09	00028	00062	MADRAS VISAKAPAT	17-Mar-09 19-Dec-12	Birth Transfer
90.	00092	M00685 HAMSA 00063AF- 363/PUNE 10118	F	30-Apr-08	00034	00036	MYSORE PUNE	30-Apr-08 21-Sep-09	Birth Transfer
91.	00093	314 MAYA	F	2-Feb-09	00047	00007	BANNERGHA	2-Feb-09 19-Jan-10	Birth Death
92.	00094	NONE BEEMA	M	????	WILD	WILD	INDIA MADRAS	~19 Mar 1987 19-Mar-87 21-Jul-94	Capture Transfer Death
93.	00095	M00100 SANJU 9.56E+14	M	5-Mar-04	00025	00026	MYSORE	5-Mar-04	Birth
94.	00097	310/81 SHANKAR	M	26-Jun-06	00013	00030	BANNERGHA	26-Jun-06 29-Sep-13	Birth Death
95.	00099	312/99 MANAV	M	2-Feb-07	00013	00021	BANNERGHA	2-Feb-07	Birth
96.	00100	313 KABEER	M	4-Jun-07	00013	00030	BANNERGHA	4-Jun-07 3-Aug-11	Birth Death
97.	00101	M00066 LIKITHA 0006CC17DA	F	21-Feb-09	00057	00026	MYSORE	21-Feb-09 7-Sep-11	Birth Death
98.	00102	M00099 PUNITH 00-063AC-6F7	M	25-Dec-08	00034	00053	MYSORE	25-Dec-08	Birth
99.	00103	M00065 RAVI	M	20-Dec-08	00057	00065	MYSORE	20-Dec-08	Birth

Sl. No.	National Studbook #	Local ID Name Transponder #	Sex	Birth Date	Sire	Dam	Location	Date	Event
100.	00104	M00686 RAMYA 00-06B7-5085	F	23-Apr-09	00034	00031	MYSORE	23-Apr-09 8-Jan-10	Birth Death
101.	00105	M00103 SUSHMA 0006CD2D39	F	4-Jul-09	00034	00058	MYSORE TRIVANDRU	4-Jul-09 25-Aug-11	Birth Transfer
102.	00106	M00104 GANGUBAI 0006CBDBE9	F	22-Jul-09	00034	00035	MYSORE TIRUPATI	22-Jul-09 13-Dec-11	Birth Transfer
103.	00107	M00105 RAKSHA 0006CC29E8	F	4-Aug-09	00034	00036	MYSORE TIRUPATI	4-Aug-09 13-Dec-11	Birth Transfer
104.	00108	314 GAYATHRI	F	10-Aug-09	00047	00074	BANNERGHA	10-Aug-09 5-Sep-12	Birth Death
105.	00109	M00067 NARASIMHA 0006B74F4F	M	22-Nov-09	00051	00026	MYSORE TIRUPATI	22-Nov-09 13-Dec-11	Birth Transfer
106.	00110	M00106 MAHADEVA 0006B75B54	M	2-Dec-09	00055	00073	MYSORE	2-Dec-09	Birth
107.	00111	M00107 VENKI 0006CC3690	M	19-Dec-09	00055	00053	MYSORE	19-Dec-09 4-Oct-10	Birth Death
108.	00112	M00068 PRUTHVI 0006CC30BE	M	26-Dec-09	00057	00018	MYSORE TRIVANDRU	26-Dec-09 25-Aug-11	Birth Transfer
109.	00113	M00069 SHIVRAJ 0006CBF2CC	M	2-Feb-10	00057	00082	MYSORE	2-Feb-10 5-Apr-12	Birth Death
110.	00114	M00070 RAGHAVENDRA 0006CBFEA4	M	14-Feb-10	00051	00065	MYSORE	14-Feb-10 19-Dec-10	Birth Death
111.	00115	100178 CAUVERY	F	25-Apr-10	00028	00062	MADRAS	25-Apr-10	Birth
112.	00116	M00108 ANJALI 0006CD0621 1004	F	13-Jun-10	00055	00058	MYSORE HYDERABAD	13-Jun-10 11-Sep-12	Birth Transfer
113.	00117	M00109 1003 ANITHA 0006CBFDBG	F	6-Jul-10	00055	00053	MYSORE HYDERABAD	6-Jul-10 11-Sep-12	Birth Transfer
114.	00118	M00110 YATHISH 0006CBD688	M	12-Aug-10	00055	00036	MYSORE	12-Aug-10 21-Apr-11	Birth Death
115.	00119	100179	M	12-Aug-10	00028	00078	MADRAS	12-Aug-10 27-Aug-10	Birth Death
116.	00120	M00111 DARSHINI 0006CBFA33	F	17-Nov-10	00055	00035	MYSORE PATNA	17-Nov-10 8-Jul-14	Birth Transfer
117.	00121	M00087 VISHNU 0006CBE987	M	14-Dec-10	00057	00082	MYSORE	14-Dec-10 31-Aug-14	Birth Death
118.	00122	M00086 AJITH 280005	M	3-Jan-11	00057	00026	MYSORE DELHI	3-Jan-11 26-Mar-14	Birth Transfer

Sl. No.	National Studbook #	Local ID Name Transponder #	Sex	Birth Date	Sire	Dam	Location	Date	Event
119.	00123	M00112 BABU	M	8-Jan-11	00055	00073	MYSORE PATNA	8-Jan-11 8-Jul-14	Birth Transfer
120.	00124	M00085 PRIYANKA 318	F	25-Jan-11	00057	00065	MYSORE BANNERGHA	25-Jan-11 28-Feb-12	Birth Transfer
121.	00125	M00088 AKANKSHA	F	8-Feb-11	00057	00018	MYSORE	8-Feb-11	Birth
122.	00126	100180	M	6-Apr-11	00028	00062	MADRAS	6-Apr-11 25-Jan-12	Birth Death
123.	00127	M00747 BHIM 9.56E+14	M	5-Jun-11	00034	00058	MYSORE	5-Jun-11 9-Apr-13	Birth Death
124.	00128	NONE DIVYA M00115	F	~ 1996	WILD	WILD	INDIA MYSORE	~ 1997 1-Jan-97 25-Apr-00	Capture Transfer Death
125.	00129	M00116 SWARNA	F	27-Feb-98	00008	00009	MYSORE	27-Feb-98 2-Jul-01	Birth Death
126.	00130	M00671 MUKTHA	F	8-Dec-99	00008	00009	MYSORE	8-Dec-99 12-Apr-02	Birth Death
127.	00131	M00673 AJAY	M	14-Sep-02	UNK	UNK	MYSORE MADRAS	14-Sep-02 21-Dec-03 29-Dec-03	Birth Transfer Death
128.	00132	_____	M	30-Jul-03	00019	00033	HYDERABAD	30-Jul-03	Birth
129.	00133	M00676 ARPITHA	F	12-Mar-05	00025	00031	MYSORE CHATBIR Z	12-Mar-05 8-Dec-06	Birth Transfer
130.	00134	M00680 GUNDA	M	31-Jan-07	00034	00053	MYSORE	31-Jan-07 13-Nov-07	Birth Death
131.	00135	NONE RAJVEER BG0011	M	~ Jan 2009	WILD	WILD	INDIA HYDERABAD	24-Feb-09 24-Feb-09	Capture Transfer
132.	00136	_____	M	9-Jun-09	UNK	UNK	DELHI	9-Jun-09	Birth
133.	00137	SAMSHER	M	28-Feb-10	UNK	UNK	USGOWN	28-Feb-10	Birth
134.	00138	_____	F	23-Jun-10	00081	UNK	CHATBIR Z	23-Jun-10	Birth
135.	00139	_____	F	3-Sep-10	00081	UNK	CHATBIR Z	3-Sep-10 6-Sep-10	Birth Death
136.	00140	NONE _____	M	????	WILD	WILD	INDIA VANVIHAR	3-Mar-11 3-Mar-11 26-Mar-11	Capture Transfer Death
137.	00141	NONE _____	F	????	WILD	WILD	INDIA VANVIHAR	17-Mar-11 17-Mar-11	Capture Transfer
138.	00142	NONE _____	F	????	WILD	WILD	INDIA VANVIHAR	17-Mar-11 17-Mar-11 19-Mar-11	Capture Transfer Death
139.	00143	100483	M	17-Jun-11	00067	00088	MADRAS	17-Jun-11 25-Jan-12	Birth Death
140.	00144	M00761 GEETHA 9.56E+14 280006	F	9-Jul-11	00034	00036	MYSORE DELHI	9-Jul-11 26-Mar-14	Birth Transfer
141.	00145	100484 KAVI	M	8-Aug-11	00067	00078	MADRAS	8-Aug-11	Birth
142.	00146	_____	?	20-Aug-11	00081	UNK	CHATBIR Z	20-Aug-11	Birth
143.	00147	_____	?	26-Aug-11	00081	UNK	CHATBIR Z	26-Aug-11	Birth
144.	00148	_____	M	13-Sep-11	WILD	00141	VANVIHAR	13-Sep-11	Birth
145.	00149	M00776 DEEPA	F	17-Sep-11	00034	00106	MYSORE BANNERGHA	17-Sep-11 28-Feb-12	Birth Transfer

Sl. No.	National Studbook #	Local ID Name Transponder #	Sex	Birth Date	Sire	Dam	Location	Date	Event
		9.56E+14 316							
146.	00150	M00791 KUMTA 9.56E+14	F	28-Oct-11	00034	00035	MYSORE BANNERGHA	28-Oct-11 28-Feb-12	Birth Transfer
147.	00151	M00801 BUDDHA	M	30-Dec-11	UNK	00018	MYSORE	30-Dec-11 31-Dec-11	Birth Death
148.	00152	M00822 TRIBHUVAN 9.56E+14	M	14-Jan-12	00070	00026	MYSORE	14-Jan-12	Birth
149.	00153	SWARUP	M	28-Jan-12	00080	00089	RANCHI	28-Jan-12	Birth
150.	00154	3	F	5-Feb-12	00079	00073	JUNAGADH	5-Feb-12	Birth
151.	00155	100485 ANUSHA	F	24-Feb-12	00067	00091	MADRAS	24-Feb-12	Birth
152.	00156	100486 REMA	F	25-Mar-12	00067	00062	MADRAS	25-Mar-12	Birth
153.	00157	_____	M	20-Apr-12	00081	UNK	CHATBIR Z	20-Apr-12 20-Apr-12	Birth Death
154.	00158	10180 SHAMBHU 0006B733CA	M	23-Apr-12	00087	00092	PUNE	23-Apr-12 25-Jul-13	Birth Death
155.	00159	M00870 VEENA 9.56E+14	F	29-Apr-12	00051	00065	MYSORE	29-Apr-12	Birth
156.	00160	M00872 PRABHU 9.56E+14	M	7-May-12	00055	00058	MYSORE	7-May-12 6-Aug-13	Birth Death
157.	00161	M00875 DHEERAJ 9.56E+14	M	16-Jun-12	00055	00036	MYSORE	16-Jun-12	Birth
158.	00162	_____	?	3-Aug-12	00081	UNK	CHATBIR Z	3-Aug-12	Birth
159.	00163	100487 RAMAKRISHNAN	M	24-Oct-12	00067	00078	MADRAS	24-Oct-12	Birth
160.	00164	M01005 KUMUDA 9.56E+14	F	20-Nov-12	00051	00026	MYSORE	20-Nov-12	Birth
161.	00165	100488	M	7-Jan-13	00067	00088	MADRAS	7-Jan-13	Birth
162.	00166	NAVIN	M	20-Jan-13	UNK	UNK	USGOWN	20-Jan-13	Birth
163.	00167	M01023 GOWRI 9.56E+14	F	24-Feb-13	00057	00018	MYSORE PATNA	24-Feb-13 8-Jul-14	Birth Transfer
164.	00168	100489	M	28-Mar-13	00067	00062	MADRAS	28-Mar-13	Birth
165.	00169	M01031 VANITHA 9.56E+14	F	29-Mar-13	00057	00065	MYSORE	29-Mar-13	Birth
166.	00170	AAZP26	M	3-Apr-13	00067	00115	MADRAS	3-Apr-13	Birth
167.	00171	REENA	F	4-Apr-13	00080	00089	RANCHI	4-Apr-13	Birth
168.	00172	M01050 KANAKA 9.56E+14	F	1-Jun-13	00055	00036	MYSORE	1-Jun-13	Birth
169.	00173	MO1069 SUREKHA	F	13-Sep-13	UNK	UNK	MYSORE	13-Sep-13	Birth
170.	00174	BG0013 GEETHA	F	21-Sep-13	00038	00117	HYDERABAD	21-Sep-13	Birth
171.	00175	NG1	F	12-Oct-13	UNK	UNK	MYSORE	12-Oct-13 13-Oct-13	Birth Death

Sl. No.	National Studbook #	Local ID Name Transponder #	Sex	Birth Date	Sire	Dam	Location	Date	Event
172.	00176	BG0012 SITA	F	7-Nov-13	00038	00116	HYDERABAD	7-Nov-13	Birth
173.	00177	M01084 KRISHNA	M	13-Dec-13	UNK	UNK	MYSORE	13-Dec-13	Birth
174.	00178	AAZP23	M	20-Jan-14	00067	00078	MADRAS	20-Jan-14 22-Jan-14	Birth Death
175.	00179	AAZP23	M	20-Jan-14	00067	00078	MADRAS	20-Jan-14 22-Jan-14	Birth Death
176.	00180	100521 AAZP-24	M	22-Feb-14	00067	00088	MADRAS	22-Feb-14	Birth
177.	00181	100520 AAZP-25	F	1-Mar-14	00067	00062	MADRAS	1-Mar-14	Birth
178.	00182	M01117	?	8-Jun-14	UNK	UNK	MYSORE	8-Jun-14	Birth
TOTALS: 94.80.4 (178)									

Appendix II

Living population of *Bos gaurus* location-wise

Sl. No.	National Studbook #	Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event
Rajiv Gandhi Zoological Park & Research Center, Pune									
1.	00087	M00684 PRAKASH 00-063B-1896 10119	M	13-Mar-08	00057	00026	MYSORE PUNE	13-Mar-08 21-Sep-09	Birth Transfer
2.	00092	M00685 HAMSA 00063AF- 363/PUNE	F	30-Apr-08	00034	00036	MYSORE PUNE	30-Apr-08 21-Sep-09	Birth Transfer
1.1.0(2)									
Sri Venkateswara Zoological Park, Tirupati,									
3.	00106	M00104 GANGUBAI 0006CBDBE9	F	22-Jul-09	00034	00035	MYSORE TIRUPATI	22-Jul-09 13-Dec-11	Birth Transfer
4.	00107	M00105 RAKSHA 0006CC29E8	F	4-Aug-09	00034	00036	MYSORE TIRUPATI	4-Aug-09 13-Dec-11	Birth Transfer
5.	00109	M00067 NARASIMHA 0006B74F4F	M	22-Nov-09	00051	00026	MYSORE TIRUPATI	22-Nov-09 13-Dec-11	Birth Transfer
1.2.0(3)									
Nehru Zoological Park, Hyderabad									
6.	00038	PREM BG0010	M	6-Dec-00	00001	00024	USGOWN HYDERABAD	6-Dec-00 19-Sep-09	Birth Transfer
7.	00071	PINKY	F	26-Feb-06	00032	00054	USGOWN HYDERABAD	26-Feb-06 12-Mar-10	Birth Transfer
8.	00086	BHIMA	M	30-Dec-07	00032	00024	USGOWN HYDERABAD	30-Dec-07 12-Mar-10	Birth Transfer
9.	00116	M00108 ANJALI 0006CD0621 1004	F	13-Jun-10	00055	00058	MYSORE HYDERABAD	13-Jun-10 11-Sep-12	Birth Transfer
10.	00117	M00109 1003 ANITHA 0006CBFDBG	F	6-Jul-10	00055	00053	MYSORE HYDERABAD	6-Jul-10 11-Sep-12	Birth Transfer
11.	00132	_____	M	30-Jul-03	00019	00033	HYDERABAD	30-Jul-03	Birth
12.	00135	NONE RAJVEER BG0011	M	~ Jan 2009	WILD	WILD	INDIA HYDERABAD	24-Feb-09 24-Feb-09	Capture Transfer
13.	00174	BG0013 GEETHA	F	21-Sep-13	00038	00117	HYDERABAD	21-Sep-13	Birth
14.	00176	BG0012 SITA	F	7-Nov-13	00038	00116	HYDERABAD	7-Nov-13	Birth
4.5.0(9)									
Indira Gandhi Zoological Park, Visakapatnam									
15.	00027	GOWHAR	M	12-Jan-98	00005	00016	HYDERABAD VISAKAPAT	12-Jan-98 13-Mar-00	Birth Transfer
16.	00039	GAYATRI _____	F	22-Dec-00	00005	00016	HYDERABAD VISAKAPAT	22-Dec-00 21-Sep-02	Birth Transfer
17.	00040	RESHMA _____-	F	15-Mar-01	00019	00016	HYDERABAD VISAKAPAT	15-Mar-01 15-Mar-04	Birth Transfer

Sl. No.	National Studbook #	Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event
18.	00052	SHIVA	M	30-Jul-03	00019	00033	HYDERABAD VISAKAPAT	30-Jul-03 29-Jan-04	Birth Transfer
19.	00054	RANI	F	4-Sep-03	00001	00024	USGOWN VISAKAPAT	4-Sep-03 17-Sep-09	Birth Transfer
20.	00091	100177 SARANYA	F	17-Mar-09	00028	00062	MADRAS VISAKAPAT	17-Mar-09 19-Dec-12	Birth Transfer
2.4.0(6)									
Sanjay Gandhi Biological Park, Patna									
21.	00120	M00111 DARSHINI 0006CBFA33	F	17-Nov-10	00055	00035	MYSORE PATNA	17-Nov-10 8-Jul-14	Birth Transfer
22.	00123	M00112 BABU	M	8-Jan-11	00055	00073	MYSORE PATNA	8-Jan-11 8-Jul-14	Birth Transfer
23.	00167	M01023 GOWRI 9.56E+14	F	24-Feb-13	00057	00018	MYSORE PATNA	24-Feb-13 8-Jul-14	Birth Transfer
1.2.0(3)									
Bhagwan Birsa Munda Biological Park, Ranchi									
24.	00080	M00681 ADITHYA	M	3-Jun-07	00034	00058	MYSORE RANCHI	3-Jun-07 15-Jul-09	Birth Transfer
25.	00089	M00683 RAGINI	F	9-Jan-08	00034	00035	MYSORE RANCHI	9-Jan-08 15-Jul-09	Birth Transfer
26.	00153	SWARUP	M	28-Jan-12	00080	00089	RANCHI	28-Jan-12	Birth
27.	00171	REENA	F	4-Apr-13	00080	00089	RANCHI	4-Apr-13	Birth
2.2.0(4)									
National Zoological Park, New Delhi									
28.	00063	UNM2 VIKRAM 00-063A-D194	M	~ 2000	00025	00018	MYSORE DELHI	~ 2000 12-Sep-06	Birth Transfer
29.	00066	M00675 PRIYA 280001	F	18-Aug-04	00034	00036	MYSORE DELHI	18-Aug-04 12-Sep-06	Birth Transfer
30.	00085	UNM5	M	14-Dec-07	00063	00066	DELHI	14-Dec-07	Birth
31.	00122	M00086 AJITH 280005	M	3-Jan-11	00057	00026	MYSORE DELHI	3-Jan-11 26-Mar-14	Birth Transfer
32.	00136	_____	M	9-Jun-09	UNK	UNK	DELHI	9-Jun-09	Birth
33.	00144	M00761 GEETHA 9.56E+14 280006	F	9-Jul-11	00034	00036	MYSORE DELHI	9-Jul-11 26-Mar-14	Birth Transfer
4.2.0(6)									
Bondla Zoo, Usgown									
34.	00024	ROSY	F	~ 1993	WILD	WILD	INDIA USGOWN	4-Nov-97 4-Nov-97	Capture Transfer
35.	00032	REMO	M	26-Oct-99	00001	00024	USGOWN	26-Oct-99	Birth
36.	00046	VEERU	M	20-Sep-02	00001	00024	USGOWN	20-Sep-02	Birth
37.	00061	SOMU	M	9-Sep-04	00032	00024	USGOWN	9-Sep-04	Birth
38.	00075	ROSA	F	19-Sep-06	00032	00024	USGOWN	19-Sep-06	Birth
39.	00137	SAMSHER	M	28-Feb-10	UNK	UNK	USGOWN	28-Feb-10	Birth
40.	00166	NAVIN	M	20-Jan-13	UNK	UNK	USGOWN	20-Jan-13	Birth
5.2.0(7)									
Sakkarbaugh Zoo Junagadh,									
41.	00079	M00063 SHESHAN	M	1-Feb-07	00025	00026	MYSORE JUNAGADH	1-Feb-07 25-Feb-11	Birth Transfer
42.	00154	3	F	5-Feb-12	00079	00073	JUNAGADH	5-Feb-12	Birth

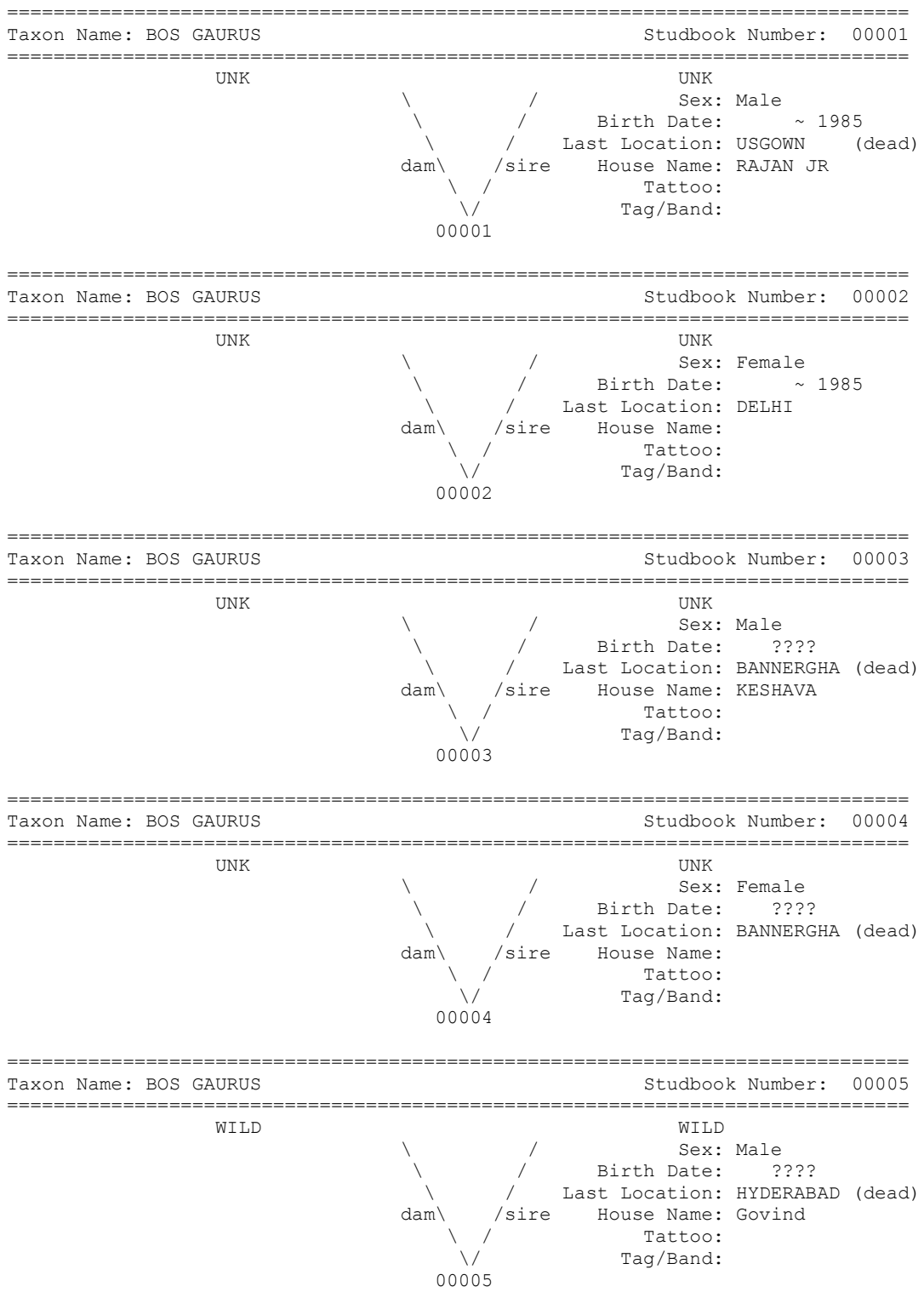
Sl. No.	National Studbook #	Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event
1.1.0(2)									
Thiruvananthapuram Zoo, Thiruvananthapuram									
43.	00105	M00103 SUSHMA 0006CD2D39	F	4-Jul-09	00034	00058	MYSORE TRIVANDRU	4-Jul-09 25-Aug-11	Birth Transfer
44.	00112	M00068 PRUTHVI 0006CC30BE	M	26-Dec-09	00057	00018	MYSORE TRIVANDRU	26-Dec-09 25-Aug-11	Birth Transfer
1.1.0(2)									
Van-Vihar National Park Bhopal									
45.	00141	NONE _____	F	????	WILD	WILD	INDIA VANVIHAR	17-Mar-11 17-Mar-11	Capture Transfer
46.	00148	_____	M	13-Sep-11	WILD	00141	VANVIHAR	13-Sep-11	Birth
1.1.0(2)									
Sri Chamarajendra Zoological Gardens, Mysore									
47.	00026	M00056 MEENA	F	16-Mar-97	00008	0009	MYSORE	16-Mar-97	Birth
48.	00034	M00090 LAARA	M	9-May-00	00022	00021	MYSORE	9-May-00	Birth
49.	00036	M00092 JASMINE	F	24-Aug-00	00025	00026	MYSORE	24-Aug-00	Birth
50.	00051	M00057 CHETAN	M	23-Mar-03	00025	00026	MYSORE	23-Mar-03	Birth
51.	00053	M00093 KALPANA	F	25-Aug-03	00034	00036	MYSORE	25-Aug-03	Birth
52.	00055	M00094 VIPIN	M	1-Oct-03	00025	00018	MYSORE	1-Oct-03	Birth
53.	00057	M00058 AMITH	M	16-Apr-04	00025	0009	MYSORE	16-Apr-04	Birth
54.	00065	M00059 VIOLAINE	F	23-Mar-05	00025	0009	MYSORE	23-Mar-05	Birth
55.	00070	M00061 PREETHAM	M	17-Feb-06	00025	00031	MYSORE	17-Feb-06	Birth
56.	00072	M00062 ANUBHAV	M	11-May-06	00025	00009	MYSORE	11-May-06	Birth
57.	00083	M00097 SIDDHU 00063B0C20	M	25-Sep-07	00034	00031	MYSORE	25-Sep-07	Birth
58.	00095	M00100 SANJU 9.56E+14	M	5-Mar-04	00025	00026	MYSORE	5-Mar-04	Birth
59.	00102	M00099 PUNITH 00-063AC-6F7	M	25-Dec-08	00034	00053	MYSORE	25-Dec-08	Birth
60.	00103	M00065 RAVI	M	20-Dec-08	00057	00065	MYSORE	20-Dec-08	Birth
61.	00110	M00106 MAHADEVA 0006B75B54	M	2-Dec-09	00055	00073	MYSORE	2-Dec-09	Birth
62.	00125	M00088 AKANKSHA	F	8-Feb-11	00057	00018	MYSORE	8-Feb-11	Birth
63.	00152	M00822 TRIBHUVAN 9.56E+14	M	14-Jan-12	00070	00026	MYSORE	14-Jan-12	Birth

Sl. No.	National Studbook #	Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event
64.	00159	M00870 VEENA 9.56E+14	F	29-Apr-12	00051	00065	MYSORE	29-Apr-12	Birth
65.	00161	M00875 DHEERAJ 9.56E+14	M	16-Jun-12	00055	00036	MYSORE	16-Jun-12	Birth
66.	00164	M01005 KUMUDA 9.56E+14	F	20-Nov-12	00051	00026	MYSORE	20-Nov-12	Birth
67.	00169	M01031 VANITHA 9.56E+14	F	29-Mar-13	00057	00065	MYSORE	29-Mar-13	Birth
68.	00172	M01050 KANAKA 9.56E+14	F	1-Jun-13	00055	00036	MYSORE	1-Jun-13	Birth
69.	00173	MO1069 SUREKHA	F	13-Sep-13	UNK	UNK	MYSORE	13-Sep-13	Birth
70.	00177	M01084 KRISHNA	M	13-Dec-13	UNK	UNK	MYSORE	13-Dec-13	Birth
71.	00182	M01117	?	8-Jun-14	UNK	UNK	MYSORE	8-Jun-14	Birth
14.10.1(25)									
Bannerghatta Biological Garden - National Park, Bangalore									
72.	00047	304/76 BHEEMA	M	12-Oct-02	00013	00021	BANNERGHA	12-Oct-02	Birth
73.	00048	307/78 BHARAT	M	~ Jan 2003	00013	00030	BANNERGHA	~ Jan 2003	Birth
74.	00099	312/99 MANAV	M	2-Feb-07	00013	00021	BANNERGHA	2-Feb-07	Birth
75.	00124	M00085 PRIYANKA 318	F	25-Jan-11	00057	00065	MYSORE BANNERGHA	25-Jan-11 28-Feb-12	Birth Transfer
76.	00149	M00776 DEEPA 9.56E+14 316	F	17-Sep-11	00034	00106	MYSORE BANNERGHA	17-Sep-11 28-Feb-12	Birth Transfer
77.	00150	M00791 KUMTA 9.56E+14	F	28-Oct-11	00034	00035	MYSORE BANNERGHA	28-Oct-11 28-Feb-12	Birth Transfer
3.3.0(6)									
M C Zoological Park Chat-Bir									
78.	00059	ANJU 00063B3B7D	F	27-Feb-06	00034	00036	MYSORE CHATBIR Z	27-Feb-06 8-Dec-06	Birth Transfer
79.	00081	M00682 ASHOKA	M	24-Jun-07	00025	00065	MYSORE CHATBIR Z	24-Jun-07 19-Sep-08	Birth Transfer
80.	00133	M00676 ARPITHA	F	12-Mar-05	00025	00031	MYSORE CHATBIR Z	12-Mar-05 8-Dec-06	Birth Transfer
81.	00138	_____	F	23-Jun-10	00081	UNK	CHATBIR Z	23-Jun-10	Birth
82.	00146	_____	?	20-Aug-11	00081	UNK	CHATBIR Z	20-Aug-11	Birth
83.	00147	_____	?	26-Aug-11	00081	UNK	CHATBIR Z	26-Aug-11	Birth
84.	00162	_____	?	3-Aug-12	00081	UNK	CHATBIR Z	3-Aug-12	Birth
1.3.3(7)									
Arignar Anna Zoological Garden, Chennai									
85.	00062	NONE GEETHA 100172	F	~ Apr 2004	WILD	WILD	INDIA MADRAS	14-Dec-04 15-Dec-04	Capture Transfer

Sl. No.	National Studbook #	Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event
86.	00067	100173 RATHNAM	M	30-Oct-05	00028	00037	MADRAS	30-Oct-05	Birth
87.	00077	100175 VIJAY	M	10-Apr-07	00028	00062	MADRAS	10-Apr-07	Birth
88.	00078	100174 SUBA	F	3-Jan-07	00028	00037	MADRAS	3-Jan-07	Birth
89.	00088	100176 LEKSHMI	F	11-Apr-08	00028	00037	MADRAS	11-Apr-08	Birth
90.	00115	100178 CAUVERY	F	25-Apr-10	00028	00062	MADRAS	25-Apr-10	Birth
91.	00145	100484 KAVI	M	8-Aug-11	00067	00078	MADRAS	8-Aug-11	Birth
92.	00155	100485 ANUSHA	F	24-Feb-12	00067	00091	MADRAS	24-Feb-12	Birth
93.	00156	100486 REMA	F	25-Mar-12	00067	00062	MADRAS	25-Mar-12	Birth
94.	00163	100487 RAMAKRISHNAN	M	24-Oct-12	00067	00078	MADRAS	24-Oct-12	Birth
95.	00165	100488	M	7-Jan-13	00067	00088	MADRAS	7-Jan-13	Birth
96.	00168	100489	M	28-Mar-13	00067	00062	MADRAS	28-Mar-13	Birth
97.	00170	AAZP26	M	3-Apr-13	00067	00115	MADRAS	3-Apr-13	Birth
98.	00180	100521 AAZP-24	M	22-Feb-14	00067	00088	MADRAS	22-Feb-14	Birth
99.	00181	100520 AAZP-25	F	1-Mar-14	00067	00062	MADRAS	1-Mar-14	Birth
8.7.0(15)									
TOTALS: 49.46.4 (99) 15 INSTITUTIONS									

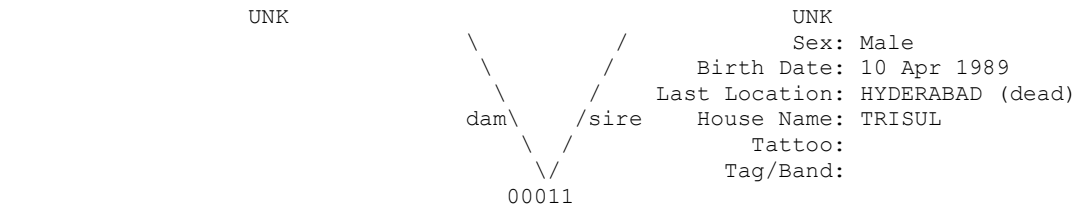
Appendix III

Pedigree Chart Report GAUR Studbook

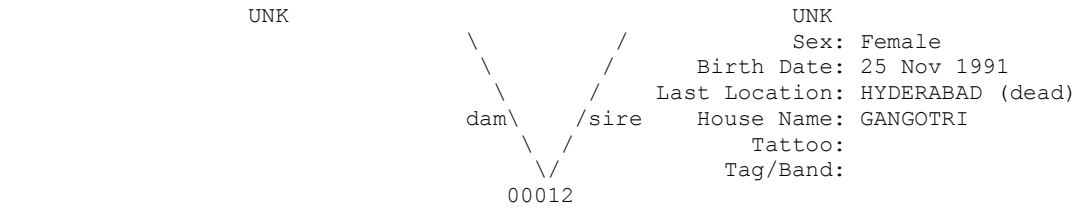


```
Taxon Name: BOS GAURUS                                  Studbook Number:  00006
================================================================================
                  UNK                                       UNK
                                   \          /             Sex: Female
                                    \        /       Birth Date: 16 Sep 1987
                                     \      /     Last Location: HYDERABAD (dead)
                                   dam\    /sire     House Name: GANGAWATHI
                                       \  /                Tattoo:
                                        \/               Tag/Band:
                                     00006

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00007
================================================================================
                  WILD                                      WILD
                                   \          /             Sex: Female
                                    \        /       Birth Date:      ~ 1998
                                     \      /     Last Location: BANNERGHA (dead)
                                   dam\    /sire     House Name: Rani
                                       \  /                Tattoo:
                                        \/               Tag/Band:
                                     00007

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00008
================================================================================
                  WILD                                      WILD
                                   \          /             Sex: Male
                                    \        /       Birth Date:      ~ 1984
                                     \      /     Last Location: MYSORE    (dead)
                                   dam\    /sire     House Name: SHERU
                                       \  /                Tattoo:
                                        \/               Tag/Band:
                                     00008

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00009
================================================================================
                  WILD                                      WILD
                                   \          /             Sex: Female
                                    \        /       Birth Date:      ~ 1988
                                     \      /     Last Location: MYSORE    (dead)
                                   dam\    /sire     House Name: RANI I
                                       \  /                Tattoo:
                                        \/               Tag/Band:
                                     00009

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00010
================================================================================
        UNK                 UNK                 UNK                 UNK
              dam\    /sire                               dam\    /sire
                  \  /                                        \  /
                   \/                                          \/
                00004                                       00003
                                                            KESHAVA
                                   \          /
                                    \        /             Sex: Female
                                     \      /       Birth Date:  3 Apr 1989
                                     \      /     Last Location: BANNERGHA
                                   dam\    /sire     House Name: VARUNDA
                                       \  /                Tattoo:
                                        \/               Tag/Band:
                                     00010


================================================================================
```

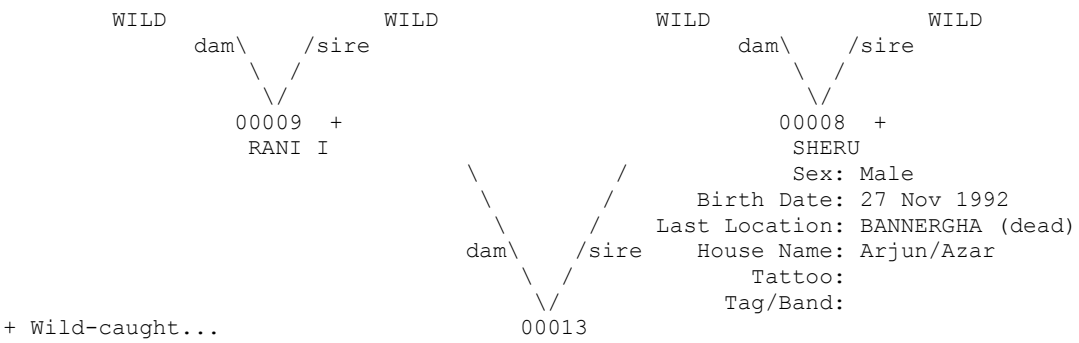
Taxon Name: BOS GAURUS Studbook Number: 00011



Taxon Name: BOS GAURUS Studbook Number: 00012



Taxon Name: BOS GAURUS Studbook Number: 00013

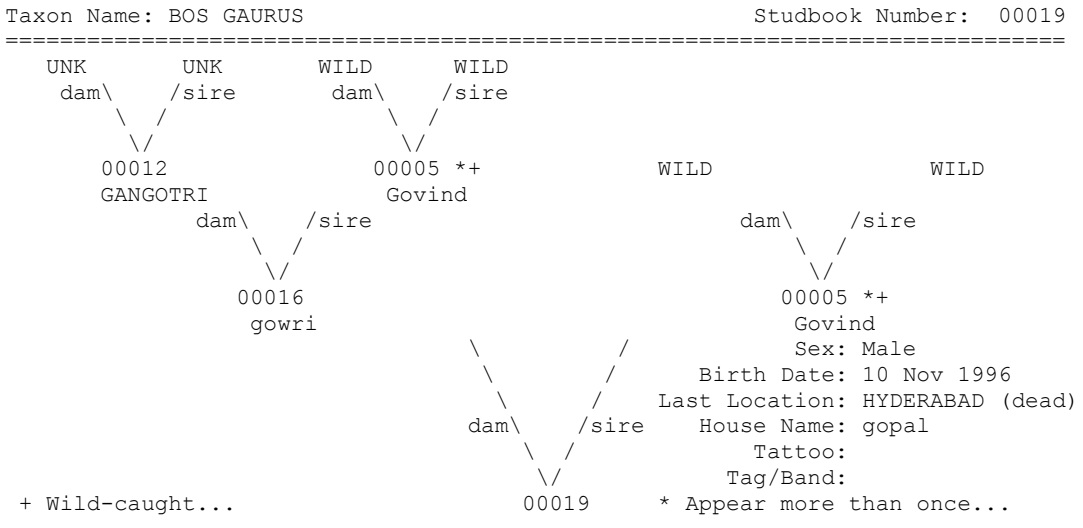


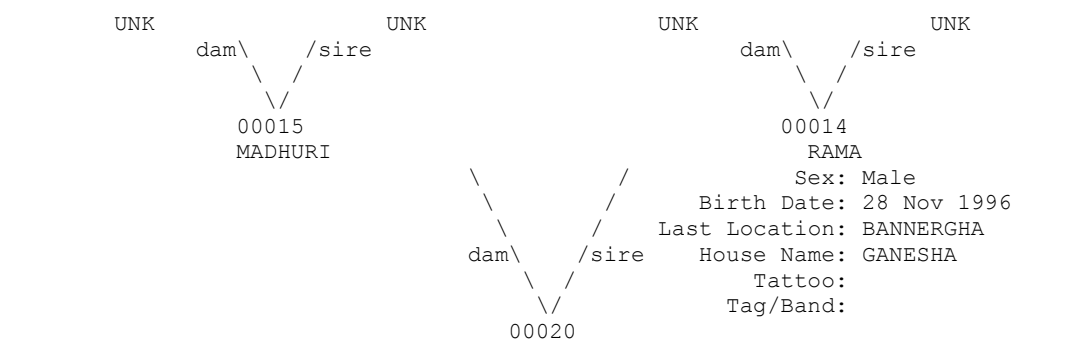
+ Wild-caught...

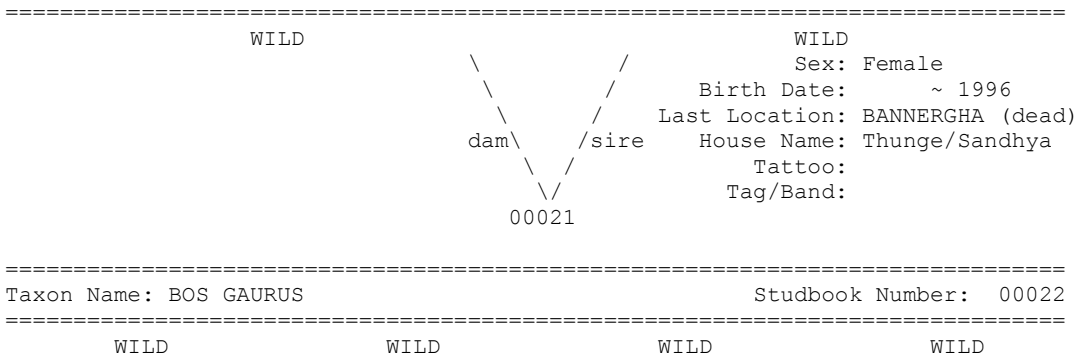
Taxon Name: BOS GAURUS Studbook Number: 00014

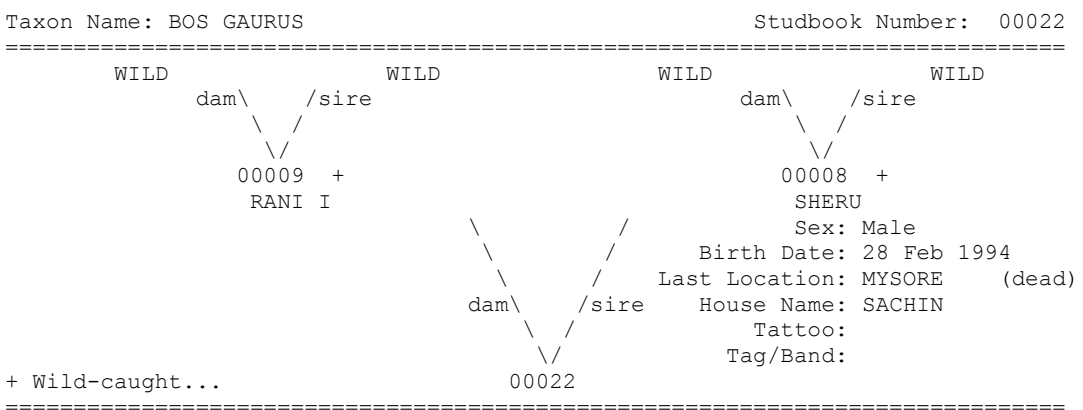
Taxon Name: BOS GAURUS Studbook Number: 00015

```
Taxon Name: BOS GAURUS                                  Studbook Number:  00016
================================================================================
        UNK                 UNK                 WILD                 WILD
              dam\    /sire                       dam\    /sire
                  \  /                                \  /
                   \/                                  \/
                 00012                               00005  +
                 GANGOTRI                             Govind

                                    \          /           Sex: Female
                                     \        /     Birth Date:  1 Nov 1993
                                      \      /    Last Location: HYDERABAD (dead)
                                    dam\    /sire    House Name: gowri
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                       00016

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00017
================================================================================
                 UNK                                      UNK
                                    \          /           Sex: Female
                                     \        /     Birth Date:      ~ 1996
                                      \      /    Last Location: HYDERABAD (dead)
                                    dam\    /sire    House Name: RADHA
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                       00017

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00018
================================================================================
        WILD                WILD                WILD                 WILD
              dam\    /sire                       dam\    /sire
                  \  /                                \  /
                   \/                                  \/
                 00009  +                            00008  +
                  RANI I                              SHERU
                                    \          /           Sex: Female
                                     \        /     Birth Date: 22 Mar 1996
                                      \      /    Last Location: MYSORE    (dead)
                                    dam\    /sire    House Name: MADHURI
                                        \  /             Tattoo:
                                         \/            Tag/Band: CZA/CBO158 (RIG
+ Wild-caught...                       00018

================================================================================
```


Taxon Name: BOS GAURUS
Studbook Number: 00019
UNK
UNK
WILD
WILD
dam\
/sire
dam\
/sire
00012
GANGOTRI
00005 *+
Govind
WILD
WILD
dam\
/sire
dam\
/sire
00016
gowri
00005 *+
Govind
Sex: Male
Birth Date: 10 Nov 1996
Last Location: HYDERABAD (dead)
House Name: gopal
Tattoo:
Tag/Band:
dam\
/sire
00019
+ Wild-caught...
* Appear more than once...


Taxon Name: BOS GAURUS
Studbook Number: 00020
UNK
UNK
UNK
UNK
dam\
/sire
dam\
/sire
00015
MADHURI
00014
RAMA
Sex: Male
Birth Date: 28 Nov 1996
Last Location: BANNERGHA
House Name: GANESHA
Tattoo:
Tag/Band:
dam\
/sire
00020


Taxon Name: BOS GAURUS
Studbook Number: 00021
WILD
WILD
Sex: Female
Birth Date: ~ 1996
Last Location: BANNERGHA (dead)
House Name: Thunge/Sandhya
Tattoo:
Tag/Band:
dam\
/sire
00021

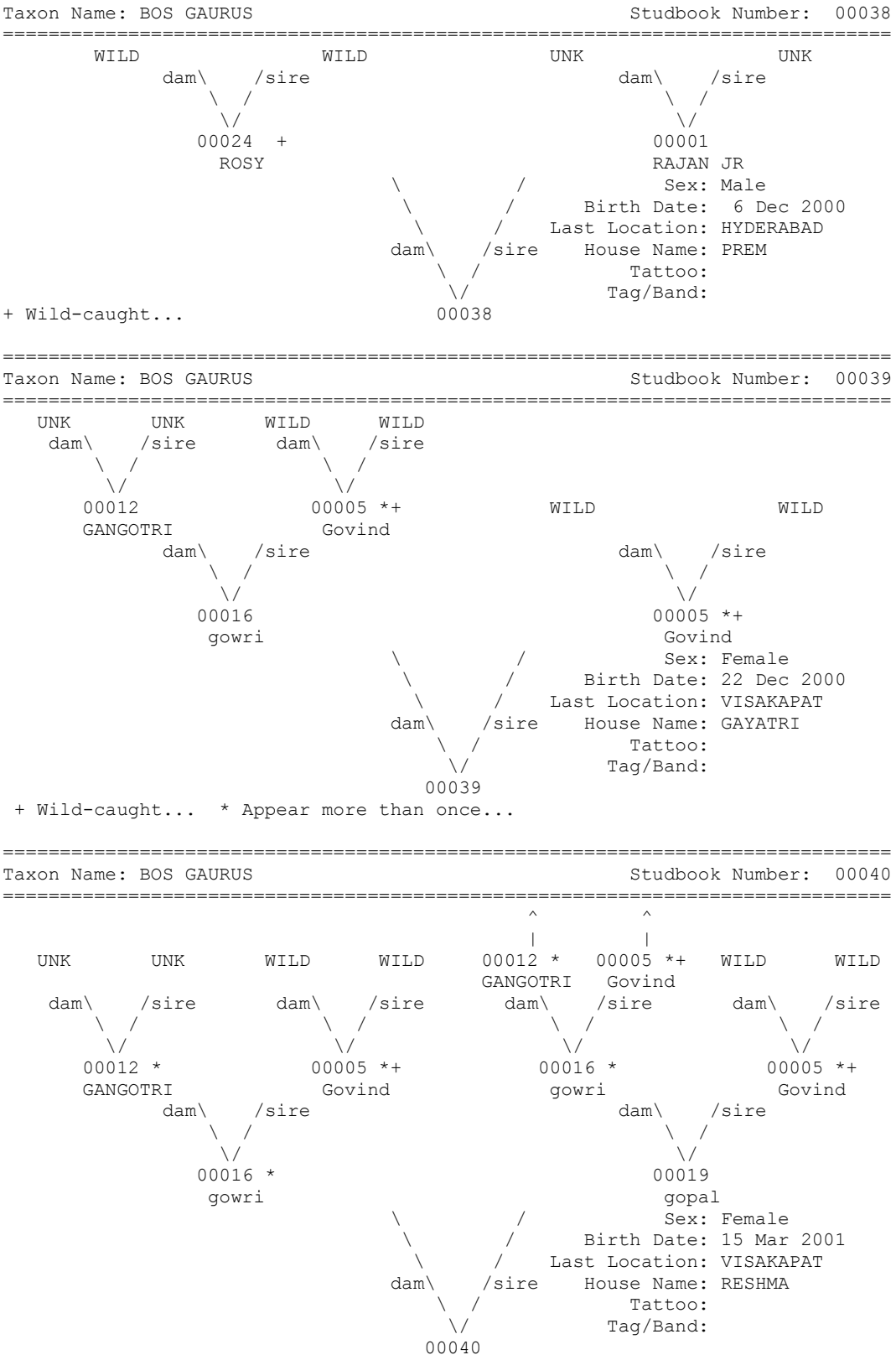

Taxon Name: BOS GAURUS
Studbook Number: 00022
WILD
WILD
WILD
WILD
dam\
/sire
dam\
/sire
00009 +
RANI I
00008 +
SHERU
Sex: Male
Birth Date: 28 Feb 1994
Last Location: MYSORE (dead)
House Name: SACHIN
Tattoo:
Tag/Band:
dam\
/sire
00022
+ Wild-caught...

```
Taxon Name: BOS GAURUS                                  Studbook Number:  00024
================================================================================
                  WILD                                      WILD
                                    \          /            Sex: Female
                                     \        /      Birth Date:      ~ 1993
                                      \      /    Last Location: USGOWN
                                    dam\    /sire    House Name: ROSY
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                       00024

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00025
================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                             dam\    /sire
                  \  /                                      \  /
                   \/                                        \/
                00009  +                                  00008  +
                 RANI I                                    SHERU
                                    \          /            Sex: Male
                                     \        /      Birth Date:  6 Apr 1995
                                      \      /    Last Location: MYSORE    (dead)
                                    dam\    /sire    House Name: Anil
                                        \  /             Tattoo:
                                         \/            Tag/Band:
  + Wild-caught...                    00025

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00026
================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                             dam\    /sire
                  \  /                                      \  /
                   \/                                        \/
                00009  +                                  00008  +
                 RANI I                                    SHERU
                                    \          /            Sex: Female
                                     \        /      Birth Date: 16 Mar 1997
                                      \      /    Last Location: MYSORE
                                    dam\    /sire    House Name: MEENA
                                        \  /             Tattoo:
                                         \/            Tag/Band: CZA/CBO156
  + Wild-caught...                    00026

================================================================================
 Taxon Name: BOS GAURUS                                 Studbook Number:  00027
================================================================================
   UNK       UNK       WILD      WILD
    dam\    /sire       dam\    /sire
        \  /                \  /
         \/                  \/
       00012               00005 *+            WILD                WILD
       GANGOTRI             Govind
              dam\    /sire                             dam\    /sire
                  \  /                                      \  /
                   \/                                        \/
                00016                                     00005 *+
                 gowri                                     Govind
                                    \          /            Sex: Male
                                     \        /      Birth Date: 12 Jan 1998
                                      \      /    Last Location: VISAKAPAT
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
 + Wild-caught...                     00027     * Appear more than once...
================================================================================
```

```
Taxon Name: BOS GAURUS                                  Studbook Number:  00028
================================================================================
                  WILD                                      WILD
                                    \          /            Sex: Male
                                     \        /      Birth Date:      ~ 1995
                                      \      /    Last Location: MADRAS    (dead)
                                    dam\    /sire    House Name: MANI
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                       00028

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00029
================================================================================
        WILD                WILD                UNK                 UNK
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                00024  +                                00001
                  ROSY                                  RAJAN JR
                                    \          /            Sex: Male
                                     \        /      Birth Date: 31 Aug 1998
                                      \      /    Last Location: MOLEM
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                      00029

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00030
================================================================================
        WILD                WILD                WILD                WILD
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                00009  +                                00008  +
                 RANI I                                  SHERU
                                    \          /            Sex: Female
                                     \        /      Birth Date: 12 Jan 1999
                                      \      /    Last Location: BANNERGHA (dead)
                                    dam\    /sire    House Name: Gange/Manisha
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                      00030

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00031
================================================================================
   WILD      WILD      WILD      WILD
    dam\    /sire       dam\    /sire
        \  /                \  /
         \/                  \/
       00009  +            00008 *+            WILD                WILD
        RANI I              SHERU
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                00018                                   00008 *+
                MADHURI                                 SHERU
                                    \          /            Sex: Female
                                     \        /      Birth Date:  7 Mar 1999
                                      \      /    Last Location: MYSORE    (dead)
                                    dam\    /sire    House Name: SUNDARI
                                        \  /             Tattoo:
                                         \/            Tag/Band: CZA/CBO154
+ Wild-caught...                      00031     * Appear more than once...
================================================================================
```

```
Taxon Name: BOS GAURUS                                  Studbook Number:  00032
================================================================================
        WILD                WILD                UNK                 UNK
              dam\    /sire                       dam\    /sire
                  \  /                                \  /
                   \/                                  \/
                00024  +                            00001
                  ROSY                              RAJAN JR
                                  \          /          Sex: Male
                                   \        /      Birth Date: 26 Oct 1999
                                    \      /    Last Location: USGOWN
                                  dam\    /sire    House Name: REMO
                                      \  /            Tattoo:
                                       \/           Tag/Band:
+ Wild-caught...                    00032

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00033
================================================================================
   UNK       UNK       WILD      WILD
    dam\    /sire       dam\    /sire
        \  /                \  /
         \/                  \/
       00012               00005 *+            WILD                WILD
       GANGOTRI            Govind
              dam\    /sire                       dam\    /sire
                  \  /                                \  /
                   \/                                  \/
                00016                               00005 *+
                 gowri                               Govind
                                  \          /          Sex: Female
                                   \        /      Birth Date: 11 Dec 1999
                                    \      /    Last Location: HYDERABAD (dead)
                                  dam\    /sire    House Name: GAUTAMI
                                      \  /            Tattoo:
                                       \/           Tag/Band:
+ Wild-caught...                    00033      * Appear more than once...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00034
================================================================================
                                          WILD      WILD      WILD      WILD
                                           dam\    /sire       dam\    /sire
                                               \  /                \  /
                                                \/                  \/
        WILD                WILD               00009  +            00008  +
                                                RANI I               SHERU
              dam\    /sire                       dam\    /sire
                  \  /                                \  /
                   \/                                  \/
                00021  +                            00022
                Thunge/S                             SACHIN
                                  \          /          Sex: Male
                                   \        /      Birth Date:  9 May 2000
                                    \      /    Last Location: MYSORE
                                  dam\    /sire    House Name: LAARA
                                      \  /            Tattoo:
                                       \/           Tag/Band: CZA/CBO147 (LEF
+ Wild-caught...                    00034

================================================================================
```

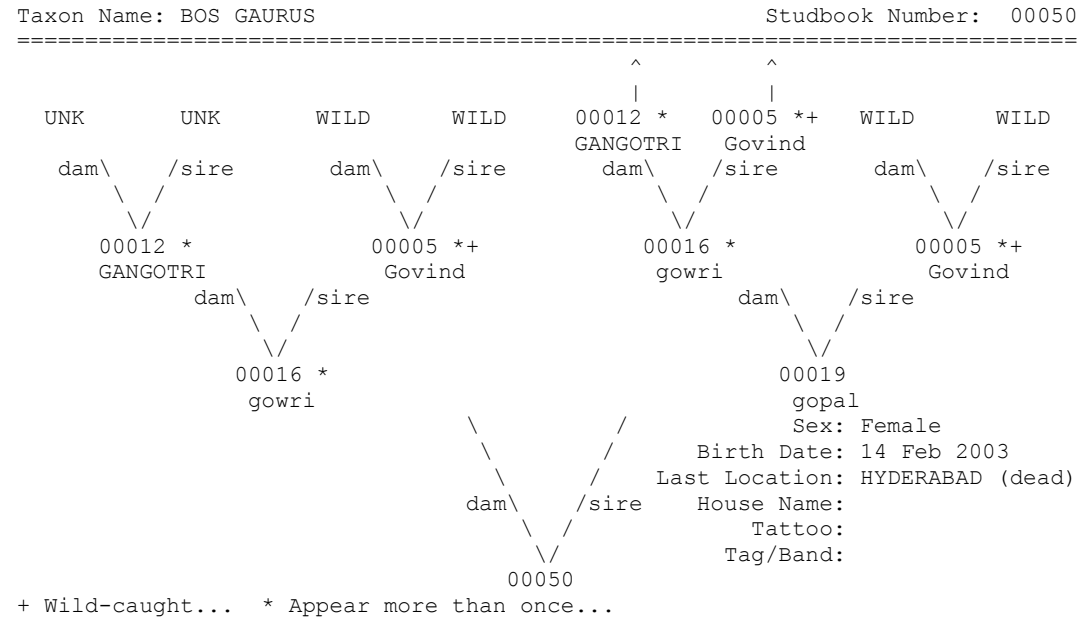
```
Taxon Name: BOS GAURUS                                  Studbook Number:  00035
================================================================================
   WILD      WILD      WILD      WILD      WILD      WILD      WILD      WILD
    dam\    /sire      dam\    /sire      dam\    /sire      dam\    /sire
        \  /               \  /               \  /               \  /
         \/                 \/                 \/                 \/
      00009 *+           00008 *+           00009 *+           00008 *+
       RANI I             SHERU              RANI I             SHERU
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
               00018                                   00025
               MADHURI                                   Anil
                                  \          /           Sex: Female
                                   \        /      Birth Date: 12 Aug 2000
                                    \      /    Last Location: MYSORE    (dead)
                                  dam\    /sire    House Name: ROSE
                                      \  /             Tattoo:
                                       \/            Tag/Band: CZA/CBO150 (RIG
+ Wild-caught...                    00035       * Appear more than once...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00036
================================================================================
   WILD      WILD      WILD      WILD      WILD      WILD      WILD      WILD
    dam\    /sire      dam\    /sire      dam\    /sire      dam\    /sire
        \  /               \  /               \  /               \  /
         \/                 \/                 \/                 \/
      00009 *+           00008 *+           00009 *+           00008 *+
       RANI I             SHERU              RANI I             SHERU
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
               00026                                   00025
                MEENA                                    Anil
                                  \          /           Sex: Female
                                   \        /      Birth Date: 24 Aug 2000
                                    \      /    Last Location: MYSORE
                                  dam\    /sire    House Name: JASMINE
                                      \  /             Tattoo:
                                       \/            Tag/Band: CZA/CBO151
+ Wild-caught...                    00036       * Appear more than once...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00037
================================================================================
                                          WILD      WILD      WILD      WILD
                                           dam\    /sire      dam\    /sire
                                               \  /               \  /
                                                \/                 \/
       WILD               WILD               00009 *+           00008  +
                                              RANI I             SHERU
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
               00009 *+                                00025
                RANI I                                   Anil
                                  \          /           Sex: Female
                                   \        /      Birth Date:  6 Nov 2000
                                    \      /    Last Location: MADRAS    (dead)
                                  dam\    /sire    House Name: LILLY/MEENA
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                    00037     * Appear more than once...


================================================================================
```

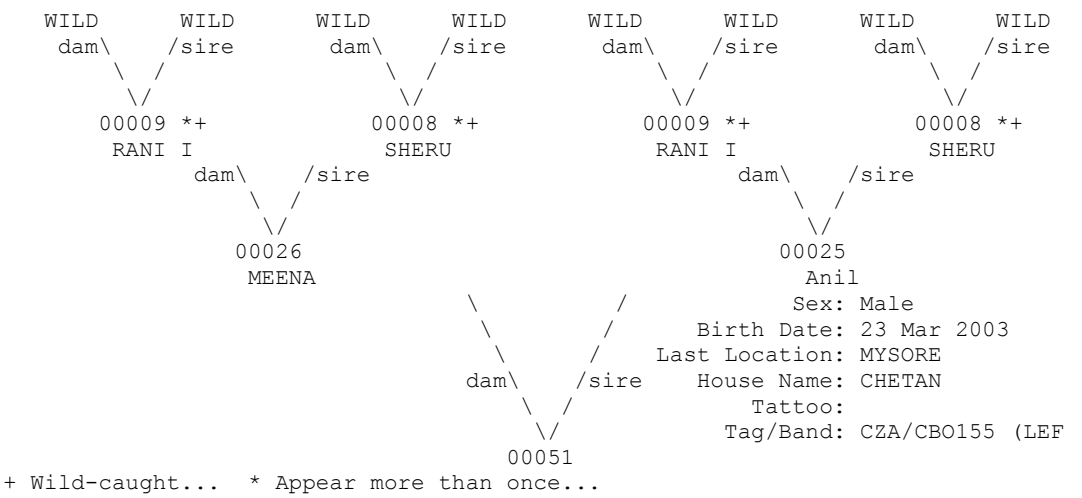

Taxon Name: BOS GAURUS
Studbook Number: 00038
WILD
WILD
UNK
UNK
dam\ /sire
dam\ /sire
00024 +
ROSY
00001
RAJAN JR
Sex: Male
Birth Date: 6 Dec 2000
Last Location: HYDERABAD
House Name: PREM
Tattoo:
Tag/Band:
dam\ /sire
00038
+ Wild-caught...
Taxon Name: BOS GAURUS
Studbook Number: 00039
UNK
UNK
WILD
WILD
dam\ /sire
dam\ /sire
00012
GANGOTRI
00005 *+
Govind
WILD
WILD
dam\ /sire
dam\ /sire
00016
gowri
00005 *+
Govind
Sex: Female
Birth Date: 22 Dec 2000
Last Location: VISAKAPAT
House Name: GAYATRI
Tattoo:
Tag/Band:
dam\ /sire
00039
+ Wild-caught... * Appear more than once...
Taxon Name: BOS GAURUS
Studbook Number: 00040
^
|
UNK
UNK
WILD
WILD
00012 *
GANGOTRI
00005 *+
Govind
WILD
WILD
dam\ /sire
dam\ /sire
dam\ /sire
dam\ /sire
00012 *
GANGOTRI
00005 *+
Govind
00016 *
gowri
00005 *+
Govind
dam\ /sire
dam\ /sire
00016 *
gowri
00019
gopal
Sex: Female
Birth Date: 15 Mar 2001
Last Location: VISAKAPAT
House Name: RESHMA
Tattoo:
Tag/Band:
dam\ /sire
00040
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

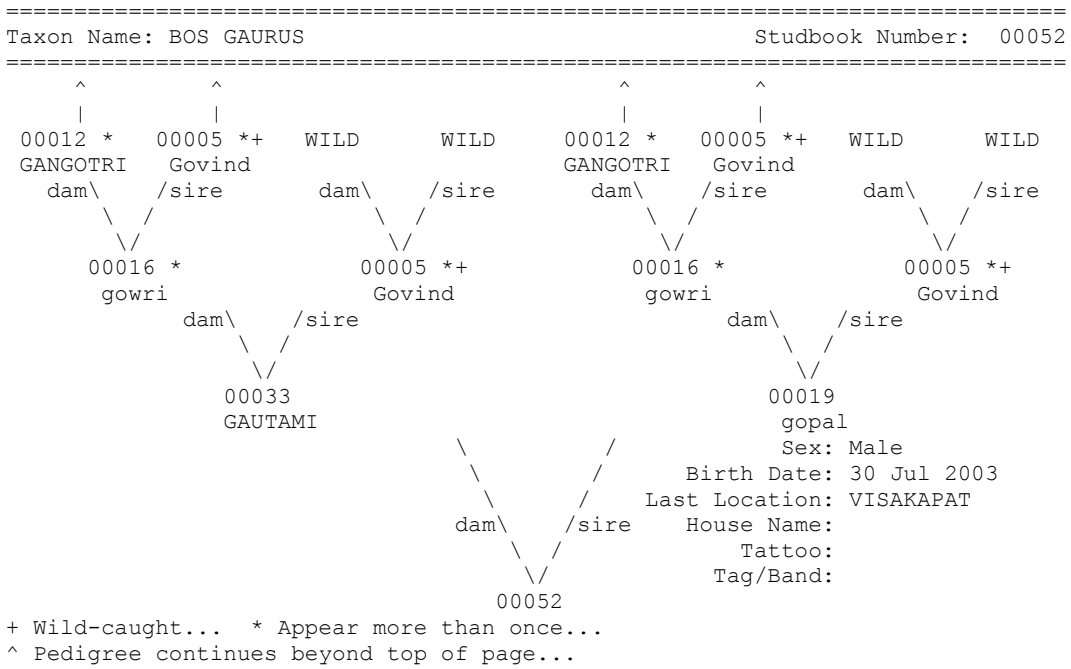
```
Taxon Name: BOS GAURUS                                  Studbook Number:  00041
================================================================================
                  WILD                                      WILD
                                    \          /            Sex: Male
                                     \        /      Birth Date:    ????
                                      \      /    Last Location: SEPAHIJAL (dead)
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                       00041

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00042
================================================================================
        WILD                WILD                UNK                 UNK
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                00024  +                                00001
                  ROSY                                  RAJAN JR
                                    \          /            Sex: Male
                                     \        /      Birth Date:  6 Oct 2001
                                      \      /    Last Location: USGOWN    (dead)
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                       00042
+ Wild-caught...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00043
================================================================================
                                            WILD      WILD      WILD      WILD
                                             dam\    /sire       dam\    /sire
                                                 \  /                \  /
                                                  \/                  \/
        WILD                WILD                00009  +            00008  +
                                                  RANI I              SHERU
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                00021  +                                00013
                Thunge/S                                Arjun/Az
                                    \          /            Sex: Male
                                     \        /      Birth Date:  ~ Jan 2005
                                      \      /    Last Location: BANNERGHA (dead)
                                    dam\    /sire    House Name: CHATURTHA
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                      00043

================================================================================
```

```
Taxon Name: BOS GAURUS                                  Studbook Number:  00044
================================================================================
                                        UNK       UNK       UNK       UNK
                                         dam\    /sire       dam\    /sire
                                             \  /                \  /
                                              \/                  \/
        UNK                 UNK                 00015 *             00014
                                                MADHURI               RAMA
              dam\    /sire                             dam\    /sire
                  \  /                                      \  /
                   \/                                        \/
                00015 *                                   00020
                MADHURI                                   GANESHA
                                    \          /            Sex: Male
                                     \        /      Birth Date:  9 Apr 2002
                                      \      /    Last Location: BANNERGHA
                                    dam\    /sire    House Name: RANGANATH
                                        \  /             Tattoo:
                                         \/            Tag/Band:
* Appear more than once...            00044

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00045
================================================================================
   WILD      WILD      WILD      WILD      WILD      WILD      WILD      WILD
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
       00009 *+            00008 *+            00009 *+            00008 *+
        RANI I              SHERU               RANI I              SHERU
              dam\    /sire                             dam\    /sire
                  \  /                                      \  /
                   \/                                        \/
                00030                                     00013
                Gange/Ma                                  Arjun/Az
                                    \          /            Sex: Male
                                     \        /      Birth Date:      ~ 2002
                                      \      /    Last Location: BANNERGHA (dead)
                                    dam\    /sire    House Name: BALARAMA
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                     00045     * Appear more than once...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00046
================================================================================
        WILD                WILD                UNK                 UNK
              dam\    /sire                             dam\    /sire
                  \  /                                      \  /
                   \/                                        \/
                00024  +                                  00001
                  ROSY                                    RAJAN JR
                                    \          /            Sex: Male
                                     \        /      Birth Date: 20 Sep 2002
                                      \      /    Last Location: USGOWN
                                    dam\    /sire    House Name: VEERU
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                     00046

================================================================================
```

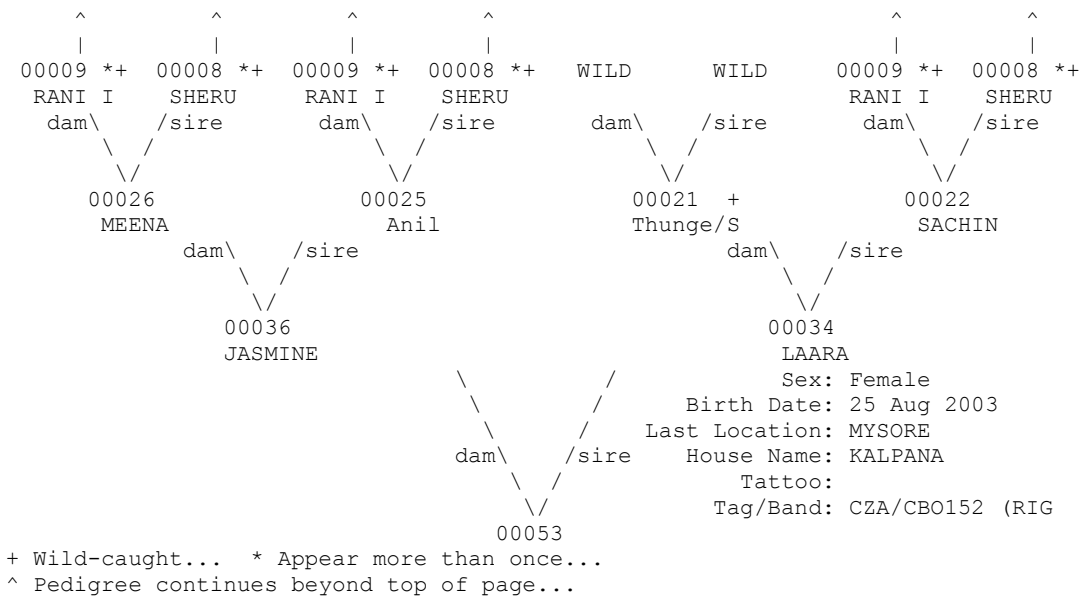
```
Taxon Name: BOS GAURUS                                  Studbook Number:  00047
================================================================================
                                        WILD      WILD      WILD      WILD
                                         dam\    /sire       dam\    /sire
                                             \  /                \  /
                                              \/                  \/
        WILD                WILD                00009  +            00008  +
                                                 RANI I              SHERU
              dam\    /sire                            dam\    /sire
                  \  /                                     \  /
                   \/                                       \/
                00021  +                                 00013
                Thunge/S                                 Arjun/Az
                                  \          /            Sex: Male
                                   \        /      Birth Date: 12 Oct 2002
                                    \      /    Last Location: BANNERGHA
                                  dam\    /sire    House Name: bheema
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                    00047

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00048
================================================================================
   WILD      WILD      WILD      WILD      WILD      WILD      WILD      WILD
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
       00009 *+            00008 *+            00009 *+            00008 *+
        RANI I              SHERU               RANI I              SHERU
              dam\    /sire                            dam\    /sire
                  \  /                                     \  /
                   \/                                       \/
                00030                                    00013
                Gange/Ma                                 Arjun/Az
                                  \          /            Sex: Male
                                   \        /      Birth Date:  ~ Jan 2003
                                    \      /    Last Location: BANNERGHA
                                  dam\    /sire    House Name: bharat
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                    00048     * Appear more than once...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00049
================================================================================
                                        WILD      WILD      WILD      WILD
                                         dam\    /sire       dam\    /sire
                                             \  /                \  /
                                              \/                  \/
        WILD                WILD                00009 *+            00008  +
                                                 RANI I              SHERU
              dam\    /sire                            dam\    /sire
                  \  /                                     \  /
                   \/                                       \/
                00009 *+                                 00025
                 RANI I                                    Anil
                                  \          /            Sex: Male
                                   \        /      Birth Date: 27 May 2003
                                    \      /    Last Location: MYSORE    (dead)
                                  dam\    /sire    House Name: BHUVAN
                                      \  /             Tattoo:
                                       \/            Tag/Band: CZA/CBO149
+ Wild-caught...                    00049      * Appear more than once...


 ================================================================================
```


Taxon Name: BOS GAURUS
Studbook Number: 00050
UNK
UNK
WILD
WILD
00012 *
GANGOTRI
00005 *+
Govind
WILD
WILD
dam\
/sire
00012 *
GANGOTRI
00005 *+
Govind
00016 *
gowri
00016 *
gowri
00019
gopal
Sex: Female
Birth Date: 14 Feb 2003
Last Location: HYDERABAD (dead)
House Name:
Tattoo:
Tag/Band:
00050
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

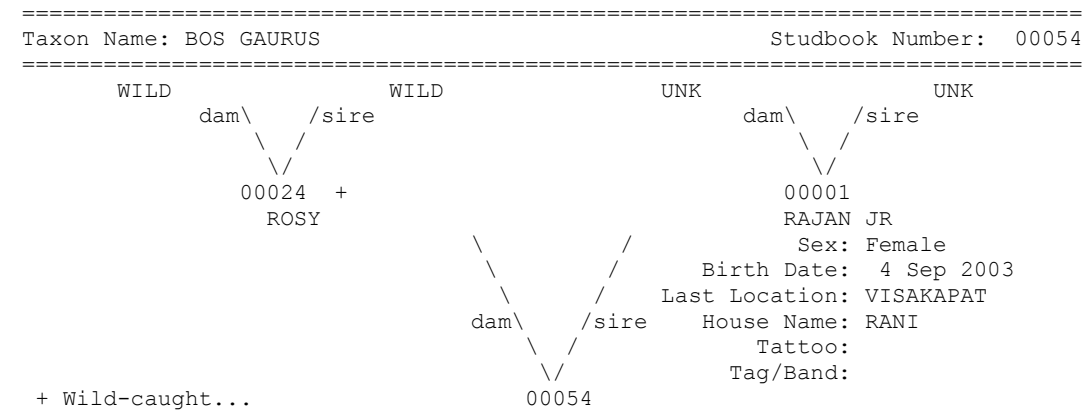

Taxon Name: BOS GAURUS
Studbook Number: 00051
WILD
00009 *+
RANI I
00008 *+
SHERU
00026
MEENA
00025
Anil
Sex: Male
Birth Date: 23 Mar 2003
Last Location: MYSORE
House Name: CHETAN
Tattoo:
Tag/Band: CZA/CBO155 (LEF
00051
+ Wild-caught... * Appear more than once...

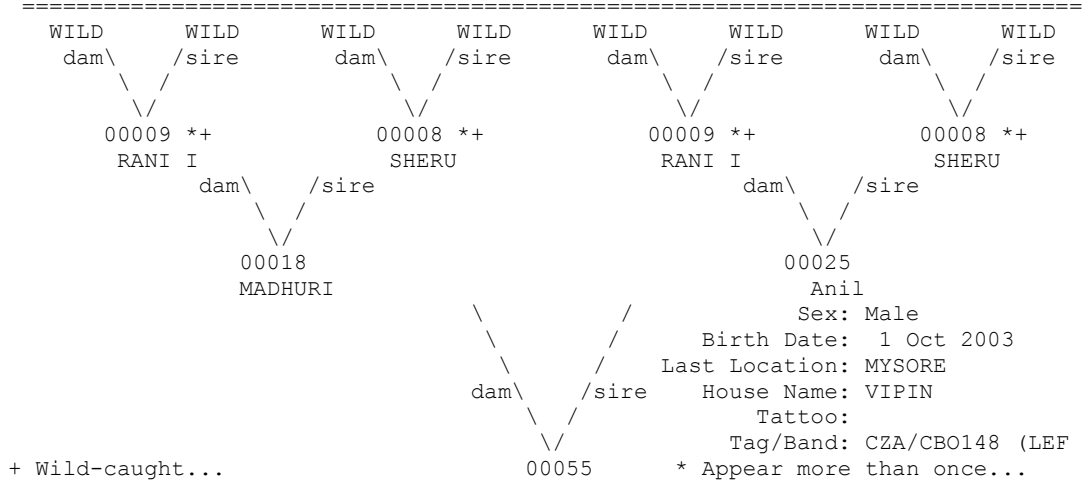


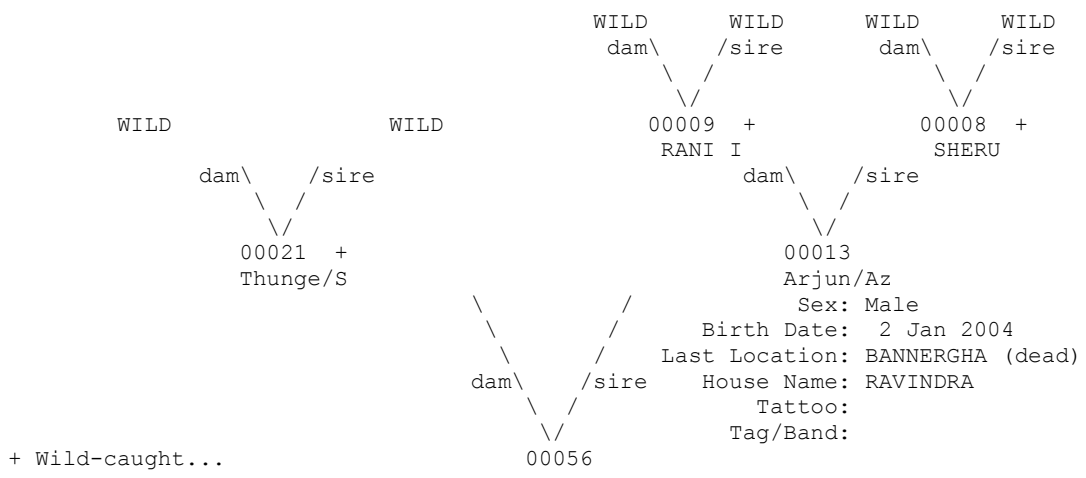
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

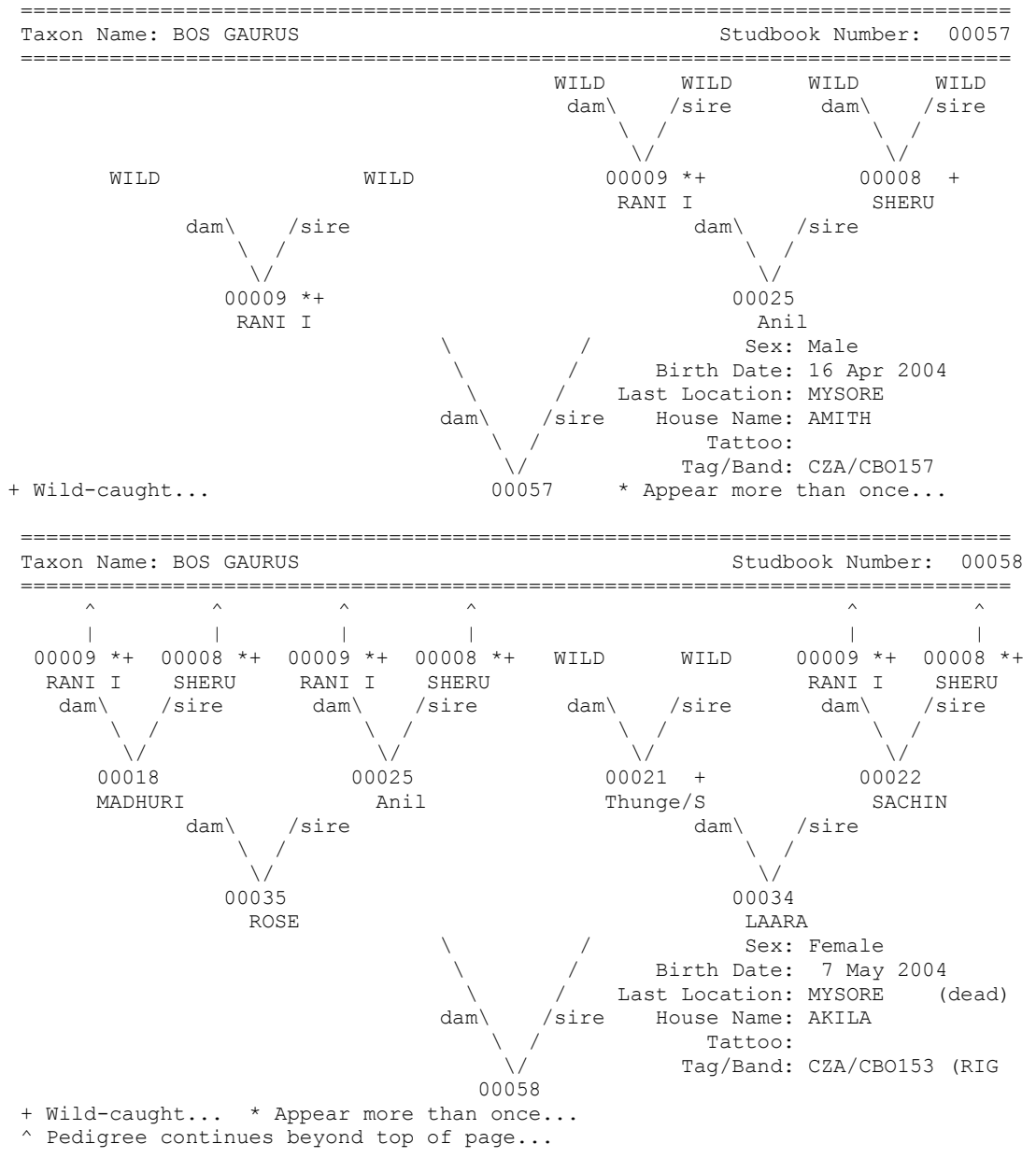


+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00054
WILD
WILD
UNK
UNK
dam\ /sire
dam\ /sire
00024 +
ROSY
00001
RAJAN JR
Sex: Female
Birth Date: 4 Sep 2003
Last Location: VISAKAPAT
House Name: RANI
Tattoo:
Tag/Band:
+ Wild-caught...
00054


Taxon Name: BOS GAURUS
Studbook Number: 00055
WILD
WILD
WILD
WILD
WILD
WILD
WILD
WILD
dam\ /sire
00009 *+
RANI I
00008 *+
SHERU
00018
MADHURI
00025
Anil
Sex: Male
Birth Date: 1 Oct 2003
Last Location: MYSORE
House Name: VIPIN
Tattoo:
Tag/Band: CZA/CBO148 (LEF
+ Wild-caught...
00055
* Appear more than once...

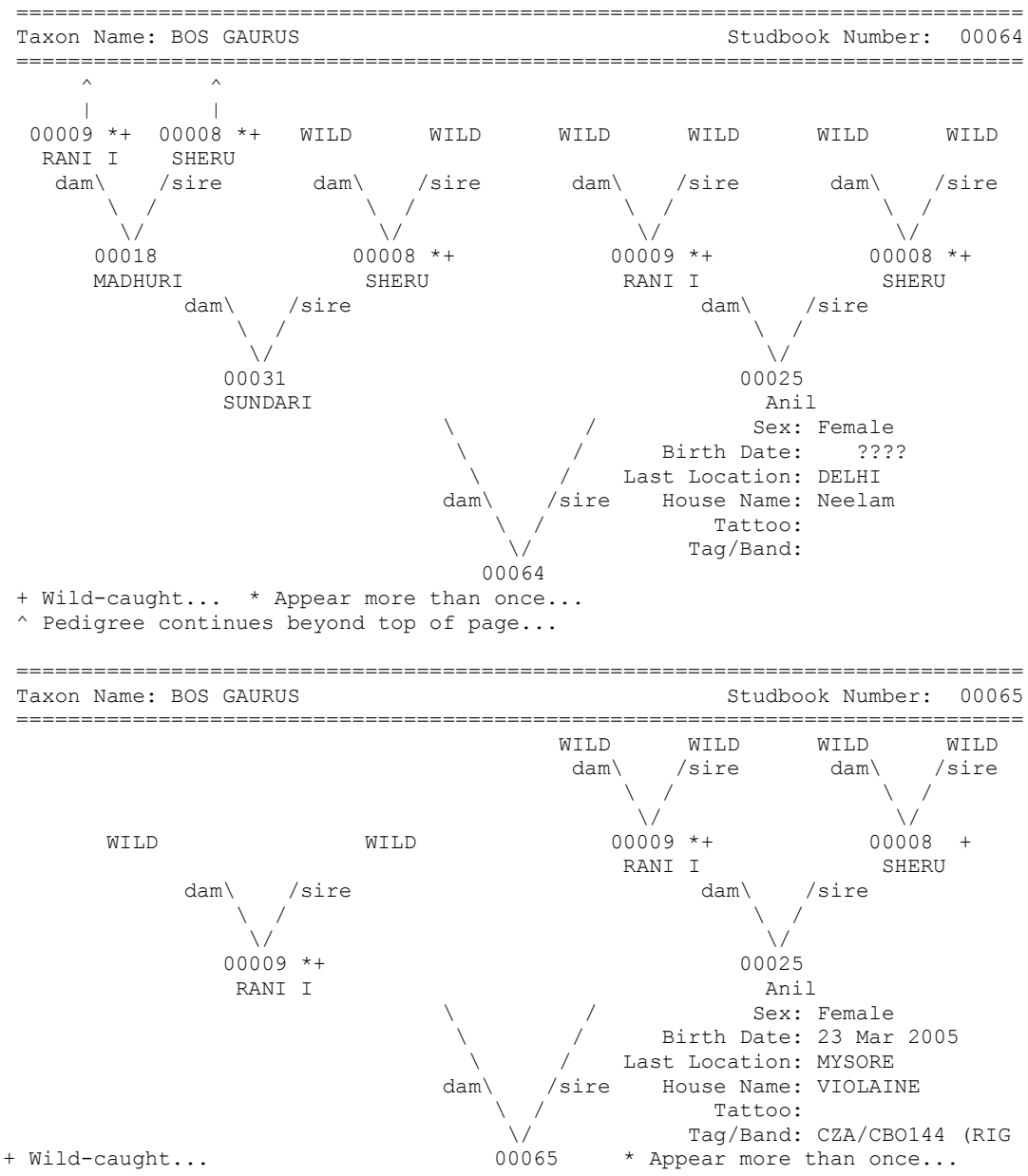

Taxon Name: BOS GAURUS
Studbook Number: 00056
WILD
WILD
WILD
WILD
WILD
WILD
00009 +
RANI I
00008 +
SHERU
00021 +
Thunge/S
00013
Arjun/Az
Sex: Male
Birth Date: 2 Jan 2004
Last Location: BANNERGHA (dead)
House Name: RAVINDRA
Tattoo:
Tag/Band:
+ Wild-caught...
00056


Taxon Name: BOS GAURUS
Studbook Number: 00057
WILD
WILD
WILD
WILD
WILD
WILD
00009 *+
RANI I
00008 +
SHERU
00009 *+
RANI I
00025
Anil
Sex: Male
Birth Date: 16 Apr 2004
Last Location: MYSORE
House Name: AMITH
Tattoo:
Tag/Band: CZA/CBO157
00057
+ Wild-caught...
* Appear more than once...

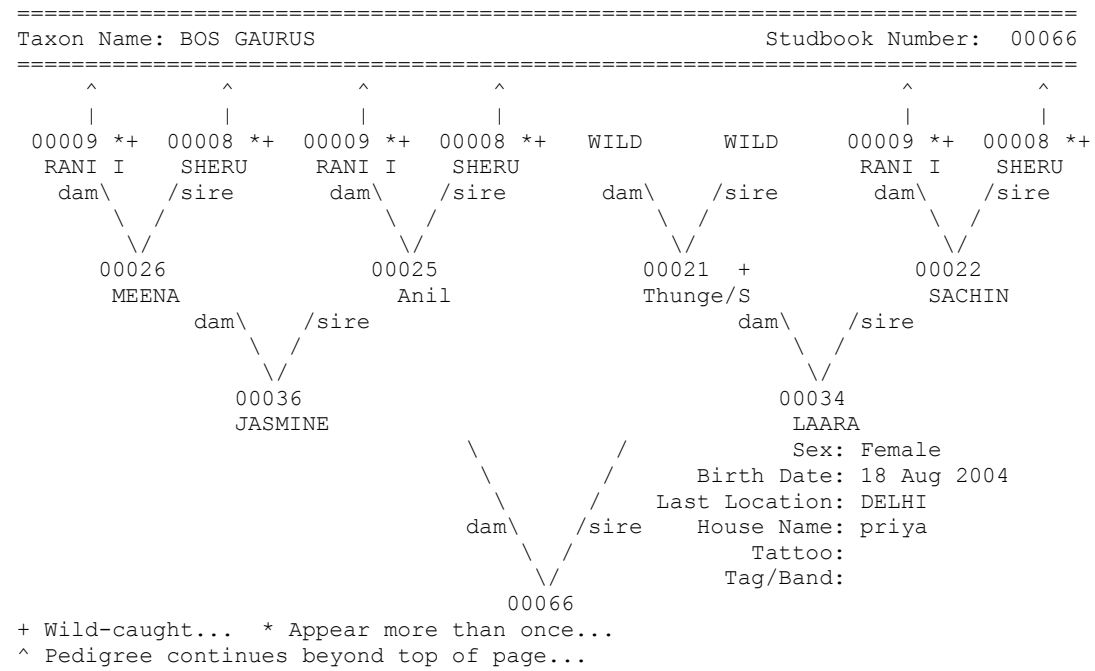
Taxon Name: BOS GAURUS
Studbook Number: 00058
00009 *+
RANI I
00008 *+
SHERU
00009 *+
RANI I
00008 *+
SHERU
WILD
WILD
00009 *+
RANI I
00008 *+
SHERU
00018
MADHURI
00025
Anil
00021 +
Thunge/S
00022
SACHIN
00035
ROSE
00034
LAARA
Sex: Female
Birth Date: 7 May 2004
Last Location: MYSORE (dead)
House Name: AKILA
Tattoo:
Tag/Band: CZA/CBO153 (RIG
00058
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...

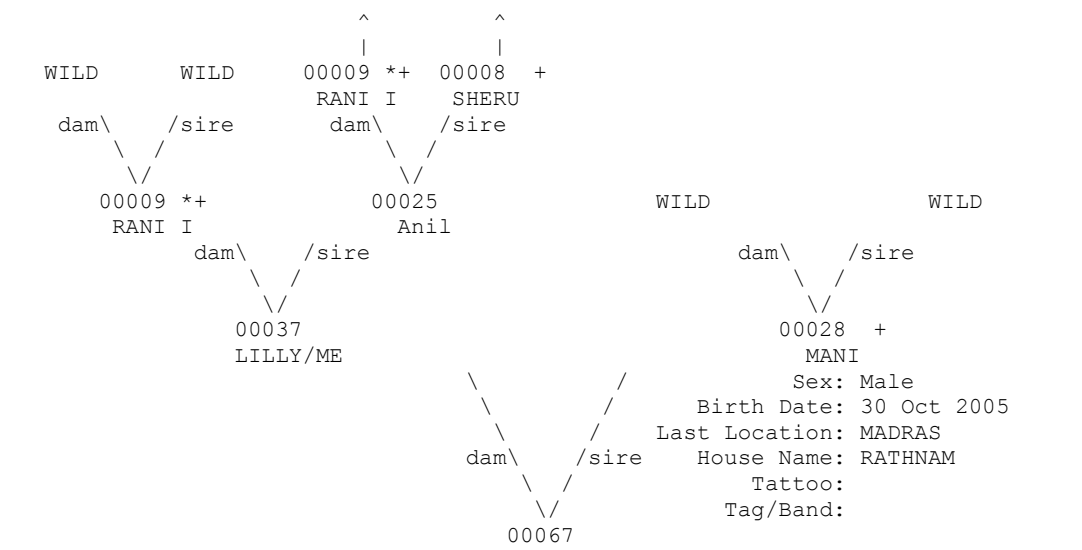
```
================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00059
================================================================================
     ^         ^         ^         ^                                 ^         ^
     |         |         |         |                                 |         |
 00009 *+  00008 *+  00009 *+  00008 *+   WILD      WILD     00009 *+  00008 *+
  RANI I    SHERU     RANI I    SHERU                         RANI I    SHERU
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /                \  /                \  /                \  /
        \/                  \/                  \/                  \/
      00026               00025               00021  +            00022
       MEENA                Anil              Thunge/S             SACHIN
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
               00036                                   00034
               JASMINE                                  LAARA
                                  \          /            Sex: Female
                                   \        /      Birth Date: 27 Feb 2006
                                    \      /    Last Location: CHATBIR Z
                                  dam\    /sire    House Name: ANJU
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                    00059
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00060
================================================================================
                          ^         ^
                          |         |
  WILD      WILD     00009 *+  00008  +
                      RANI I    SHERU
   dam\    /sire       dam\    /sire
       \  /                \  /
        \/                  \/
      00009 *+            00025
       RANI I               Anil
             dam\    /sire
                 \  /
                  \/
               00037                                   UNK
               LILLY/ME
                                  \          /            Sex: Male
                                   \        /      Birth Date: 31 Aug 2004
                                    \      /    Last Location: MADRAS    (dead)
                                  dam\    /sire    House Name: MADHAN
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                    00060
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

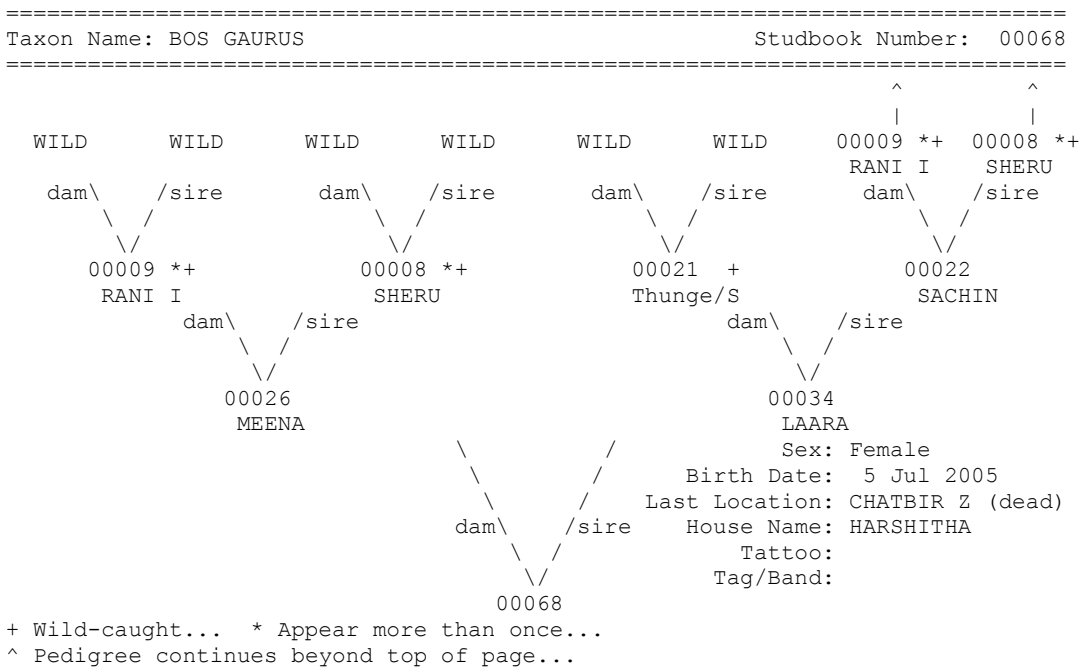
```
================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00061
================================================================================
                                        WILD      WILD      UNK       UNK
                                         dam\    /sire       dam\    /sire
                                             \  /                \  /
                                              \/                  \/
       WILD                WILD                00024 *+            00001
                                                 ROSY              RAJAN JR
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                00024 *+                                 00032
                  ROSY                                     REMO
                                    \          /           Sex: Male
                                     \        /      Birth Date:  9 Sep 2004
                                      \      /    Last Location: USGOWN
                                    dam\    /sire    House Name: SOMU
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                      00061     * Appear more than once...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00062
================================================================================
                 WILD                                     WILD
                                    \          /
                                     \        /           Sex: Female
                                      \      /      Birth Date:  ~ Apr 2004
                                    dam\    /sire    Last Location: MADRAS
                                        \  /         House Name: GEETHA
                                         \/             Tattoo:
                                                      Tag/Band:
                                      00062

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00063
================================================================================
  WILD      WILD      WILD      WILD      WILD      WILD      WILD      WILD
   dam\    /sire      dam\    /sire      dam\    /sire      dam\    /sire
       \  /                \  /                \  /                \  /
        \/                  \/                  \/                  \/
     00009 *+            00008 *+            00009 *+            00008 *+
      RANI I              SHERU               RANI I              SHERU
             dam\    /sire                               dam\    /sire
                 \  /                                        \  /
                  \/                                          \/
               00018                                       00025
               MADHURI                                       Anil
                                    \          /           Sex: Male
                                     \        /      Birth Date:      ~ 2000
                                      \      /    Last Location: DELHI
                                    dam\    /sire    House Name: VIKRAM
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                      00063

+ Wild-caught...  * Appear more than once...
```

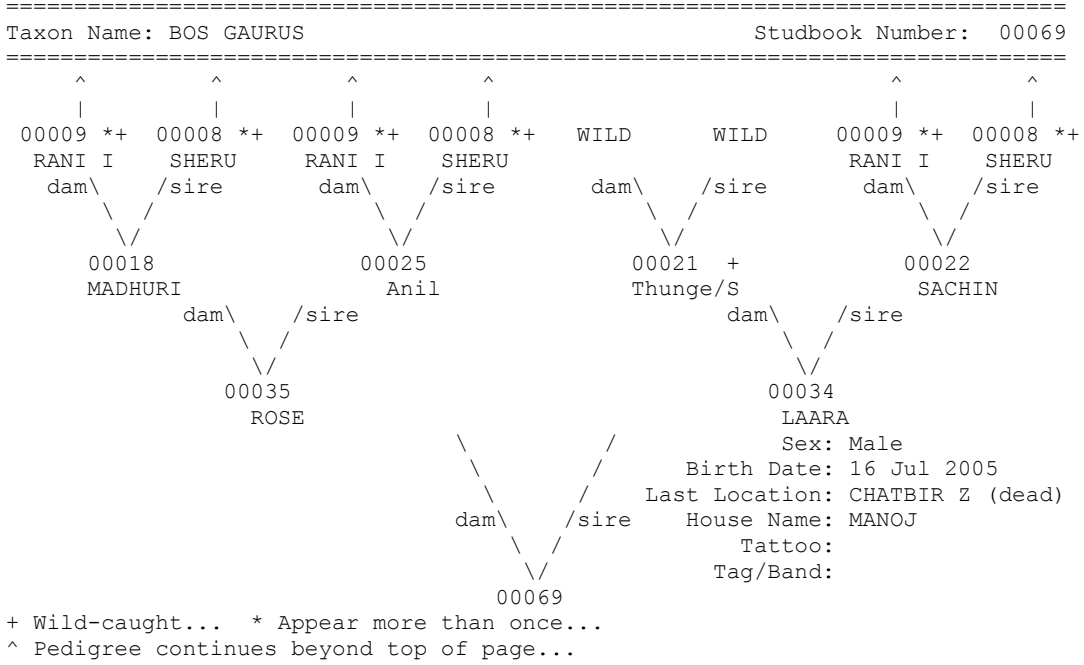

Taxon Name: BOS GAURUS
Studbook Number: 00064
00009 *+ RANI I
00008 *+ SHERU
WILD
00018 MADHURI
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00031 SUNDARI
00025 Anil
Sex: Female
Birth Date: ????
Last Location: DELHI
House Name: Neelam
Tattoo:
Tag/Band:
00064
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

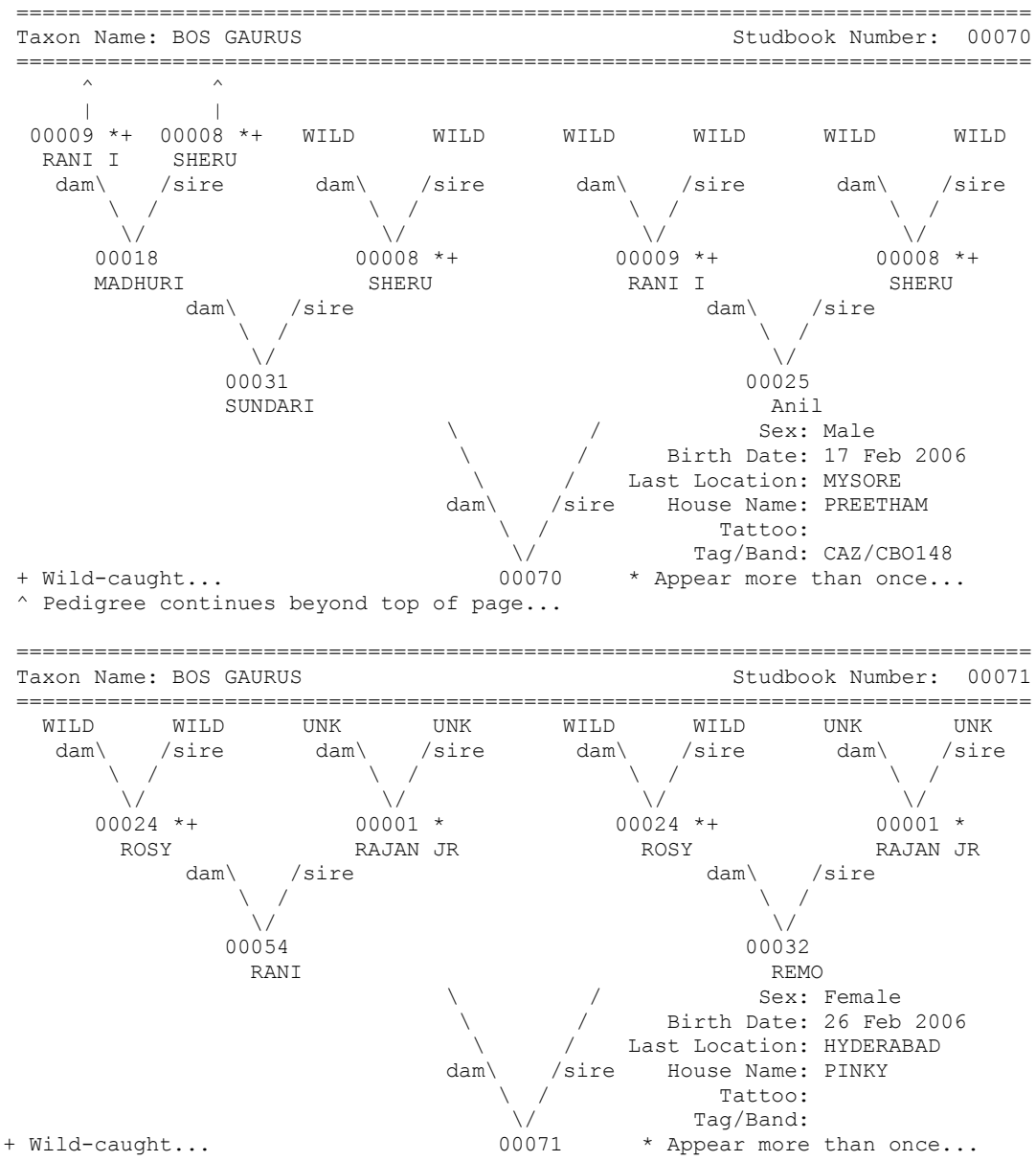
Taxon Name: BOS GAURUS
Studbook Number: 00065
WILD
00009 *+ RANI I
00008 + SHERU
00009 *+ RANI I
00025 Anil
Sex: Female
Birth Date: 23 Mar 2005
Last Location: MYSORE
House Name: VIOLAINE
Tattoo:
Tag/Band: CZA/CBO144 (RIG
00065
+ Wild-caught...
* Appear more than once...

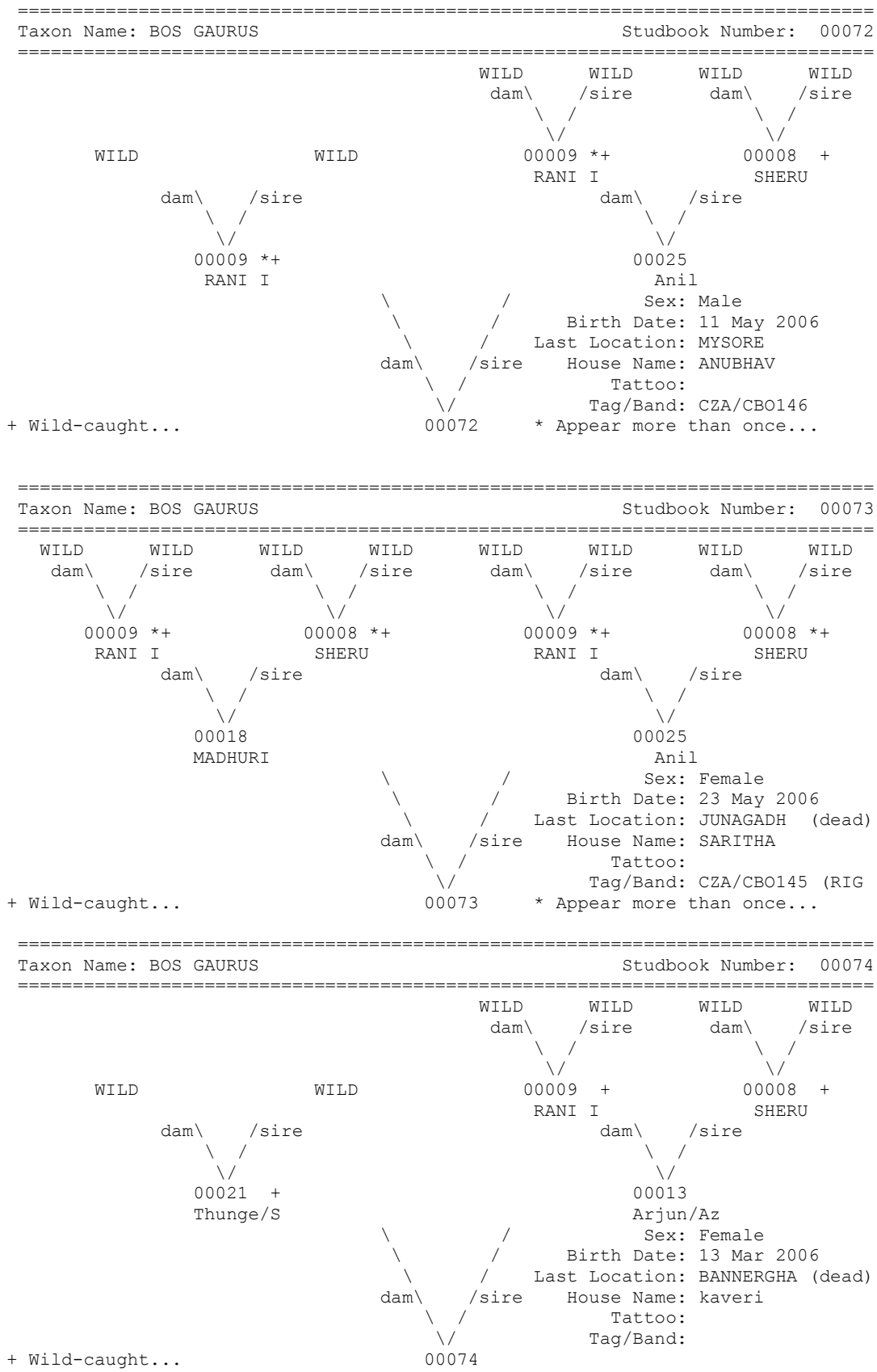

Taxon Name: BOS GAURUS
Studbook Number: 00066
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00026 MEENA
00025 Anil
00021 + Thunge/S
00022 SACHIN
00036 JASMINE
00034 LAARA
Sex: Female
Birth Date: 18 Aug 2004
Last Location: DELHI
House Name: priya
Tattoo:
Tag/Band:
00066
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

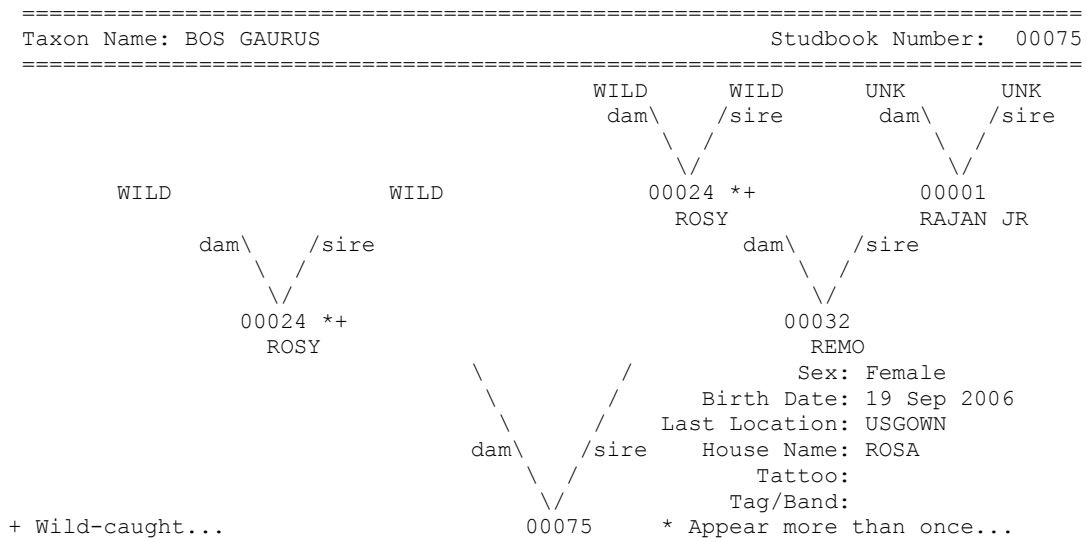

Taxon Name: BOS GAURUS
Studbook Number: 00067
WILD
WILD
00009 *+ RANI I
00008 + SHERU
00009 *+ RANI I
00025 Anil
WILD
WILD
00037 LILLY/ME
00028 + MANI
Sex: Male
Birth Date: 30 Oct 2005
Last Location: MADRAS
House Name: RATHNAM
Tattoo:
Tag/Band:
00067
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

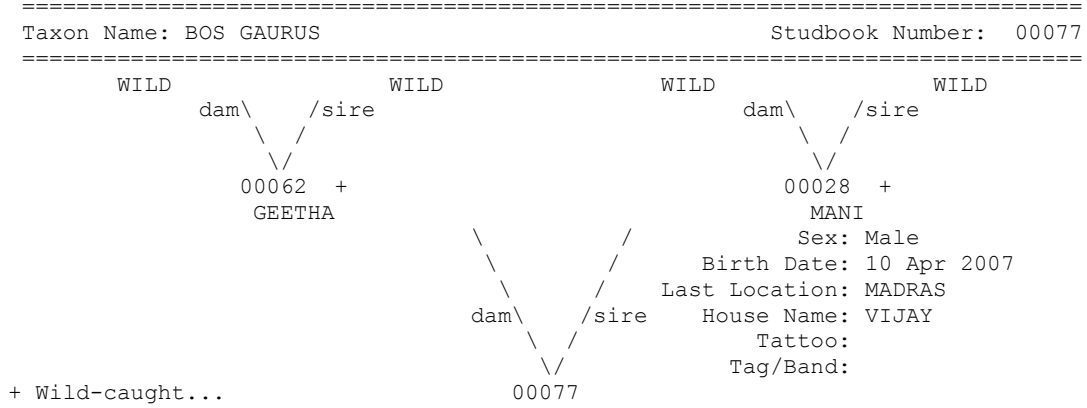

Taxon Name: BOS GAURUS
Studbook Number: 00068
WILD
WILD
WILD
WILD
WILD
WILD
00009 *+
RANI I
00008 *+
SHERU
dam\
/sire
00009 *+
RANI I
00008 *+
SHERU
00021 +
Thunge/S
00022
SACHIN
00026
MEENA
00034
LAARA
Sex: Female
Birth Date: 5 Jul 2005
Last Location: CHATBIR Z (dead)
House Name: HARSHITHA
Tattoo:
Tag/Band:
00068
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

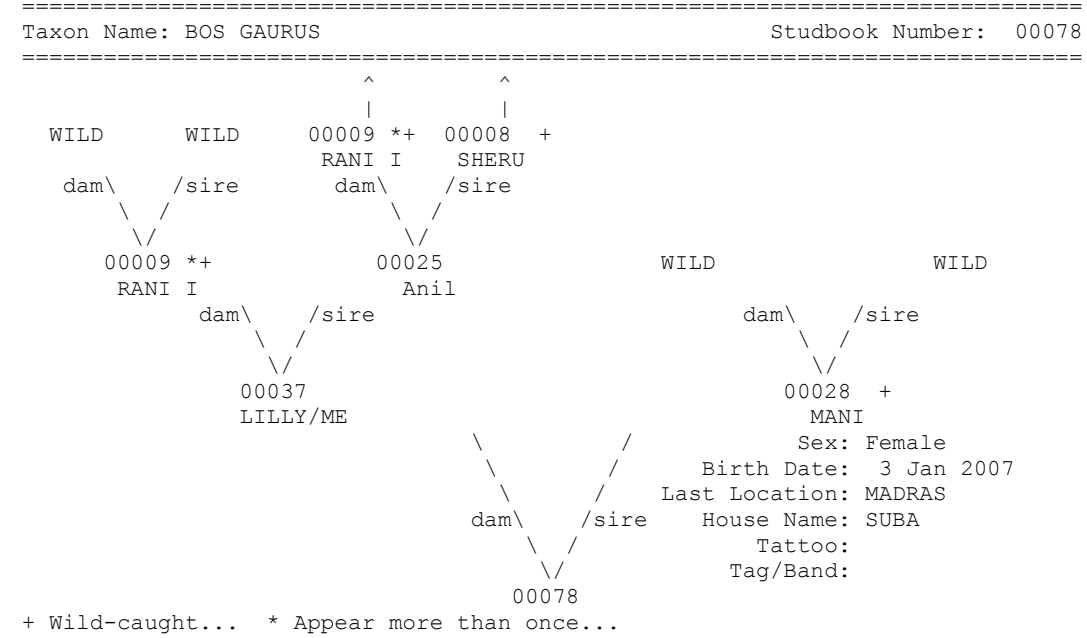

Taxon Name: BOS GAURUS
Studbook Number: 00069
00009 *+
RANI I
00008 *+
SHERU
00018
MADHURI
00025
Anil
00021 +
Thunge/S
00022
SACHIN
00035
ROSE
00034
LAARA
Sex: Male
Birth Date: 16 Jul 2005
Last Location: CHATBIR Z (dead)
House Name: MANOJ
Tattoo:
Tag/Band:
00069
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

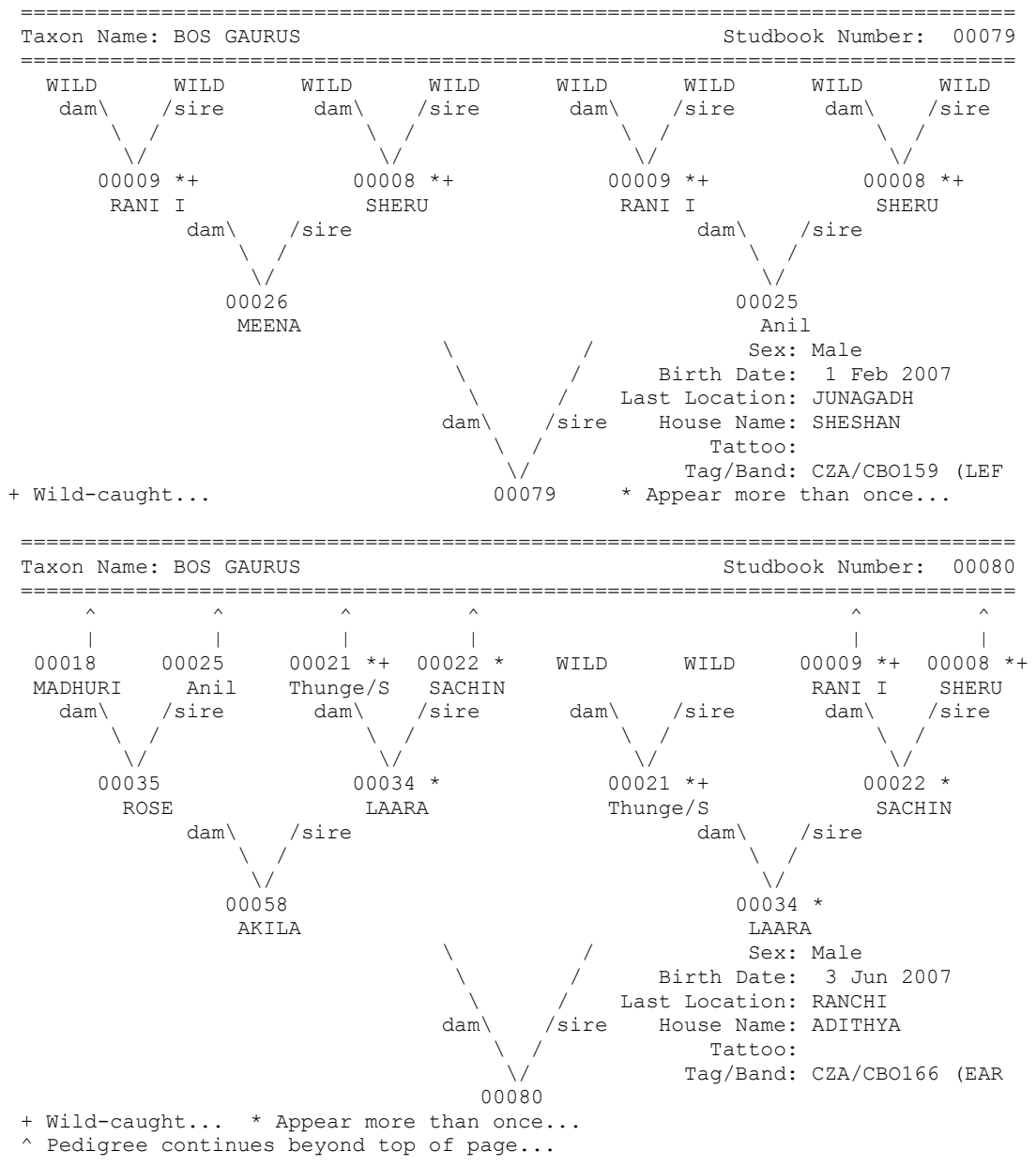

Taxon Name: BOS GAURUS
Studbook Number: 00070
00009 *+ RANI I
00008 *+ SHERU
WILD
00018 MADHURI
00008 *+ SHERU
00031 SUNDARI
00009 *+ RANI I
00025 Anil
Sex: Male
Birth Date: 17 Feb 2006
Last Location: MYSORE
House Name: PREETHAM
Tattoo:
Tag/Band: CAZ/CBO148
00070
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...
Taxon Name: BOS GAURUS
Studbook Number: 00071
WILD
UNK
00024 *+ ROSY
00001 * RAJAN JR
00054 RANI
00024 *+ ROSY
00001 * RAJAN JR
00032 REMO
Sex: Female
Birth Date: 26 Feb 2006
Last Location: HYDERABAD
House Name: PINKY
Tattoo:
Tag/Band:
00071
+ Wild-caught...
* Appear more than once...


Taxon Name: BOS GAURUS
Studbook Number: 00072
WILD
WILD
WILD
WILD
WILD
WILD
00009 *+
RANI I
00008 +
SHERU
00009 *+
RANI I
00025
Anil
Sex: Male
Birth Date: 11 May 2006
Last Location: MYSORE
House Name: ANUBHAV
Tattoo:
Tag/Band: CZA/CBO146
00072
+ Wild-caught...
* Appear more than once...
Taxon Name: BOS GAURUS
Studbook Number: 00073
WILD
WILD
WILD
WILD
WILD
WILD
WILD
WILD
00009 *+
RANI I
00008 *+
SHERU
00009 *+
RANI I
00008 *+
SHERU
00018
MADHURI
00025
Anil
Sex: Female
Birth Date: 23 May 2006
Last Location: JUNAGADH (dead)
House Name: SARITHA
Tattoo:
Tag/Band: CZA/CBO145 (RIG
00073
+ Wild-caught...
* Appear more than once...
Taxon Name: BOS GAURUS
Studbook Number: 00074
WILD
WILD
WILD
WILD
WILD
WILD
00009 +
RANI I
00008 +
SHERU
00021 +
Thunge/S
00013
Arjun/Az
Sex: Female
Birth Date: 13 Mar 2006
Last Location: BANNERGHA (dead)
House Name: kaveri
Tattoo:
Tag/Band:
00074
+ Wild-caught...

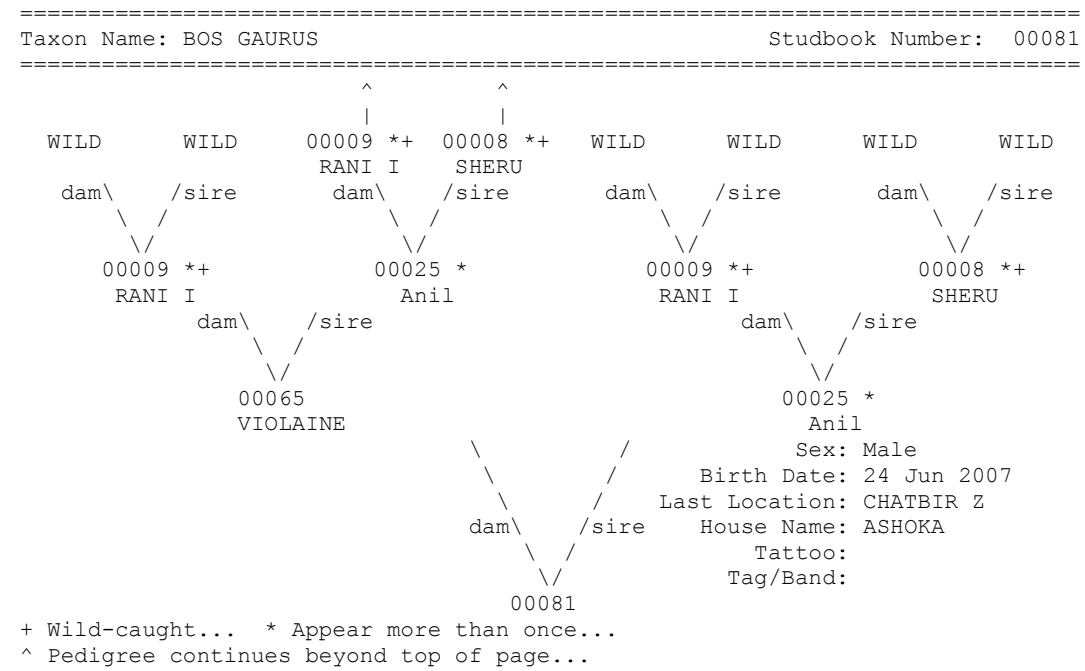

Taxon Name: BOS GAURUS
Studbook Number: 00075
WILD dam\ WILD /sire UNK dam\ UNK /sire
WILD WILD 00024 *+ ROSY 00001 RAJAN JR
dam\ /sire dam\ /sire
00024 *+ ROSY
00032 REMO
Sex: Female
Birth Date: 19 Sep 2006
Last Location: USGOWN
House Name: ROSA
Tattoo:
Tag/Band:
dam\ /sire
00075
+ Wild-caught...
* Appear more than once...

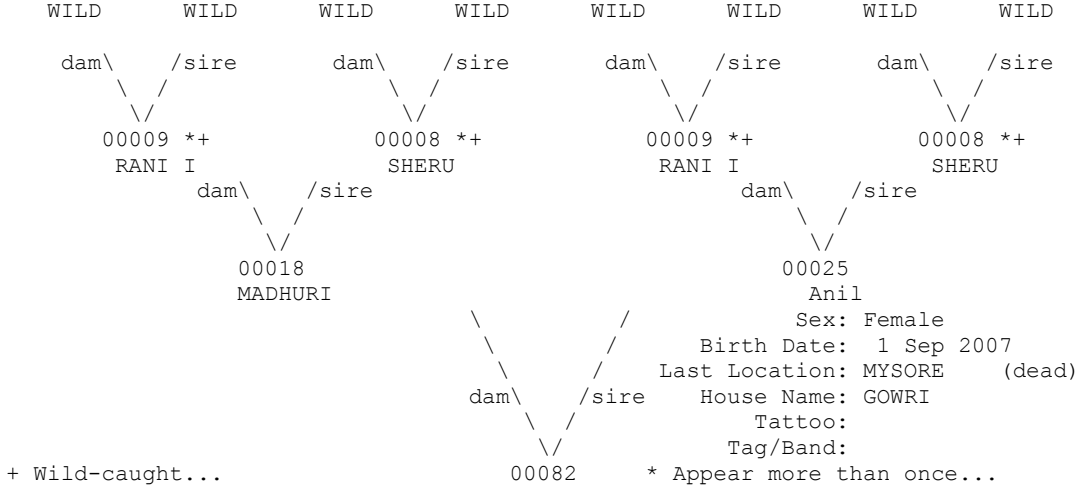

Taxon Name: BOS GAURUS
Studbook Number: 00077
WILD WILD WILD WILD
dam\ /sire dam\ /sire
00062 + GEETHA
00028 + MANI
Sex: Male
Birth Date: 10 Apr 2007
Last Location: MADRAS
House Name: VIJAY
Tattoo:
Tag/Band:
dam\ /sire
00077
+ Wild-caught...

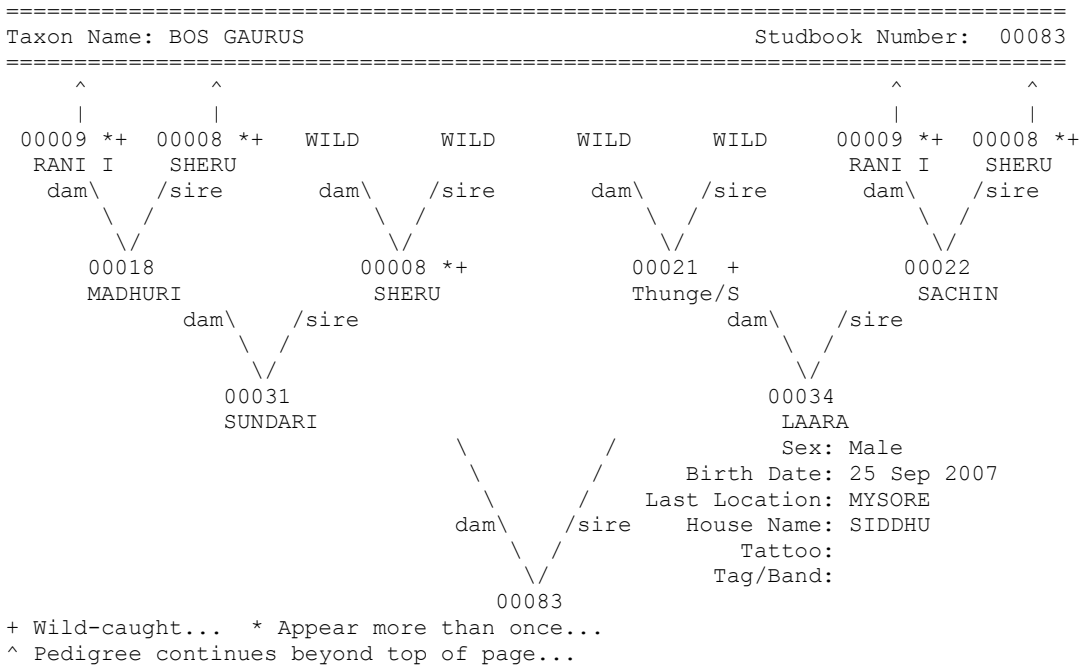

Taxon Name: BOS GAURUS
Studbook Number: 00078
^
WILD WILD 00009 *+ RANI I 00008 + SHERU
dam\ /sire dam\ /sire
00009 *+ RANI I 00025 Anil
WILD WILD
dam\ /sire dam\ /sire
00037 LILLY/ME
00028 + MANI
Sex: Female
Birth Date: 3 Jan 2007
Last Location: MADRAS
House Name: SUBA
Tattoo:
Tag/Band:
dam\ /sire
00078
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...

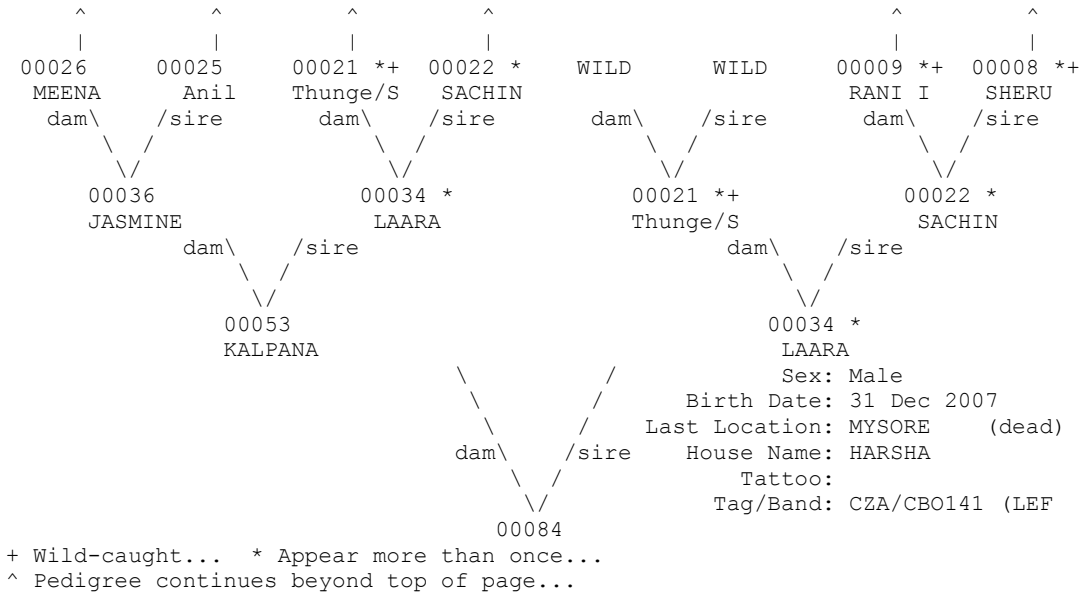

Taxon Name: BOS GAURUS
Studbook Number: 00079
WILD dam\ /sire
WILD dam\ /sire
WILD dam\ /sire
WILD dam\ /sire
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
dam\ /sire
00026 MEENA
00025 Anil
Sex: Male
Birth Date: 1 Feb 2007
Last Location: JUNAGADH
House Name: SHESHAN
Tattoo:
Tag/Band: CZA/CBO159 (LEF
dam\ /sire
00079
+ Wild-caught...
* Appear more than once...

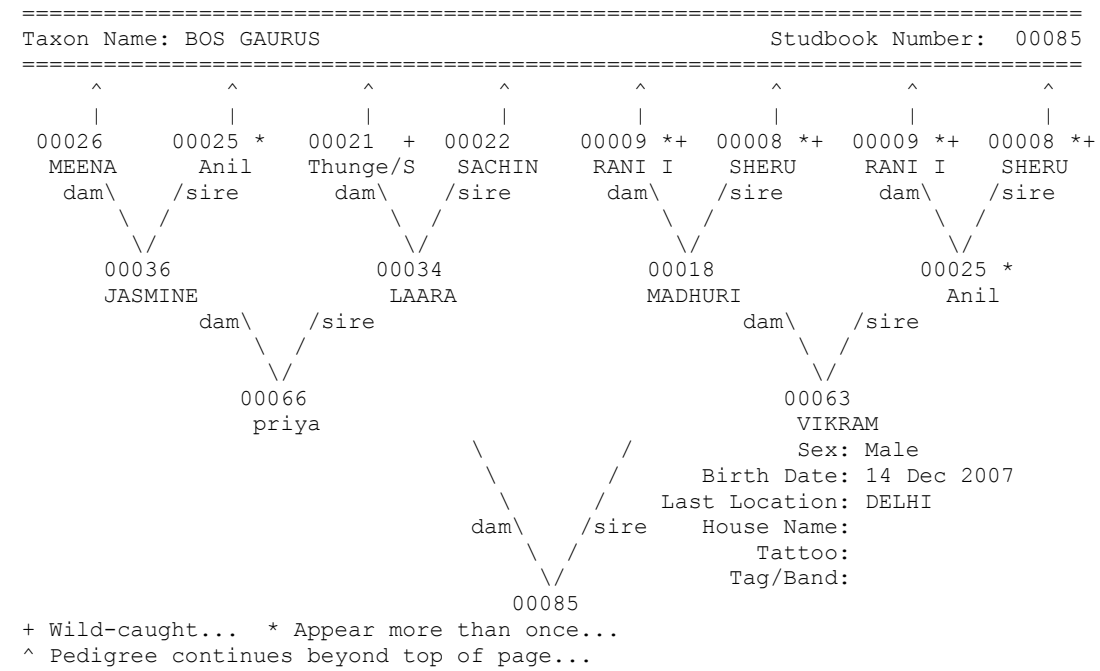
Taxon Name: BOS GAURUS
Studbook Number: 00080
00018 MADHURI
00025 Anil
00021 *+ Thunge/S
00022 * SACHIN
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
dam\ /sire
dam\ /sire
dam\ /sire
00035 ROSE
00034 * LAARA
00021 *+ Thunge/S
00022 * SACHIN
dam\ /sire
dam\ /sire
00058 AKILA
00034 * LAARA
Sex: Male
Birth Date: 3 Jun 2007
Last Location: RANCHI
House Name: ADITHYA
Tattoo:
Tag/Band: CZA/CBO166 (EAR
dam\ /sire
00080
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...

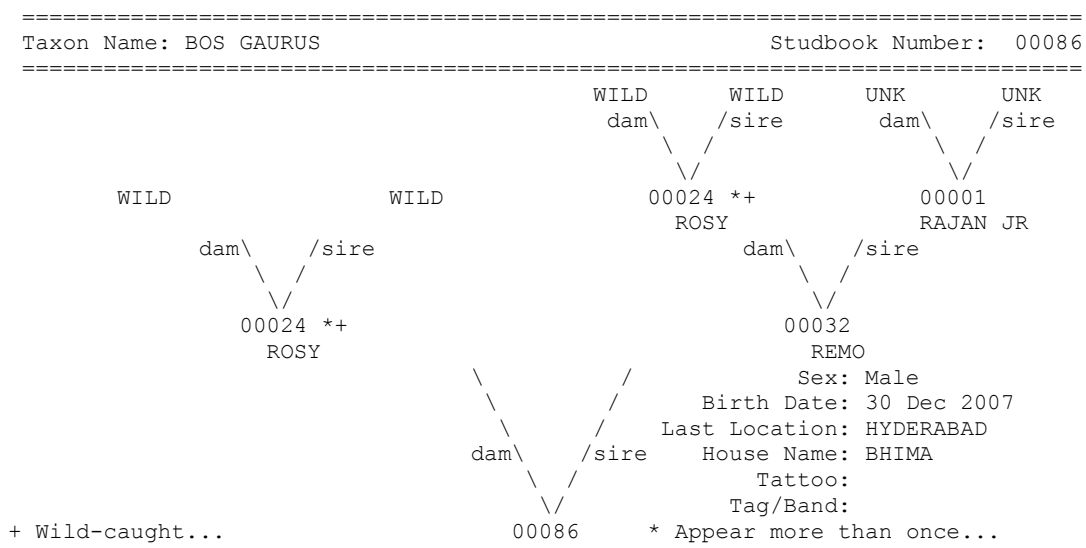

Taxon Name: BOS GAURUS
Studbook Number: 00081
WILD
WILD
00009 *+
RANI I
00008 *+
SHERU
WILD
WILD
WILD
WILD
dam\
/sire
00009 *+
RANI I
00025 *
Anil
00009 *+
RANI I
00008 *+
SHERU
00065
VIOLAINE
00025 *
Anil
Sex: Male
Birth Date: 24 Jun 2007
Last Location: CHATBIR Z
House Name: ASHOKA
Tattoo:
Tag/Band:
00081
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00082
WILD
WILD
WILD
WILD
WILD
WILD
WILD
WILD
dam\
/sire
00009 *+
RANI I
00008 *+
SHERU
00018
MADHURI
00025
Anil
Sex: Female
Birth Date: 1 Sep 2007
Last Location: MYSORE (dead)
House Name: GOWRI
Tattoo:
Tag/Band:
00082
+ Wild-caught...
* Appear more than once...


Taxon Name: BOS GAURUS
Studbook Number: 00083
00009 *+ RANI I
00008 *+ SHERU
WILD
WILD
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00018 MADHURI
00008 *+ SHERU
00021 + Thunge/S
00022 SACHIN
00031 SUNDARI
00034 LAARA
Sex: Male
Birth Date: 25 Sep 2007
Last Location: MYSORE
House Name: SIDDHU
Tattoo:
Tag/Band:
00083
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00084
00026 MEENA
00025 Anil
00021 *+ Thunge/S
00022 * SACHIN
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00036 JASMINE
00034 * LAARA
00021 *+ Thunge/S
00022 * SACHIN
00053 KALPANA
00034 * LAARA
Sex: Male
Birth Date: 31 Dec 2007
Last Location: MYSORE (dead)
House Name: HARSHA
Tattoo:
Tag/Band: CZA/CBO141 (LEF
00084
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00085
00026 MEENA dam
00025 * Anil /sire
00021 + Thunge/S dam
00022 SACHIN /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00036 JASMINE dam
00034 LAARA /sire
00018 MADHURI dam
00025 * Anil /sire
00066 priya dam
00063 VIKRAM /sire
Sex: Male
Birth Date: 14 Dec 2007
Last Location: DELHI
House Name:
Tattoo:
Tag/Band:
00085
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

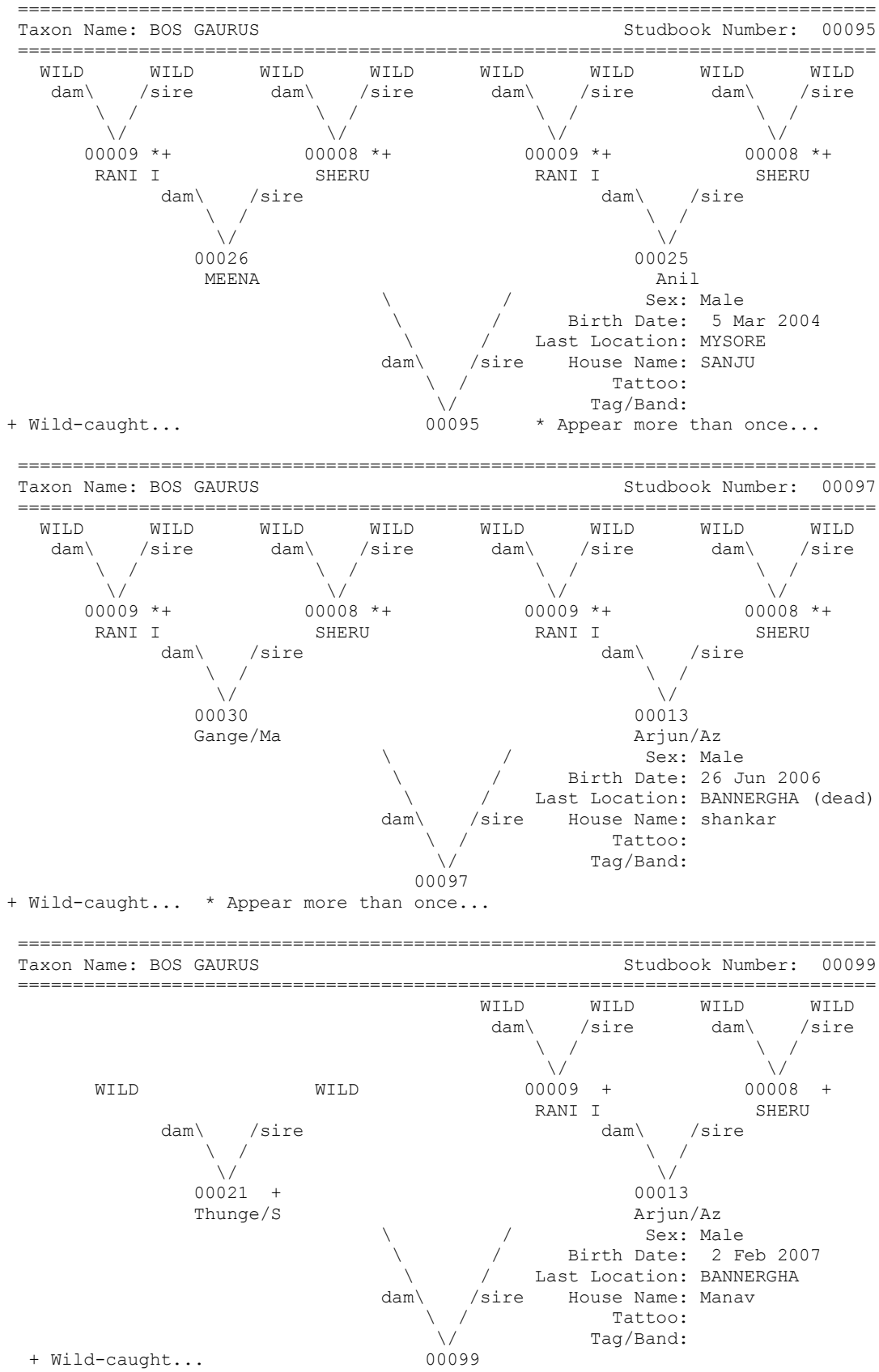

Taxon Name: BOS GAURUS
Studbook Number: 00086
WILD dam
WILD /sire
UNK dam
UNK /sire
WILD
WILD
00024 *+ ROSY dam
00001 RAJAN JR /sire
00024 *+ ROSY dam
00032 REMO /sire
Sex: Male
Birth Date: 30 Dec 2007
Last Location: HYDERABAD
House Name: BHIMA
Tattoo:
Tag/Band:
+ Wild-caught...
00086
* Appear more than once...

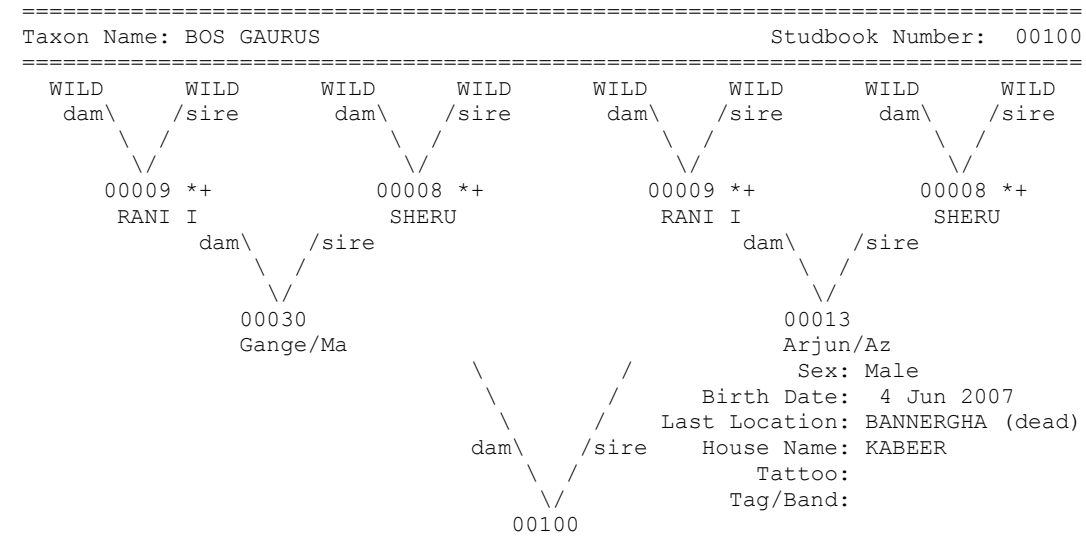
```
================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00087
================================================================================
                                                                    ^         ^
                                                                    |         |
  WILD      WILD      WILD      WILD      WILD      WILD     00009 *+  00008 *+
                                                               RANI I    SHERU
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /                \  /                \  /                \  /
        \/                  \/                  \/                  \/
      00009 *+            00008 *+            00009 *+            00025
       RANI I              SHERU               RANI I              Anil

             dam\    /sire                               dam\    /sire
                 \  /                                        \  /
                  \/                                          \/
               00026                                       00057
                MEENA                                       AMITH
                                  \          /              Sex: Male
                                   \        /       Birth Date: 13 Mar 2008
                                    \      /     Last Location: PUNE
                                  dam\    /sire    House Name: PRAKASH
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                    00087
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

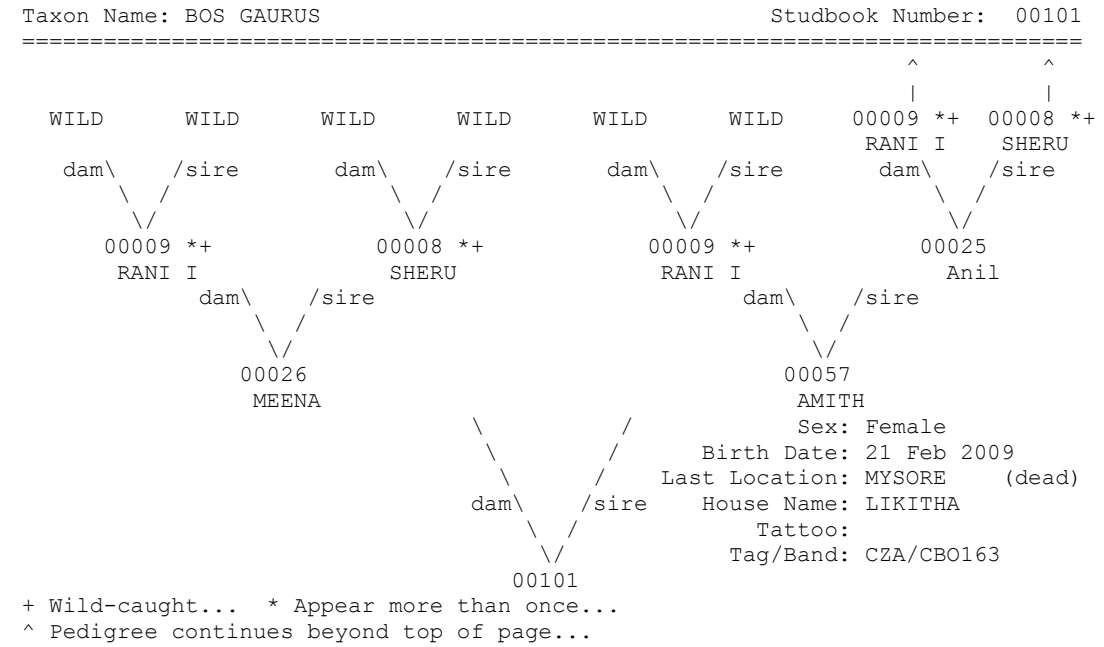
```
================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00088
================================================================================
                          ^         ^
                          |         |
  WILD      WILD     00009 *+  00008  +
                      RANI I    SHERU
   dam\    /sire       dam\    /sire
       \  /                \  /
        \/                  \/
      00009 *+            00025               WILD                WILD
       RANI I              Anil
             dam\    /sire                               dam\    /sire
                 \  /                                        \  /
                  \/                                          \/
               00037                                       00028  +
               LILLY/ME                                     MANI
                                  \          /              Sex: Female
                                   \        /       Birth Date: 11 Apr 2008
                                    \      /     Last Location: MADRAS
                                  dam\    /sire    House Name: LEKSHMI
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                    00088
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

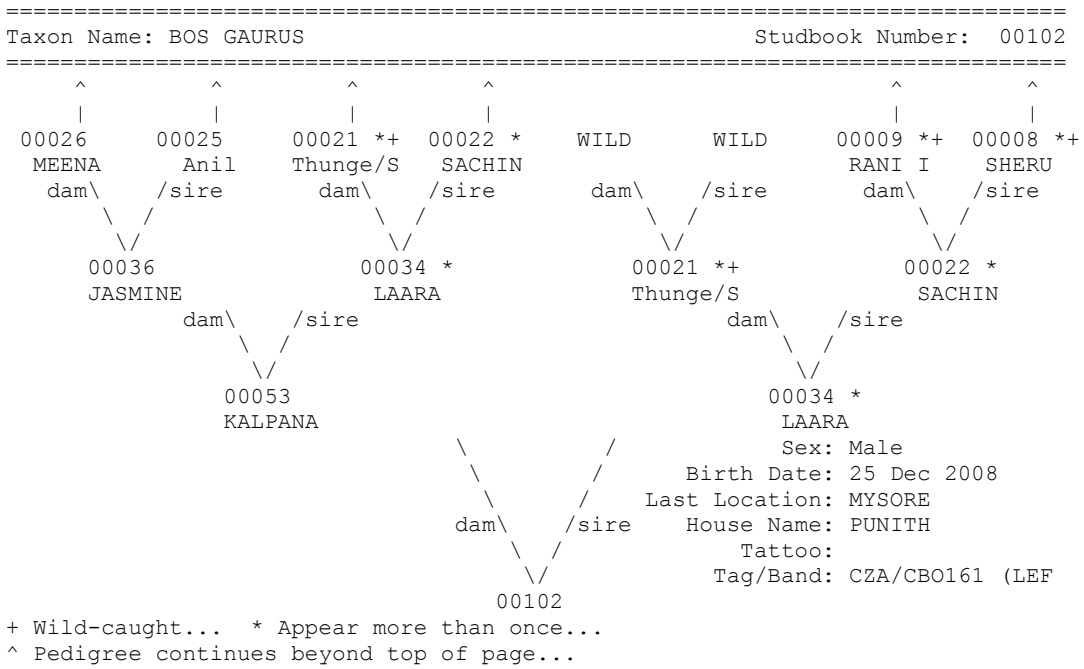
```
================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00089
================================================================================
     ^         ^         ^         ^                                 ^         ^
     |         |         |         |                                 |         |
 00009 *+  00008 *+  00009 *+  00008 *+   WILD      WILD     00009 *+  00008 *+
  RANI I    SHERU     RANI I    SHERU                         RANI I    SHERU
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /                \  /                \  /                \  /
        \/                  \/                  \/                  \/
     00018                00025               00021  +            00022
     MADHURI               Anil               Thunge/S             SACHIN
            dam\    /sire                           dam\    /sire
                \  /                                    \  /
                 \/                                      \/
              00035                                   00034
                ROSE                                    LAARA
                                  \          /            Sex: Female
                                   \        /      Birth Date:  9 Jan 2008
                                    \      /    Last Location: RANCHI
                                  dam\    /sire    House Name: RAGINI
                                      \  /            Tattoo:
                                       \/           Tag/Band: CZA/CBO142 (EAR
                                    00089
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00090
================================================================================
  WILD      WILD      WILD      WILD
   dam\    /sire       dam\    /sire
       \  /                \  /
        \/                  \/
     00009  +            00008  +
      RANI I               SHERU
            dam\    /sire
                \  /
                 \/
              00018                                     UNK
              MADHURI
                                  \          /            Sex: Male
                                   \        /      Birth Date: 13 Mar 2008
                                    \      /    Last Location: MYSORE
                                  dam\    /sire    House Name: AVINASH
                                      \  /            Tattoo:
                                       \/           Tag/Band:
+ Wild-caught...                    00090

================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00091
================================================================================
       WILD                WILD                WILD                WILD
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
              00062  +                                00028  +
               GEETHA                                   MANI
                                  \          /            Sex: Female
                                   \        /      Birth Date: 17 Mar 2009
                                    \      /    Last Location: VISAKAPAT
                                  dam\    /sire    House Name: SARANYA
                                      \  /            Tattoo:
                                       \/           Tag/Band:
+ Wild-caught...                    00091
```

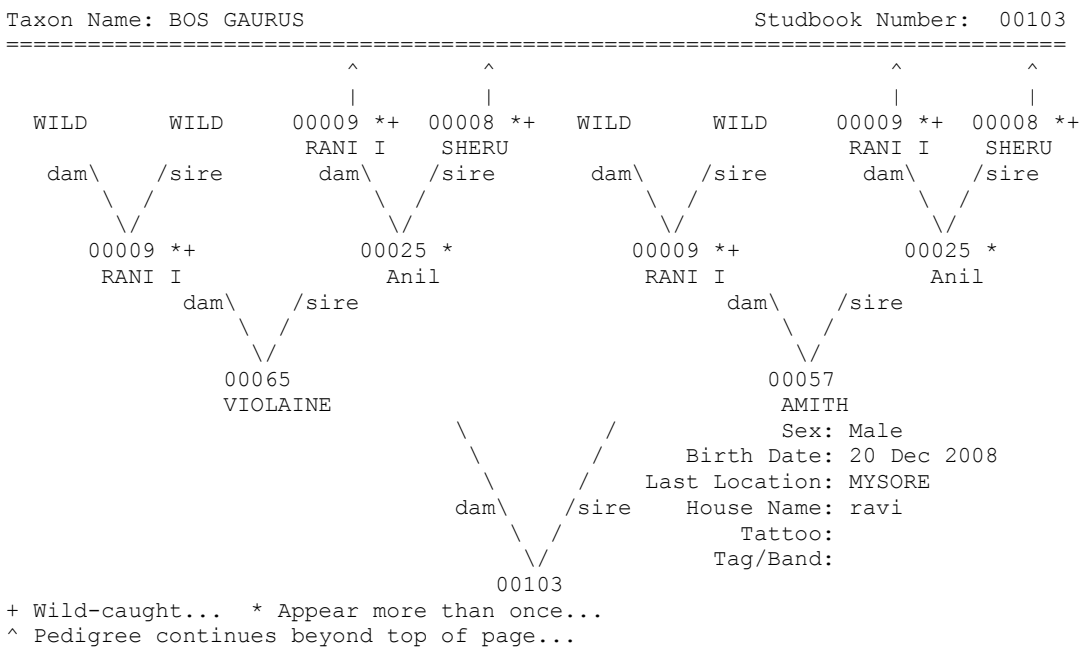
```
================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00092
================================================================================
     ^         ^         ^         ^                                 ^         ^
     |         |         |         |                                 |         |
 00009 *+  00008 *+  00009 *+  00008 *+   WILD      WILD     00009 *+  00008 *+
  RANI I    SHERU     RANI I    SHERU                         RANI I    SHERU
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /                \  /                \  /                \  /
        \/                  \/                  \/                  \/
      00026               00025               00021  +            00022
       MEENA                Anil              Thunge/S             SACHIN
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
               00036                                   00034
               JASMINE                                  LAARA
                                  \          /           Sex: Female
                                   \        /      Birth Date: 30 Apr 2008
                                    \      /    Last Location: PUNE
                                  dam\    /sire    House Name: HAMSA
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                    00092     * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00093
================================================================================
                                                                 ^         ^
                                                                 |         |
                                              WILD      WILD     00009  +  00008  +
                                                                  RANI I    SHERU
                                               dam\    /sire       dam\    /sire
                                                   \  /                \  /
                                                    \/                  \/
       WILD                WILD                  00021  +            00013
                                                 Thunge/S             Arjun/Az
             dam\    /sire                               dam\    /sire
                 \  /                                        \  /
                  \/                                          \/
               00007  +                                    00047
                 Rani                                       bheema
                                  \          /              Sex: Female
                                   \        /      Birth Date:  2 Feb 2009
                                    \      /    Last Location: BANNERGHA (dead)
                                  dam\    /sire    House Name: maya
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                    00093
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00094
================================================================================
                WILD                                       WILD
                                  \          /              Sex: Male
                                   \        /      Birth Date:    ????
                                    \      /    Last Location: MADRAS    (dead)
                                  dam\    /sire    House Name: BEEMA
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                    00094
```

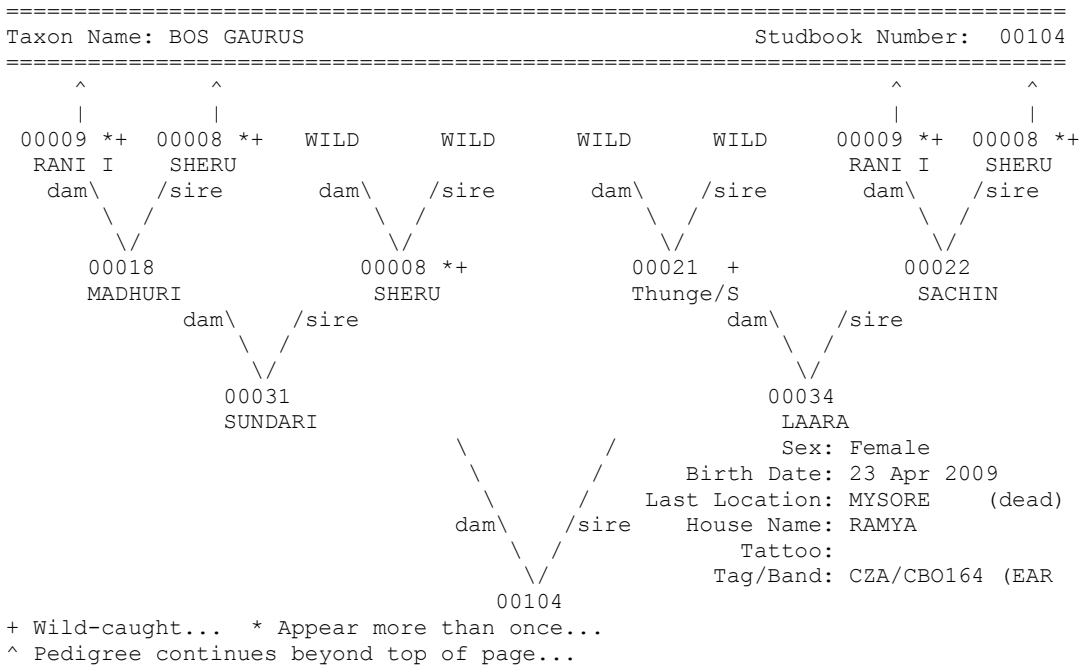

Taxon Name: BOS GAURUS
Studbook Number: 00095
WILD dam\ /sire
00009 *+
RANI I
00026
MEENA
00008 *+
SHERU
00025
Anil
Sex: Male
Birth Date: 5 Mar 2004
Last Location: MYSORE
House Name: SANJU
Tattoo:
Tag/Band:
00095
+ Wild-caught...
* Appear more than once...
Taxon Name: BOS GAURUS
Studbook Number: 00097
00030
Gange/Ma
00013
Arjun/Az
Sex: Male
Birth Date: 26 Jun 2006
Last Location: BANNERGHA (dead)
House Name: shankar
00097
+ Wild-caught... * Appear more than once...
Taxon Name: BOS GAURUS
Studbook Number: 00099
00021 +
Thunge/S
00013
Arjun/Az
Sex: Male
Birth Date: 2 Feb 2007
Last Location: BANNERGHA
House Name: Manav
00099
+ Wild-caught...

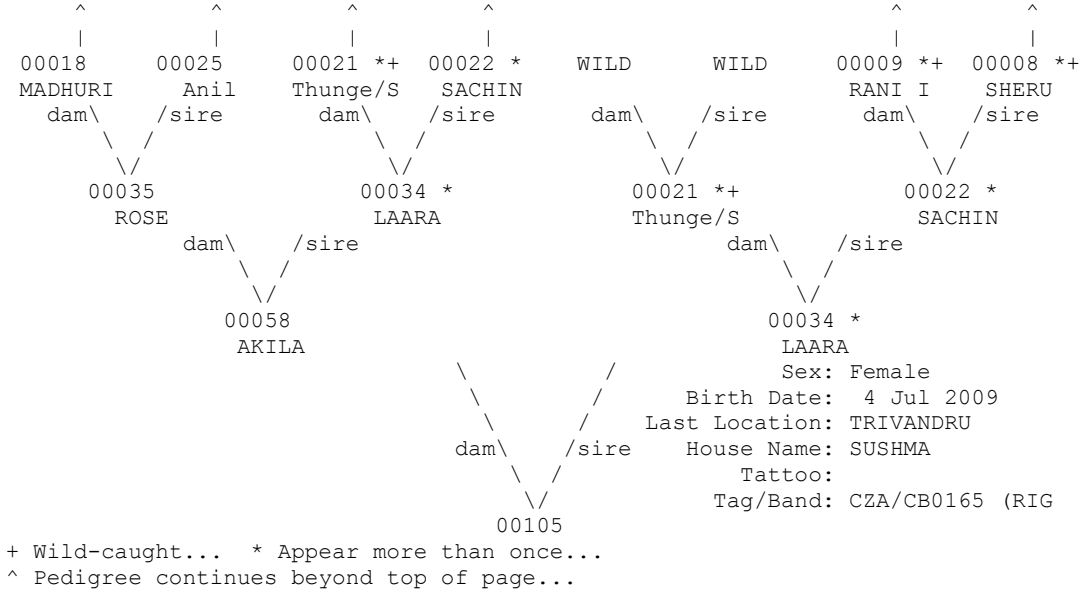

Taxon Name: BOS GAURUS
Studbook Number: 00100
WILD dam\ /sire
00009 *+
RANI I
00008 *+
SHERU
00030
Gange/Ma
00013
Arjun/Az
Sex: Male
Birth Date: 4 Jun 2007
Last Location: BANNERGHA (dead)
House Name: KABEER
Tattoo:
Tag/Band:
00100
+ Wild-caught... * Appear more than once...

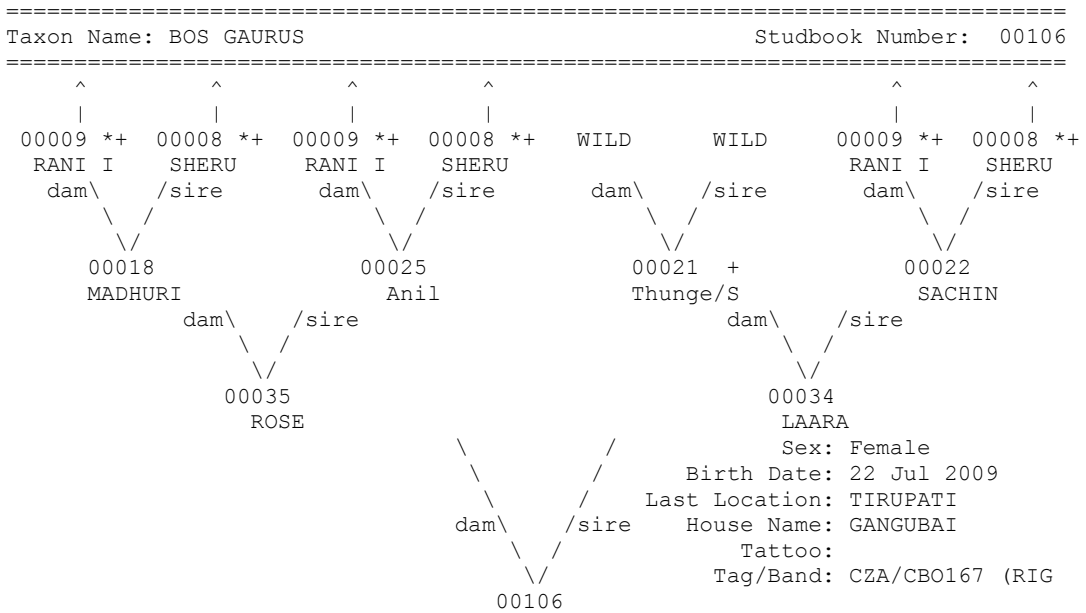

Taxon Name: BOS GAURUS
Studbook Number: 00101
00009 *+ 00008 *+
RANI I SHERU
00025
Anil
00026
MEENA
00057
AMITH
Sex: Female
Birth Date: 21 Feb 2009
Last Location: MYSORE (dead)
House Name: LIKITHA
Tattoo:
Tag/Band: CZA/CBO163
00101
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

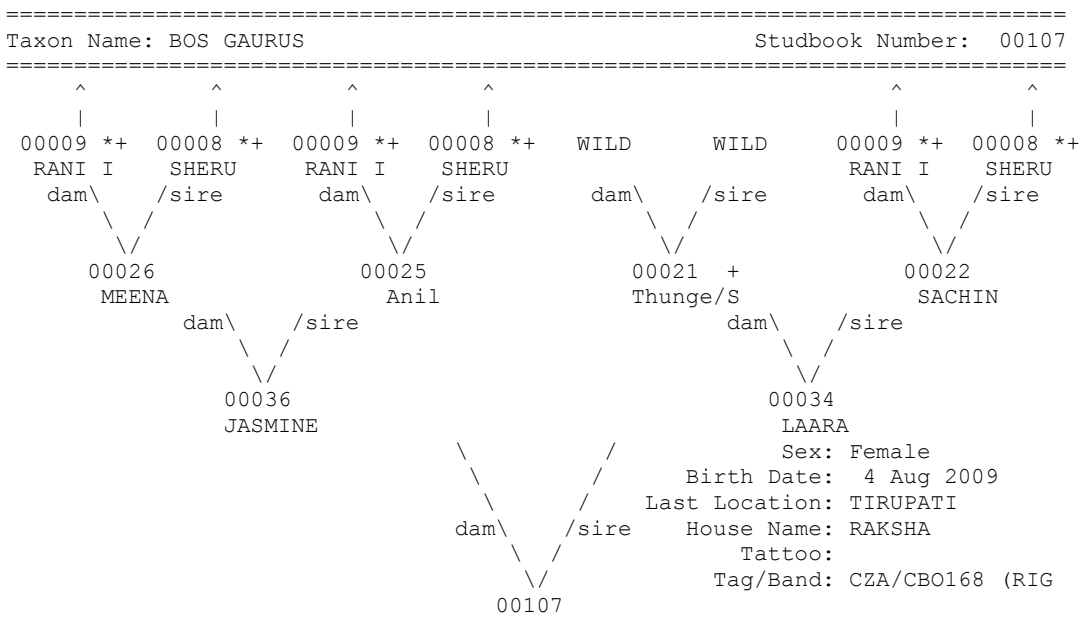

Taxon Name: BOS GAURUS
Studbook Number: 00102
00026 MEENA
00025 Anil
00021 *+ Thunge/S
00022 * SACHIN
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00036 JASMINE
00034 * LAARA
00021 *+ Thunge/S
00022 * SACHIN
00053 KALPANA
00034 * LAARA
Sex: Male
Birth Date: 25 Dec 2008
Last Location: MYSORE
House Name: PUNITH
Tattoo:
Tag/Band: CZA/CBO161 (LEF
00102
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

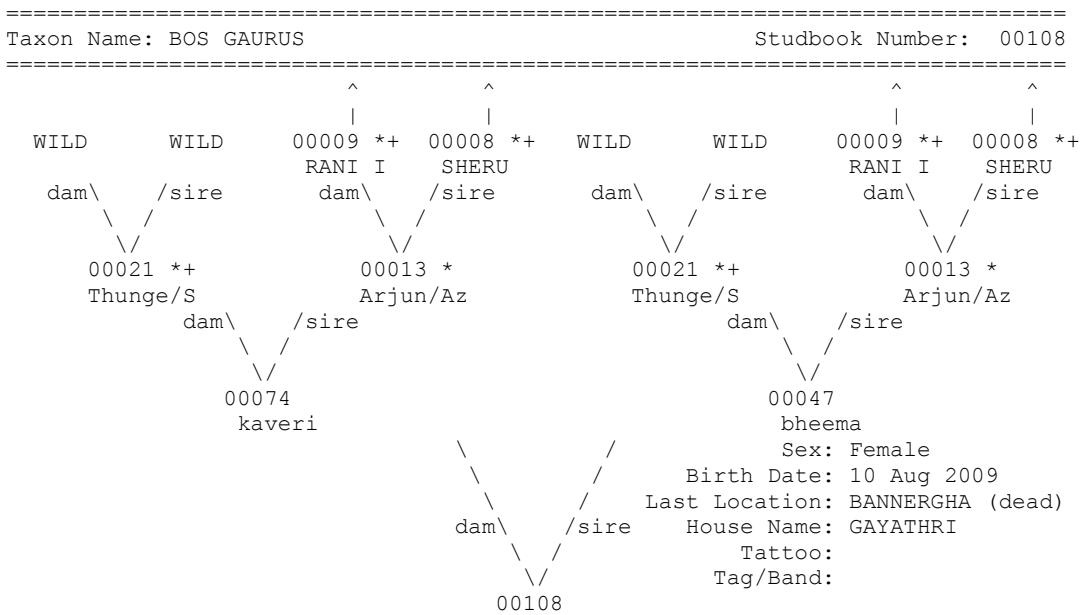

Taxon Name: BOS GAURUS
Studbook Number: 00103
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00009 *+ RANI I
00025 * Anil
00065 VIOLAINE
00057 AMITH
Sex: Male
Birth Date: 20 Dec 2008
Last Location: MYSORE
House Name: ravi
Tattoo:
Tag/Band:
00103
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

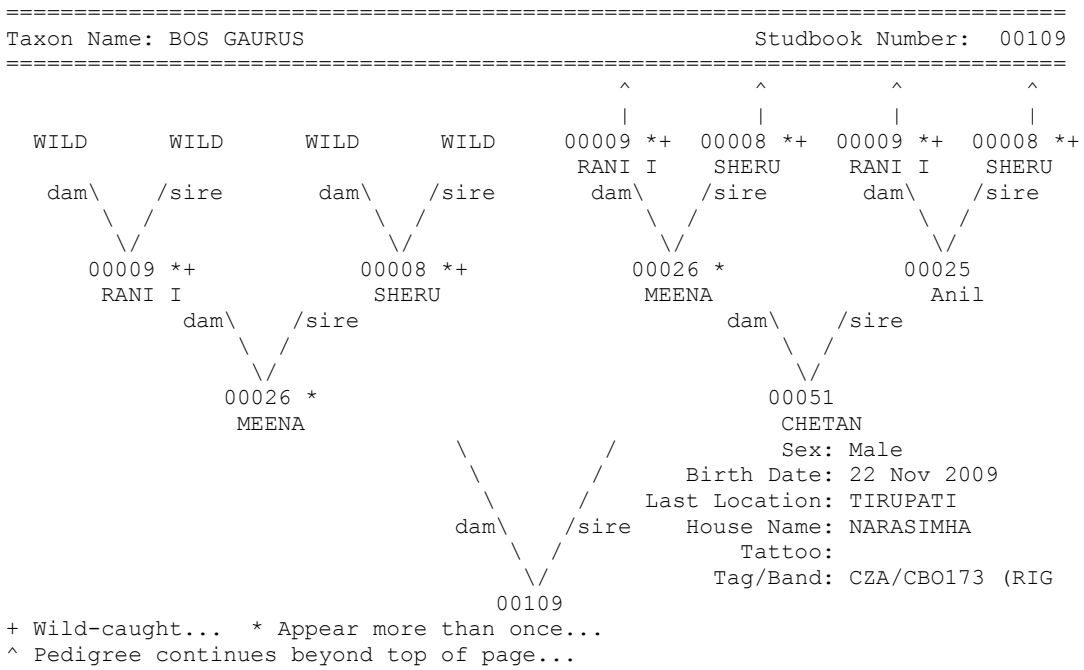

Taxon Name: BOS GAURUS
Studbook Number: 00104
00009 *+ RANI I dam
00008 *+ SHERU /sire
WILD
WILD
WILD
WILD
00009 *+ RANI I dam
00008 *+ SHERU /sire
00018 MADHURI
00008 *+ SHERU
00021 + Thunge/S
00022 SACHIN
dam\ /sire
dam\ /sire
00031 SUNDARI
00034 LAARA
Sex: Female
Birth Date: 23 Apr 2009
Last Location: MYSORE (dead)
House Name: RAMYA
Tattoo:
Tag/Band: CZA/CBO164 (EAR
dam\ /sire
00104
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

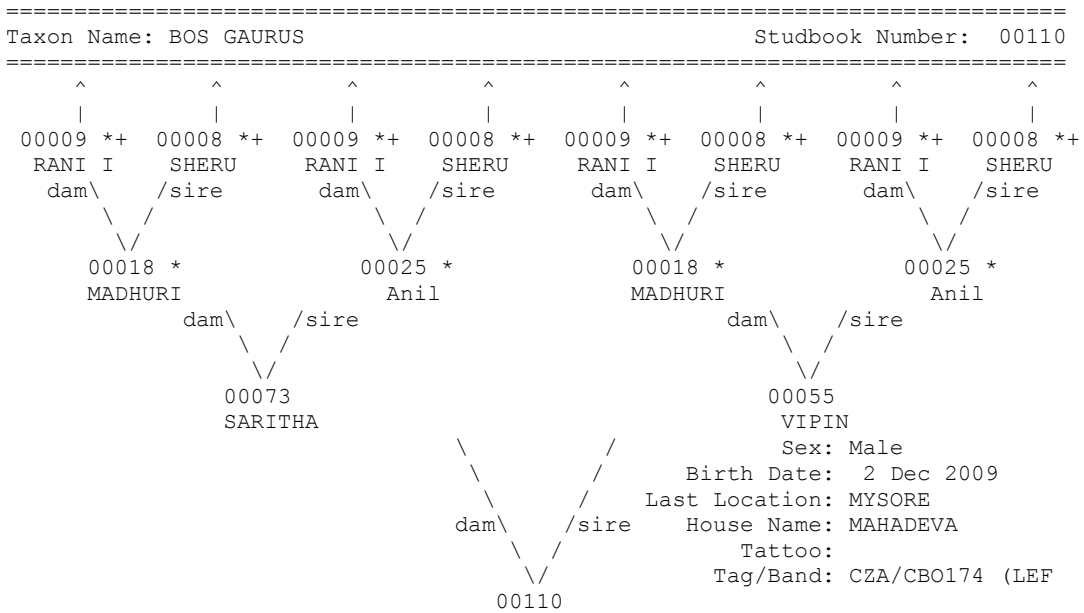

Taxon Name: BOS GAURUS
Studbook Number: 00105
00018 MADHURI
00025 Anil
00021 *+ Thunge/S
00022 * SACHIN
WILD
WILD
00009 *+ RANI I dam
00008 *+ SHERU /sire
00035 ROSE
00034 * LAARA
00021 *+ Thunge/S
00022 * SACHIN
dam\ /sire
dam\ /sire
00058 AKILA
00034 * LAARA
Sex: Female
Birth Date: 4 Jul 2009
Last Location: TRIVANDRU
House Name: SUSHMA
Tattoo:
Tag/Band: CZA/CB0165 (RIG
dam\ /sire
00105
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

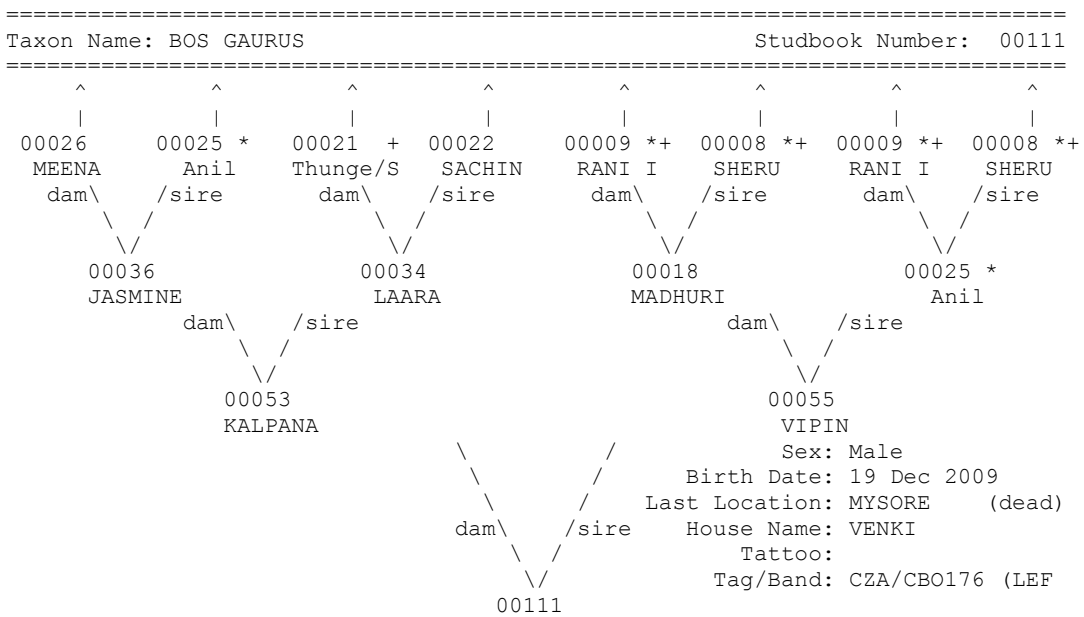

Taxon Name: BOS GAURUS
Studbook Number: 00106
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00018 MADHURI
00025 Anil
00021 + Thunge/S
00022 SACHIN
00035 ROSE
00034 LAARA
Sex: Female
Birth Date: 22 Jul 2009
Last Location: TIRUPATI
House Name: GANGUBAI
Tattoo:
Tag/Band: CZA/CBO167 (RIG
00106
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

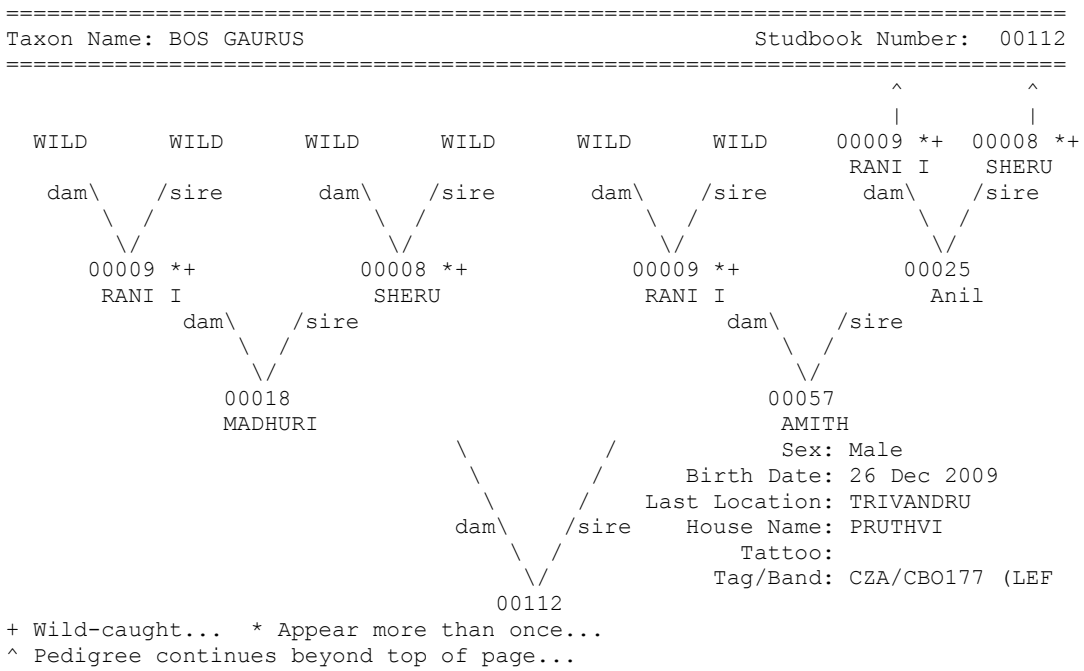

Taxon Name: BOS GAURUS
Studbook Number: 00107
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00026 MEENA
00025 Anil
00021 + Thunge/S
00022 SACHIN
00036 JASMINE
00034 LAARA
Sex: Female
Birth Date: 4 Aug 2009
Last Location: TIRUPATI
House Name: RAKSHA
Tattoo:
Tag/Band: CZA/CBO168 (RIG
00107
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00108
WILD
WILD
00009 *+
RANI I
00008 *+
SHERU
WILD
WILD
00009 *+
RANI I
00008 *+
SHERU
dam\
/sire
dam\
/sire
dam\
/sire
dam\
/sire
00021 *+
Thunge/S
00013 *
Arjun/Az
00021 *+
Thunge/S
00013 *
Arjun/Az
dam\
/sire
dam\
/sire
00074
kaveri
00047
bheema
Sex: Female
Birth Date: 10 Aug 2009
Last Location: BANNERGHA (dead)
House Name: GAYATHRI
Tattoo:
Tag/Band:
dam\
/sire
00108
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

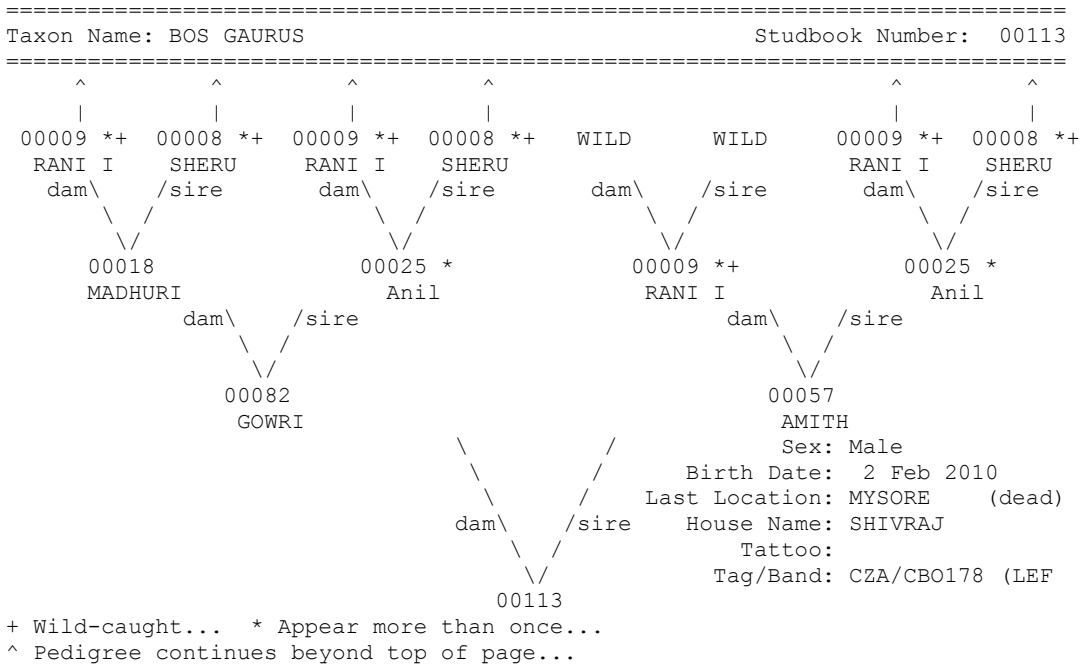

Taxon Name: BOS GAURUS
Studbook Number: 00109
WILD
WILD
WILD
WILD
00009 *+
RANI I
00008 *+
SHERU
00009 *+
RANI I
00008 *+
SHERU
dam\
/sire
dam\
/sire
dam\
/sire
dam\
/sire
00009 *+
RANI I
00008 *+
SHERU
00026 *
MEENA
00025
Anil
dam\
/sire
dam\
/sire
00026 *
MEENA
00051
CHETAN
Sex: Male
Birth Date: 22 Nov 2009
Last Location: TIRUPATI
House Name: NARASIMHA
Tattoo:
Tag/Band: CZA/CBO173 (RIG
dam\
/sire
00109
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00110
00009 *+ RANI I dam
00008 *+ SHERU /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00018 * MADHURI
00025 * Anil
00018 * MADHURI
00025 * Anil
dam /sire
dam /sire
00073 SARITHA
00055 VIPIN
Sex: Male
Birth Date: 2 Dec 2009
Last Location: MYSORE
House Name: MAHADEVA
Tattoo:
Tag/Band: CZA/CBO174 (LEF
00110
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

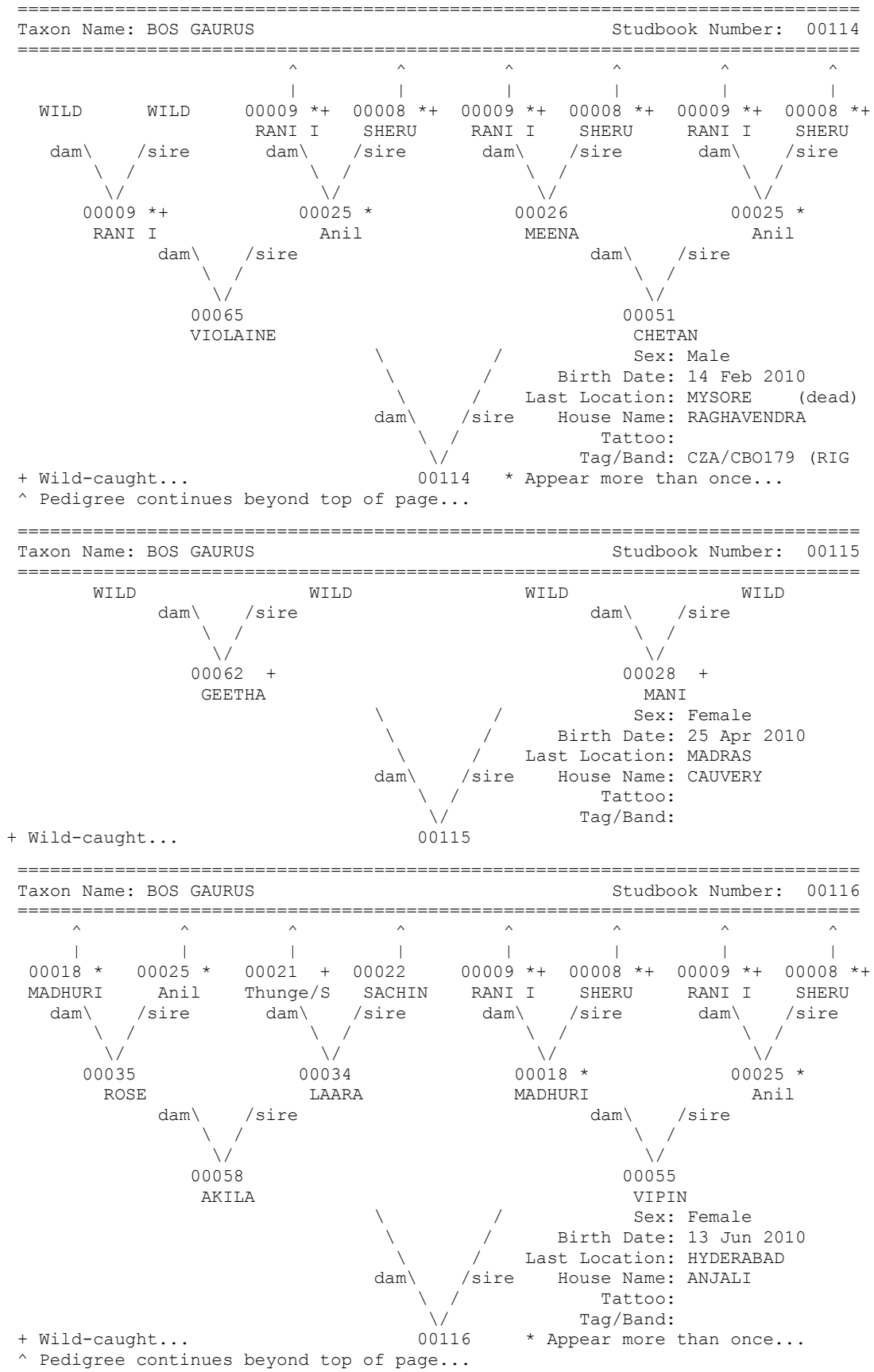

Taxon Name: BOS GAURUS
Studbook Number: 00111
00026 MEENA dam
00025 * Anil /sire
00021 + Thunge/S dam
00022 SACHIN /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00036 JASMINE
00034 LAARA
00018 MADHURI
00025 * Anil
dam /sire
dam /sire
00053 KALPANA
00055 VIPIN
Sex: Male
Birth Date: 19 Dec 2009
Last Location: MYSORE (dead)
House Name: VENKI
Tattoo:
Tag/Band: CZA/CBO176 (LEF
00111
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

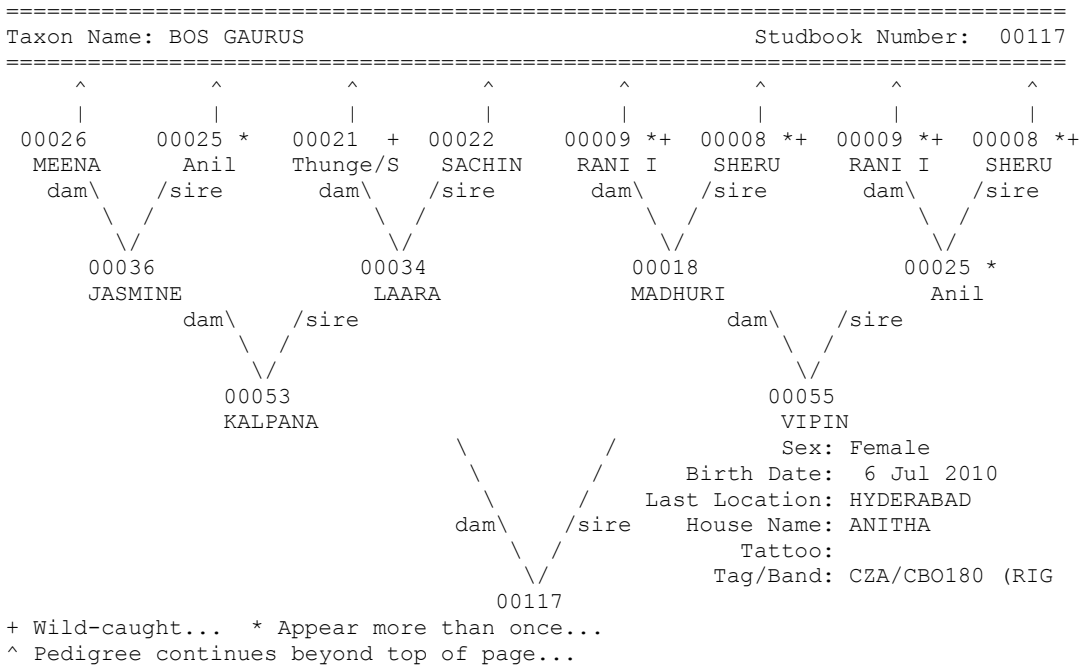


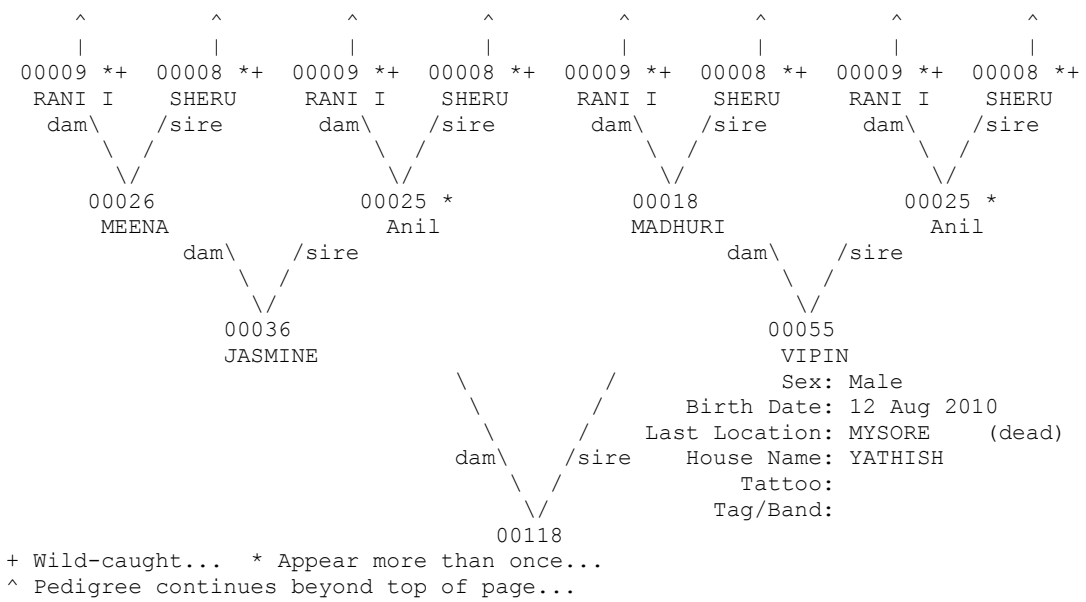
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...



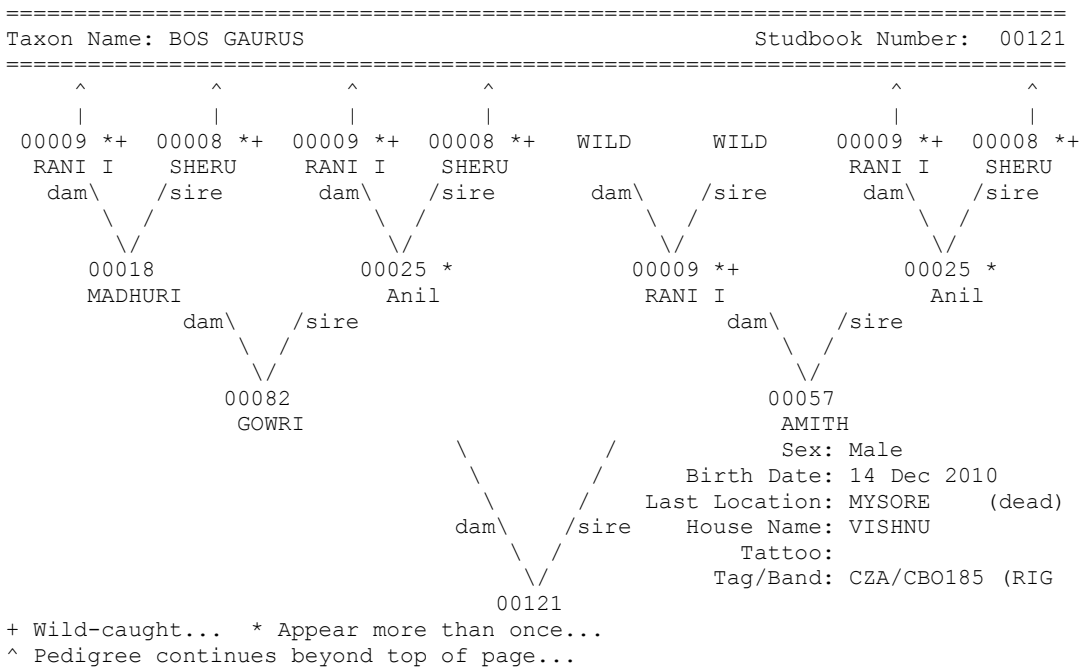
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

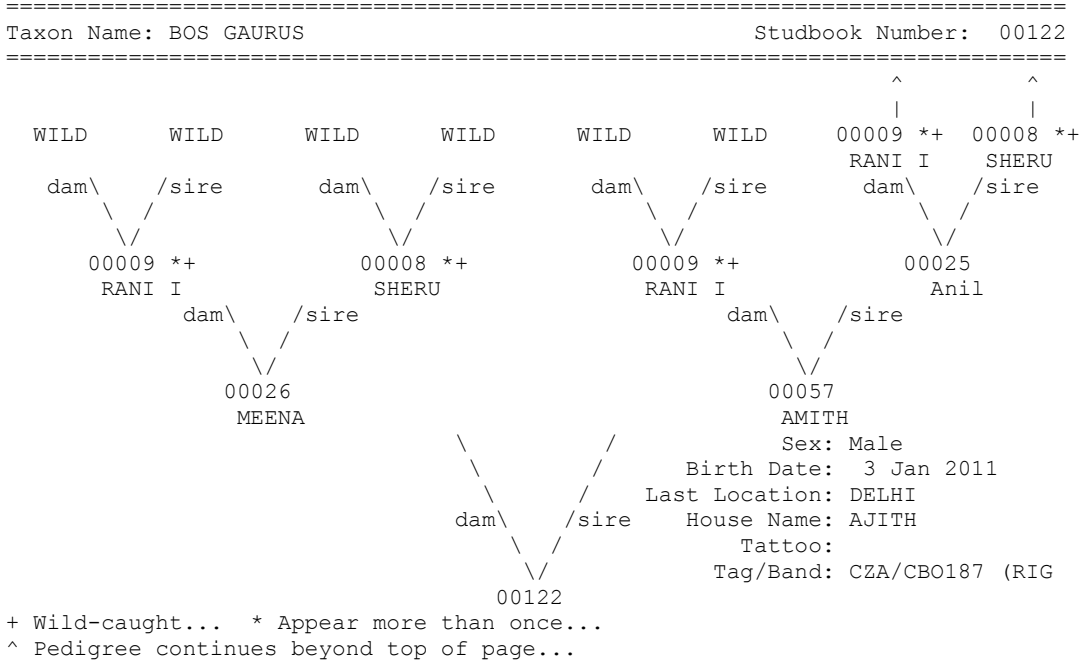

Taxon Name: BOS GAURUS
Studbook Number: 00114
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00025 * Anil
00026 MEENA
00025 * Anil
00065 VIOLAINE
00051 CHETAN
Sex: Male
Birth Date: 14 Feb 2010
Last Location: MYSORE (dead)
House Name: RAGHAVENDRA
Tattoo:
Tag/Band: CZA/CBO179 (RIG
00114 * Appear more than once...
+ Wild-caught...
^ Pedigree continues beyond top of page...
Taxon Name: BOS GAURUS
Studbook Number: 00115
WILD
WILD
WILD
WILD
00062 + GEETHA
00028 + MANI
Sex: Female
Birth Date: 25 Apr 2010
Last Location: MADRAS
House Name: CAUVERY
Tattoo:
Tag/Band:
00115
+ Wild-caught...
Taxon Name: BOS GAURUS
Studbook Number: 00116
00018 * MADHURI
00025 * Anil
00021 + Thunge/S
00022 SACHIN
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00035 ROSE
00034 LAARA
00018 * MADHURI
00025 * Anil
00058 AKILA
00055 VIPIN
Sex: Female
Birth Date: 13 Jun 2010
Last Location: HYDERABAD
House Name: ANJALI
Tattoo:
Tag/Band:
00116 * Appear more than once...
+ Wild-caught...
^ Pedigree continues beyond top of page...

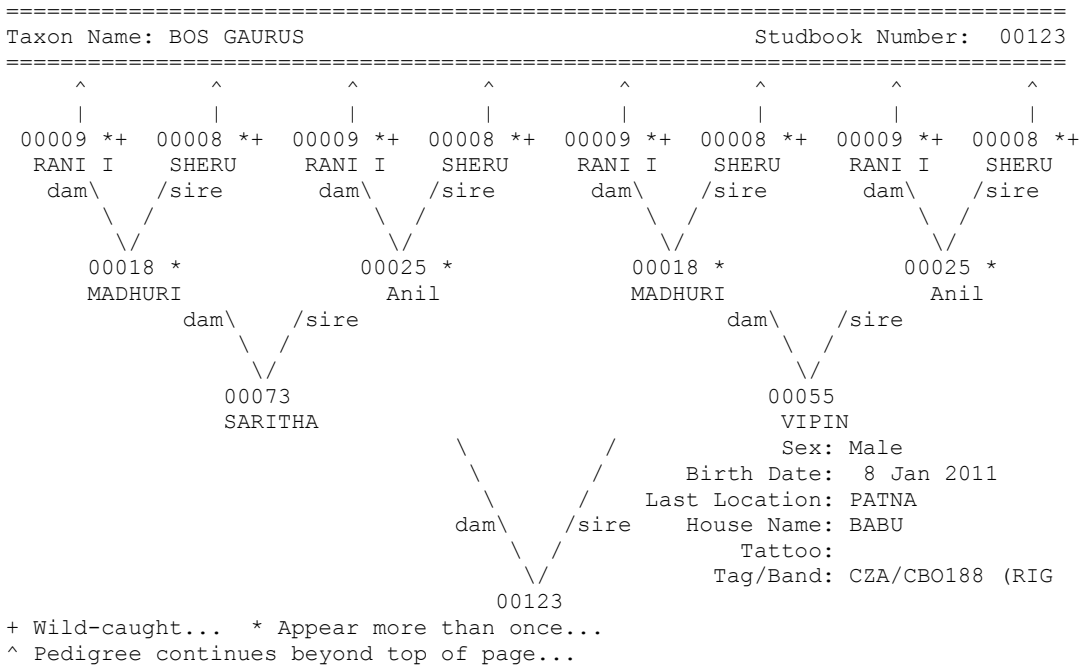

Taxon Name: BOS GAURUS
Studbook Number: 00117
00026 MEENA dam
00025 * Anil /sire
00021 + Thunge/S dam
00022 SACHIN /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00036 JASMINE
00034 LAARA
00018 MADHURI
00025 * Anil
dam /sire
dam /sire
00053 KALPANA
00055 VIPIN
Sex: Female
Birth Date: 6 Jul 2010
Last Location: HYDERABAD
House Name: ANITHA
Tattoo:
Tag/Band: CZA/CBO180 (RIG
dam /sire
00117
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

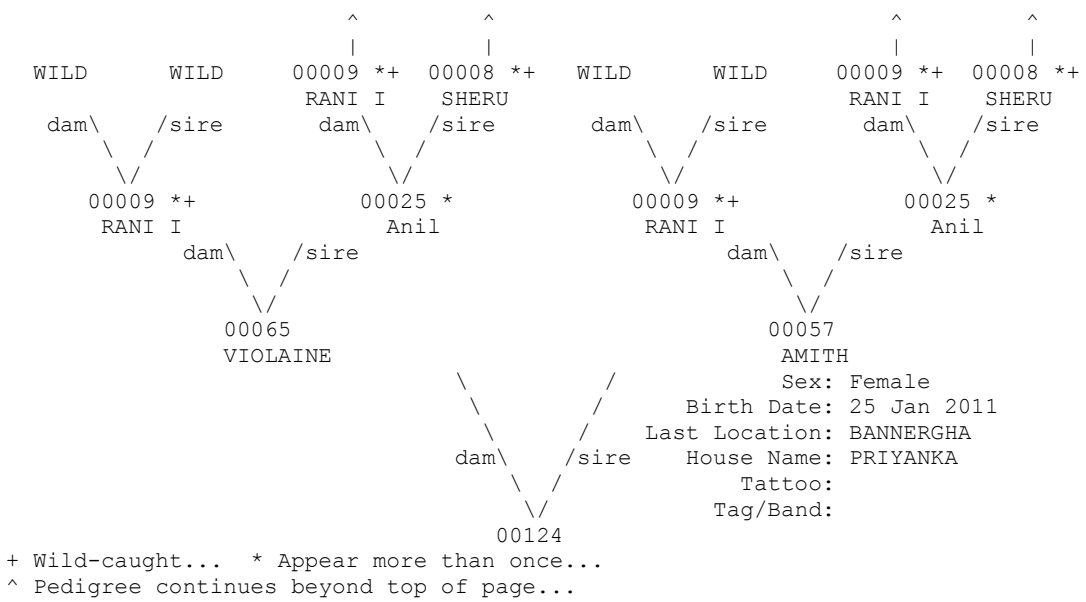

Taxon Name: BOS GAURUS
Studbook Number: 00118
00009 *+ RANI I dam
00008 *+ SHERU /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00009 *+ RANI I dam
00008 *+ SHERU /sire
00026 MEENA
00025 * Anil
00018 MADHURI
00025 * Anil
dam /sire
dam /sire
00036 JASMINE
00055 VIPIN
Sex: Male
Birth Date: 12 Aug 2010
Last Location: MYSORE (dead)
House Name: YATHISH
Tattoo:
Tag/Band:
dam /sire
00118
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

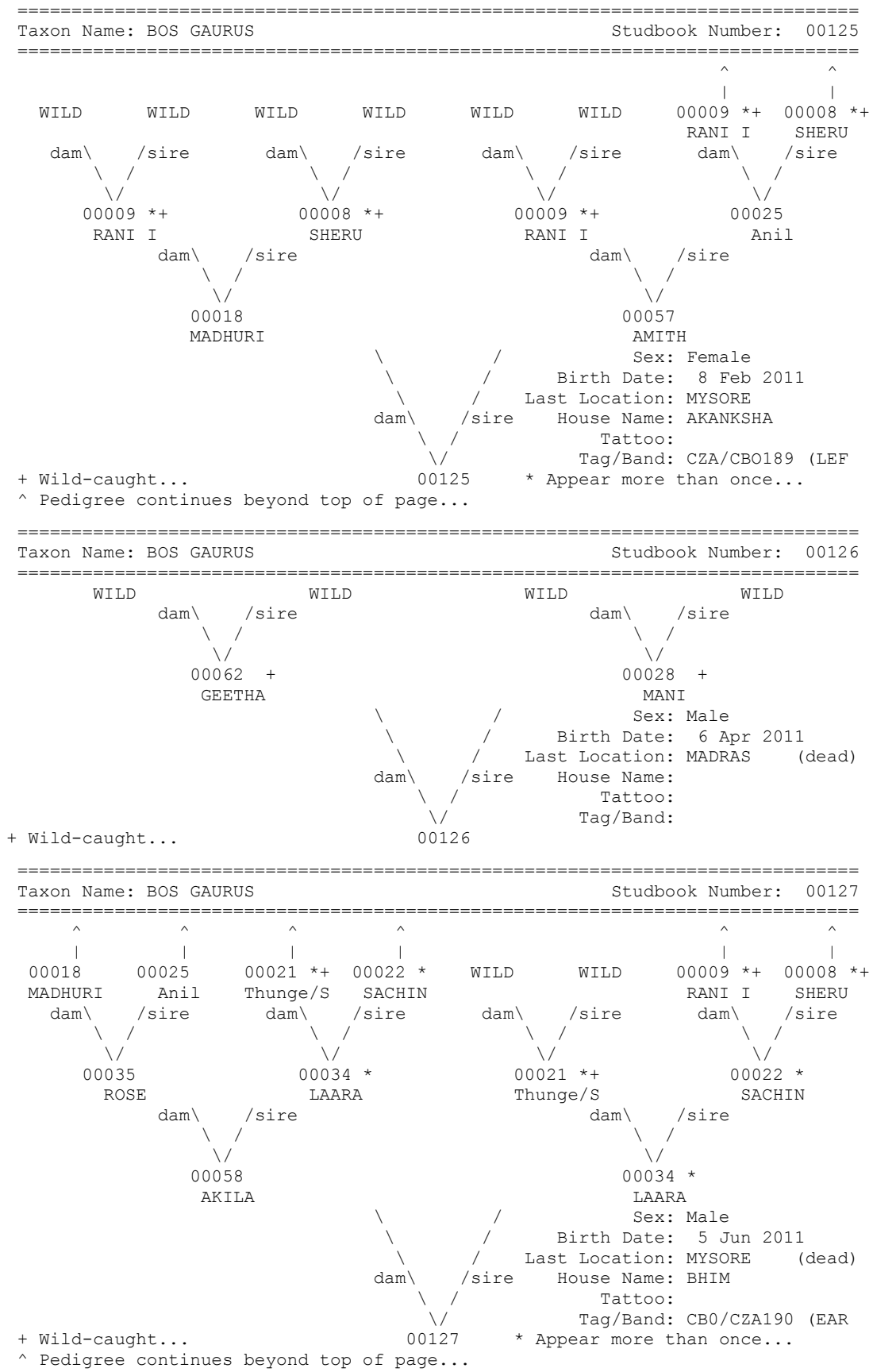
```
================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00119
================================================================================
     ^         ^
     |         |
 00009 *+  00025      WILD      WILD
  RANI I     Anil
   dam\    /sire       dam\    /sire
       \  /                \  /
        \/                  \/
      00037                00028 *+             WILD                WILD
      LILLY/ME               MANI
             dam\    /sire                            dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
                00078                                   00028 *+
                  SUBA                                    MANI
                                    \          /            Sex: Male
                                     \        /      Birth Date: 12 Aug 2010
                                      \      /    Last Location: MADRAS    (dead)
                                    dam\    /sire    House Name:
                                        \  /            Tattoo:
                                         \/           Tag/Band:
                                       00119
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00120
================================================================================
     ^         ^         ^         ^         ^         ^         ^         ^
     |         |         |         |         |         |         |         |
 00009 *+  00008 *+  00009 *+  00008 *+  00009 *+  00008 *+  00009 *+  00008 *+
  RANI I    SHERU     RANI I    SHERU     RANI I    SHERU     RANI I    SHERU
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /                \  /                \  /                \  /
        \/                  \/                  \/                  \/
      00018 *             00025 *             00018 *             00025 *
      MADHURI               Anil              MADHURI               Anil
             dam\    /sire                               dam\    /sire
                 \  /                                        \  /
                  \/                                          \/
                00035                                       00055
                  ROSE                                      VIPIN
                                    \          /            Sex: Female
                                     \        /      Birth Date: 17 Nov 2010
                                      \      /    Last Location: PATNA
                                    dam\    /sire    House Name: DARSHINI
                                        \  /            Tattoo:
                                         \/           Tag/Band: CZA/CBO184 (RIG
                                       00120
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```


Taxon Name: BOS GAURUS
Studbook Number: 00121
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00018 MADHURI
00025 * Anil
00009 *+ RANI I
00025 * Anil
00082 GOWRI
00057 AMITH
Sex: Male
Birth Date: 14 Dec 2010
Last Location: MYSORE (dead)
House Name: VISHNU
Tattoo:
Tag/Band: CZA/CBO185 (RIG
00121
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

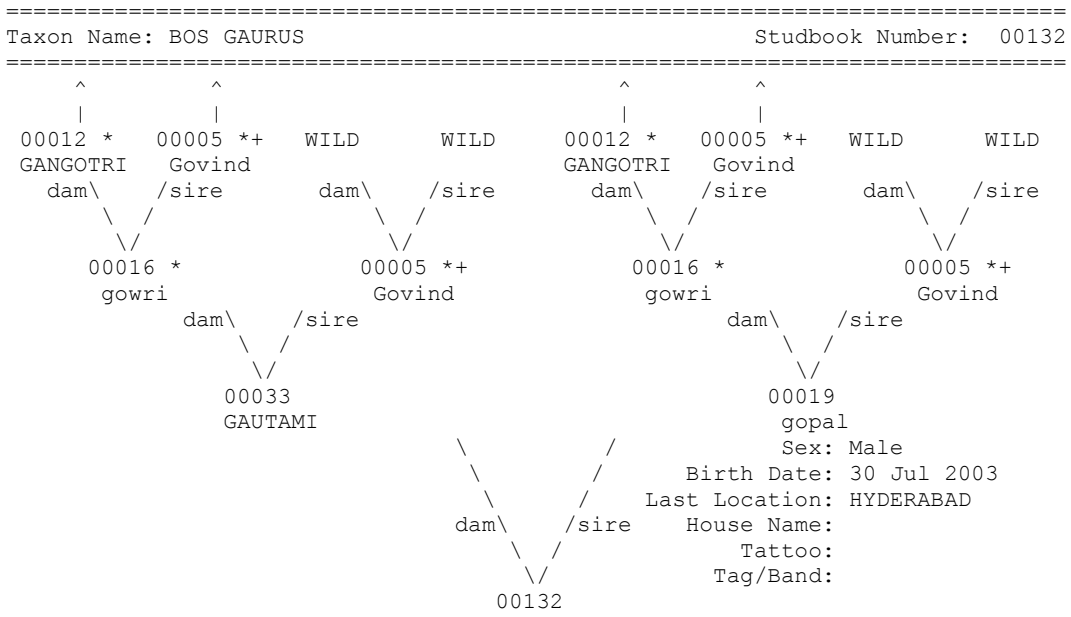

Taxon Name: BOS GAURUS
Studbook Number: 00122
WILD
WILD
WILD
WILD
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00025 Anil
00026 MEENA
00057 AMITH
Sex: Male
Birth Date: 3 Jan 2011
Last Location: DELHI
House Name: AJITH
Tattoo:
Tag/Band: CZA/CBO187 (RIG
00122
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

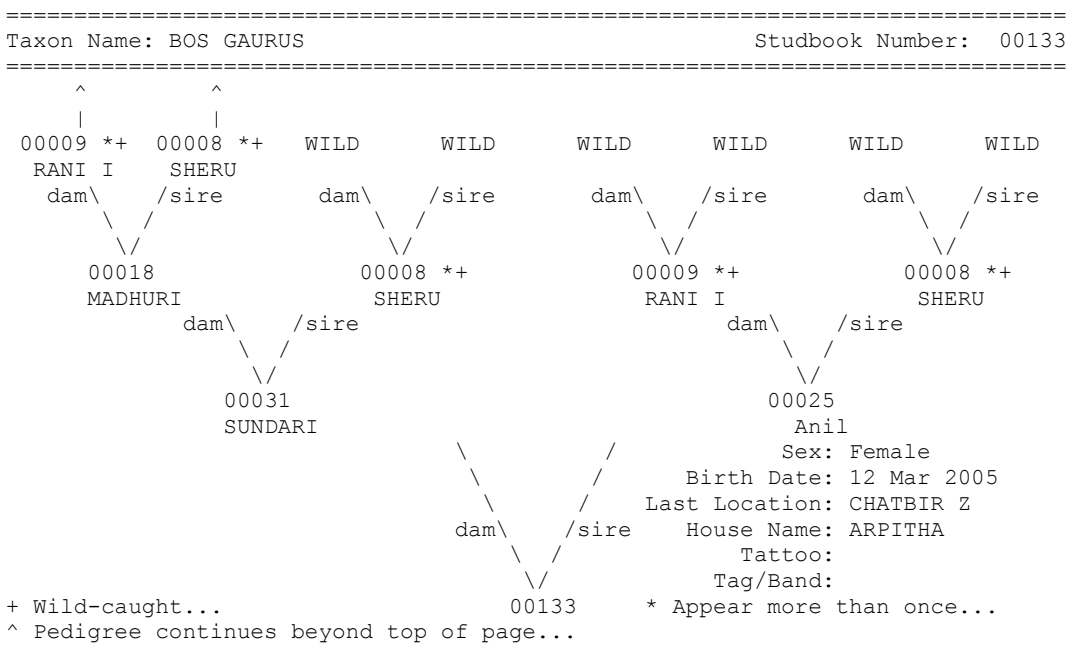

Taxon Name: BOS GAURUS
Studbook Number: 00123
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00018 * MADHURI
00025 * Anil
00018 * MADHURI
00025 * Anil
dam\ /sire
dam\ /sire
00073 SARITHA
00055 VIPIN
Sex: Male
Birth Date: 8 Jan 2011
Last Location: PATNA
House Name: BABU
Tattoo:
Tag/Band: CZA/CBO188 (RIG
00123
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00124
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00009 *+ RANI I
00025 * Anil
00009 *+ RANI I
00025 * Anil
dam\ /sire
dam\ /sire
00065 VIOLAINE
00057 AMITH
Sex: Female
Birth Date: 25 Jan 2011
Last Location: BANNERGHA
House Name: PRIYANKA
Tattoo:
Tag/Band:
00124
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00125
WILD
WILD
WILD
WILD
WILD
WILD
00009 *+
RANI I
00008 *+
SHERU
dam\
/sire
00009 *+
RANI I
00008 *+
SHERU
00025
Anil
00018
MADHURI
00057
AMITH
Sex: Female
Birth Date: 8 Feb 2011
Last Location: MYSORE
House Name: AKANKSHA
Tattoo:
Tag/Band: CZA/CBO189 (LEF
00125
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...
Taxon Name: BOS GAURUS
Studbook Number: 00126
WILD
WILD
WILD
WILD
00062 +
GEETHA
00028 +
MANI
Sex: Male
Birth Date: 6 Apr 2011
Last Location: MADRAS (dead)
House Name:
Tattoo:
Tag/Band:
00126
+ Wild-caught...
Taxon Name: BOS GAURUS
Studbook Number: 00127
00018
MADHURI
00025
Anil
00021 *+
Thunge/S
00022 *
SACHIN
WILD
WILD
00009 *+
RANI I
00008 *+
SHERU
00035
ROSE
00034 *
LAARA
00021 *+
Thunge/S
00022 *
SACHIN
00058
AKILA
00034 *
LAARA
Sex: Male
Birth Date: 5 Jun 2011
Last Location: MYSORE (dead)
House Name: BHIM
Tattoo:
Tag/Band: CB0/CZA190 (EAR
00127
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...

```
================================================================================
Taxon Name: BOS GAURUS                              Studbook Number:  00128
================================================================================
                 WILD                                    WILD
                                    \          /         Sex: Female
                                     \        /     Birth Date:      ~ 1996
                                      \      /    Last Location: MYSORE    (dead)
                                    dam\    /sire    House Name: divya
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                       00128

================================================================================
Taxon Name: BOS GAURUS                              Studbook Number:  00129
================================================================================
       WILD                 WILD                WILD                 WILD
             dam\    /sire                              dam\    /sire
                 \  /                                       \  /
                  \/                                         \/
               00009  +                                   00008  +
                RANI I                                     SHERU
                                    \          /         Sex: Female
                                     \        /     Birth Date: 27 Feb 1998
                                      \      /    Last Location: MYSORE    (dead)
                                    dam\    /sire    House Name: swarna
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                      00129



================================================================================
Taxon Name: BOS GAURUS                              Studbook Number:  00130
================================================================================
       WILD                 WILD                WILD                 WILD
             dam\    /sire                              dam\    /sire
                 \  /                                       \  /
                  \/                                         \/
               00009  +                                   00008  +
                RANI I                                     SHERU
                                    \          /         Sex: Female
                                     \        /     Birth Date:  8 Dec 1999
                                      \      /    Last Location: MYSORE    (dead)
                                    dam\    /sire    House Name: muktha
                                        \  /             Tattoo:
                                         \/            Tag/Band:
+ Wild-caught...                      00130

================================================================================
Taxon Name: BOS GAURUS                              Studbook Number:  00131
================================================================================
                 UNK                                     UNK
                                    \          /         Sex: Male
                                     \        /     Birth Date: 14 Sep 2002
                                      \      /    Last Location: MADRAS    (dead)
                                    dam\    /sire    House Name: Ajay
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                       00131
```

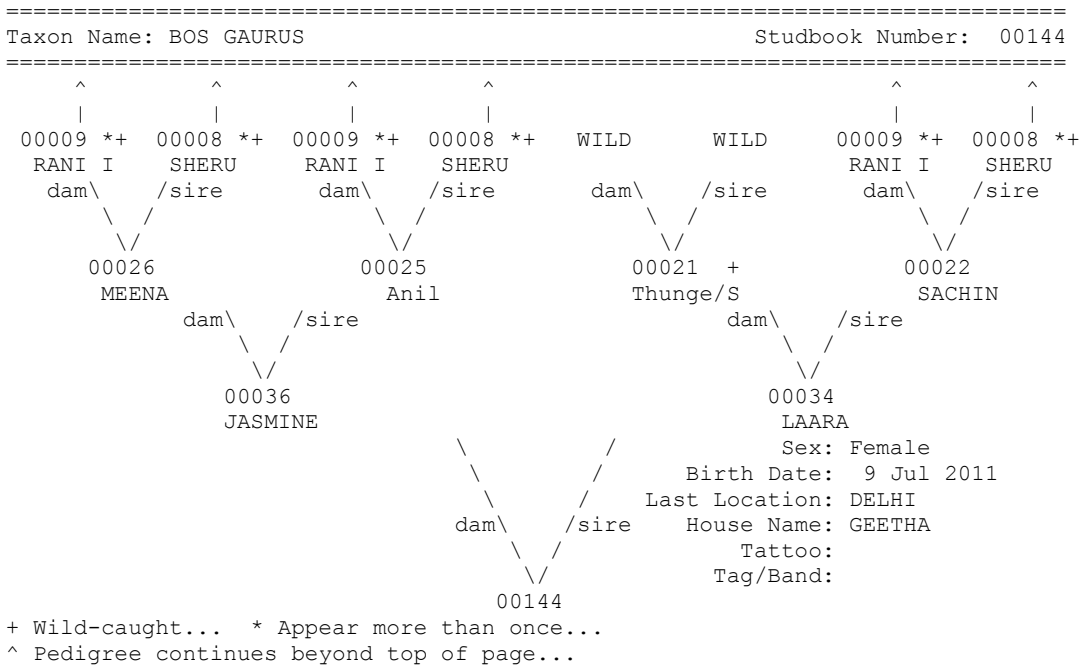

Taxon Name: BOS GAURUS
Studbook Number: 00132
00012 * GANGOTRI
00005 *+ Govind
WILD
WILD
00012 * GANGOTRI
00005 *+ Govind
WILD
WILD
dam\ /sire
dam\ /sire
dam\ /sire
dam\ /sire
00016 * gowri
00005 *+ Govind
00016 * gowri
00005 *+ Govind
dam\ /sire
dam\ /sire
00033 GAUTAMI
00019 gopal
Sex: Male
Birth Date: 30 Jul 2003
Last Location: HYDERABAD
dam\ /sire
House Name:
Tattoo:
Tag/Band:
00132
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

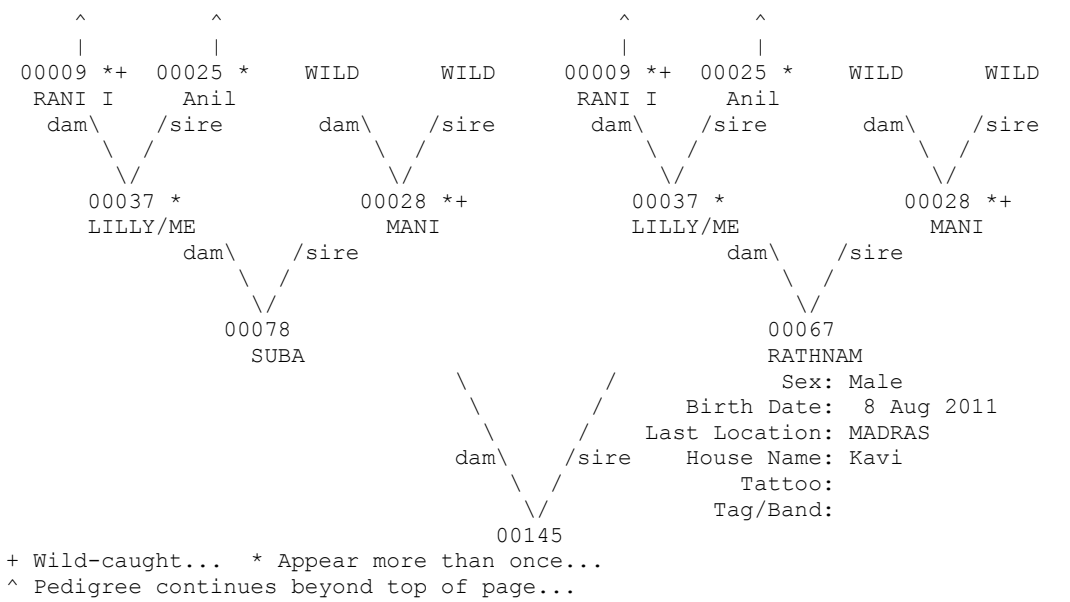

Taxon Name: BOS GAURUS
Studbook Number: 00133
00009 *+ RANI I
00008 *+ SHERU
WILD
WILD
WILD
WILD
WILD
WILD
dam\ /sire
dam\ /sire
dam\ /sire
dam\ /sire
00018 MADHURI
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
dam\ /sire
00031 SUNDARI
00025 Anil
Sex: Female
Birth Date: 12 Mar 2005
Last Location: CHATBIR Z
dam\ /sire
House Name: ARPITHA
Tattoo:
Tag/Band:
00133
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...

```
================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00134
================================================================================
     ^         ^         ^         ^                                 ^         ^
     |         |         |         |                                 |         |
 00026     00025     00021 *+  00022 *    WILD      WILD     00009 *+  00008 *+
  MEENA       Anil    Thunge/S   SACHIN                        RANI I    SHERU
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
      \  /                \  /                \  /                \  /
       \/                  \/                  \/                  \/
     00036               00034 *             00021 *+            00022 *
     JASMINE              LAARA              Thunge/S             SACHIN
            dam\    /sire                           dam\    /sire
                \  /                                    \  /
                 \/                                      \/
               00053                                   00034 *
               KALPANA                                  LAARA
                                  \          /          Sex: Male
                                   \        /      Birth Date: 31 Jan 2007
                                    \      /    Last Location: MYSORE    (dead)
                                  dam\    /sire    House Name: GUNDA
                                      \  /            Tattoo:
                                       \/           Tag/Band:
+ Wild-caught...                     00134     * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00135
================================================================================
               WILD                                     WILD
                                  \          /          Sex: Male
                                   \        /      Birth Date:  ~ Jan 2009
                                    \      /    Last Location: HYDERABAD
                                  dam\    /sire    House Name: RAJVEER
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                     00135

================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00136
================================================================================
               UNK                                      UNK
                                  \          /          Sex: Male
                                   \        /      Birth Date:  9 Jun 2009
                                    \      /    Last Location: DELHI
                                  dam\    /sire    House Name:
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                     00136

================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00137
================================================================================
               UNK                                      UNK
                                  \          /          Sex: Male
                                   \        /      Birth Date: 28 Feb 2010
                                    \      /    Last Location: USGOWN
                                  dam\    /sire    House Name: SAMSHER
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                     00137
```

```
================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00138
================================================================================
                                        ^         ^         ^         ^
                                        |         |         |         |
                                    00009 *+  00025 *   00009 *+  00008 *+
                                     RANI I     Anil     RANI I    SHERU
                                      dam\    /sire       dam\    /sire
                                          \  /                \  /
                                           \/                  \/
                                        00065                00025 *
                                        VIOLAINE               Anil
                                               dam\    /sire
                                                   \  /
                                                    \/
                UNK                                 00081
                                                     ASHOKA
                                \          /         Sex: Female
                                 \        /      Birth Date: 23 Jun 2010
                                  \      /    Last Location: CHATBIR Z
                                dam\    /sire    House Name:
                                    \  /            Tattoo:
                                     \/           Tag/Band:
+ Wild-caught...                  00138    * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00139
================================================================================
                                        ^         ^         ^         ^
                                        |         |         |         |
                                    00009 *+  00025 *   00009 *+  00008 *+
                                     RANI I     Anil     RANI I    SHERU
                                      dam\    /sire       dam\    /sire
                                          \  /                \  /
                                           \/                  \/
                                        00065                00025 *
                                        VIOLAINE               Anil
                                               dam\    /sire
                                                   \  /
                                                    \/
                UNK                                 00081
                                                     ASHOKA
                                \          /         Sex: Female
                                 \        /      Birth Date:  3 Sep 2010
                                  \      /    Last Location: CHATBIR Z (dead)
                                dam\    /sire    House Name:
                                    \  /            Tattoo:
                                     \/           Tag/Band:
+ Wild-caught...                  00139     * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00140
================================================================================
                WILD                                  WILD
                                \          /         Sex: Male
                                 \        /      Birth Date:    ????
                                  \      /    Last Location: VANVIHAR  (dead)
                                dam\    /sire    House Name:
                                    \  /            Tattoo:
                                     \/           Tag/Band:
                                   00140
```

```
================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00141
================================================================================
                 WILD                                    WILD
                                    \          /         Sex: Female
                                     \        /      Birth Date:    ????
                                      \      /    Last Location: VANVIHAR
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                      00141

================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00142
================================================================================
                 WILD                                    WILD
                                    \          /         Sex: Female
                                     \        /      Birth Date:    ????
                                      \      /    Last Location: VANVIHAR  (dead)
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                      00142


================================================================================
Taxon Name: BOS GAURUS                                          Studbook Number:  00143
================================================================================
     ^         ^                                   ^         ^
     |         |                                   |         |
 00009 *+  00025 *    WILD      WILD     00009 *+  00025 *    WILD      WILD
  RANI I     Anil                        RANI I     Anil
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /                \  /                \  /                \  /
        \/                  \/                  \/                  \/
     00037 *             00028 *+            00037 *             00028 *+
     LILLY/ME              MANI              LILLY/ME              MANI
            dam\    /sire                               dam\    /sire
                \  /                                        \  /
                 \/                                          \/
              00088                                       00067
              LEKSHMI                                     RATHNAM
                                    \          /          Sex: Male
                                     \        /      Birth Date: 17 Jun 2011
                                      \      /    Last Location: MADRAS    (dead)
                                    dam\    /sire    House Name:
                                        \  /             Tattoo:
                                         \/            Tag/Band:
                                      00143
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

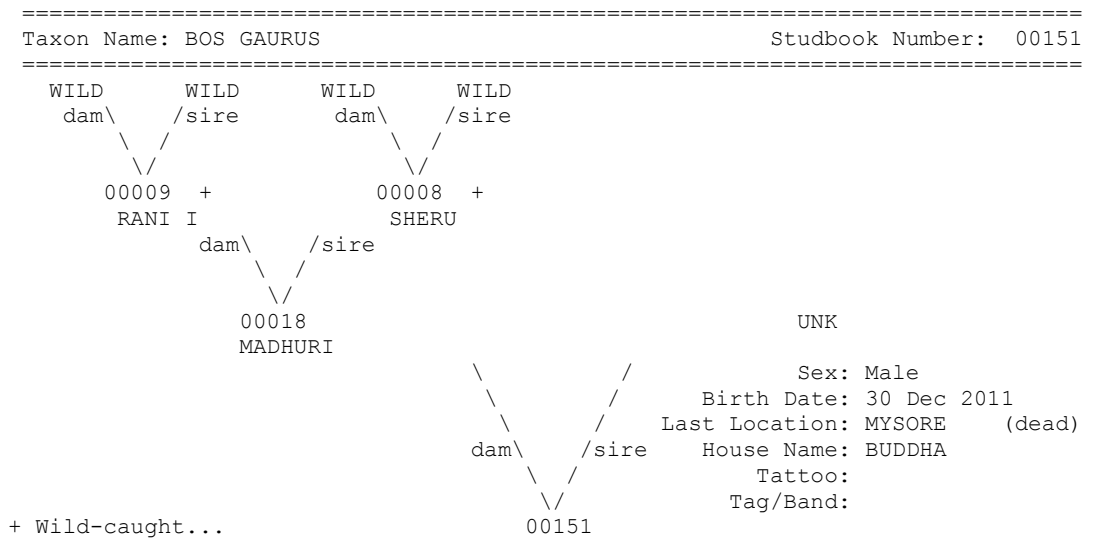

Taxon Name: BOS GAURUS
Studbook Number: 00144
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00026 MEENA
00025 Anil
00021 + Thunge/S
00022 SACHIN
00036 JASMINE
00034 LAARA
Sex: Female
Birth Date: 9 Jul 2011
Last Location: DELHI
House Name: GEETHA
Tattoo:
Tag/Band:
00144
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

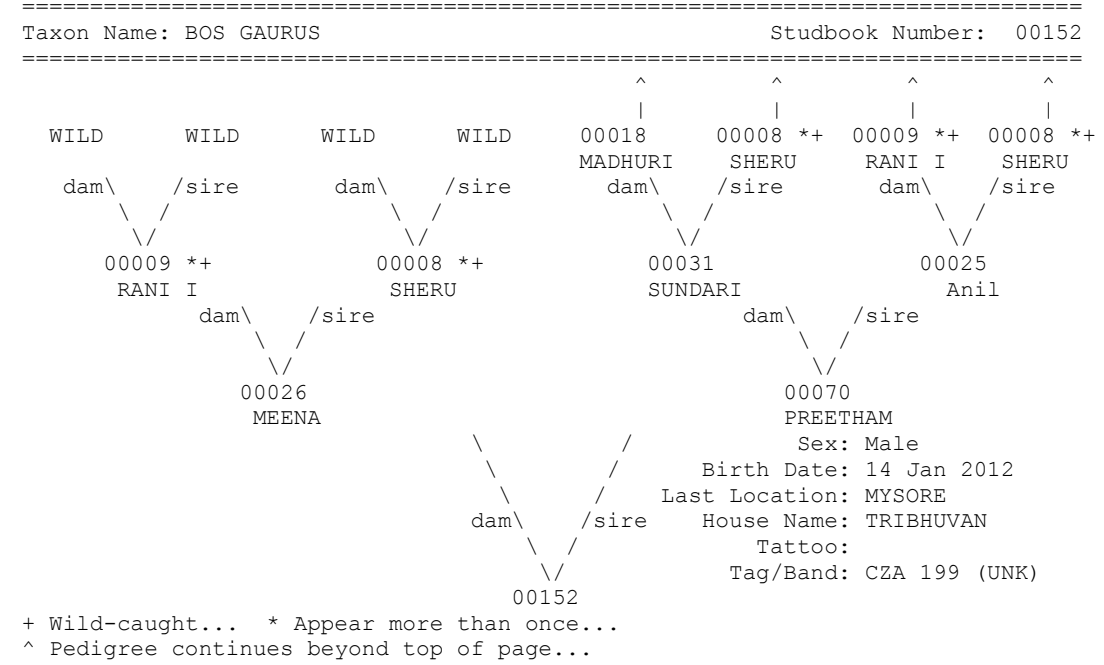

Taxon Name: BOS GAURUS
Studbook Number: 00145
00009 *+ RANI I
00025 * Anil
WILD
WILD
00009 *+ RANI I
00025 * Anil
WILD
WILD
dam\ /sire
00037 * LILLY/ME
00028 *+ MANI
00078 SUBA
00067 RATHNAM
Sex: Male
Birth Date: 8 Aug 2011
Last Location: MADRAS
House Name: Kavi
Tattoo:
Tag/Band:
00145
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

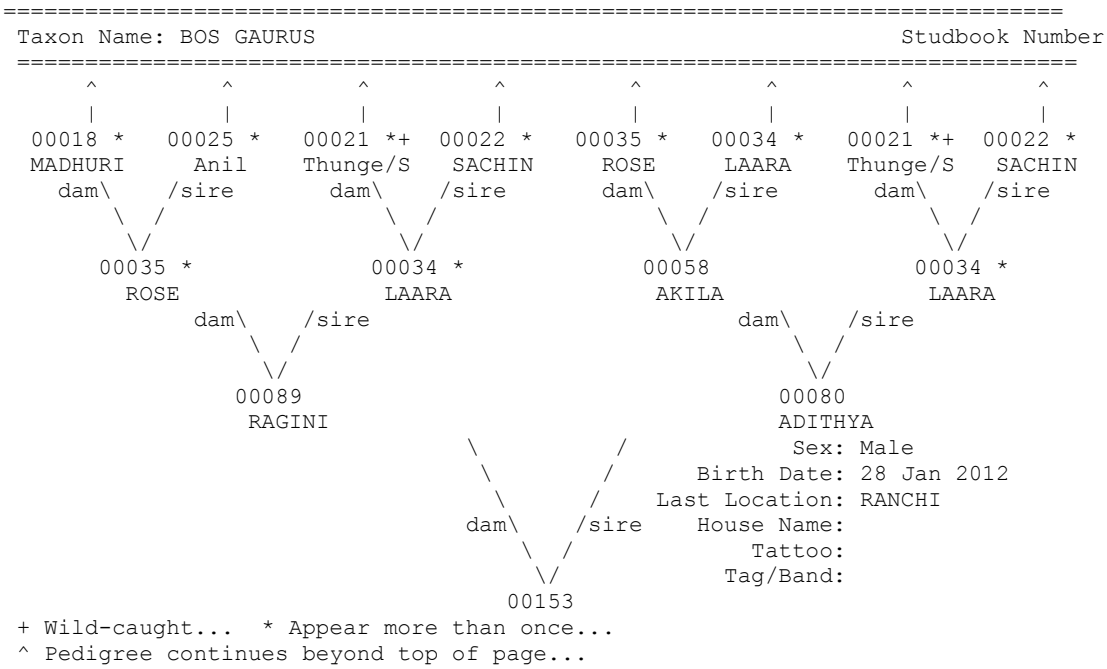
```
================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00146
================================================================================
                                        ^         ^         ^         ^
                                        |         |         |         |
                                    00009 *+  00025 *   00009 *+  00008 *+
                                     RANI I     Anil     RANI I    SHERU
                                      dam\    /sire       dam\    /sire
                                          \  /                \  /
                                           \/                  \/
                                        00065                00025 *
                                        VIOLAINE               Anil
                                               dam\    /sire
                                                   \  /
                                                    \/
                UNK                                 00081
                                                     ASHOKA
                                  \          /       Sex: Unknown
                                   \        /     Birth Date: 20 Aug 2011
                                    \      /    Last Location: CHATBIR Z
                                  dam\    /sire    House Name:
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                     00146
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

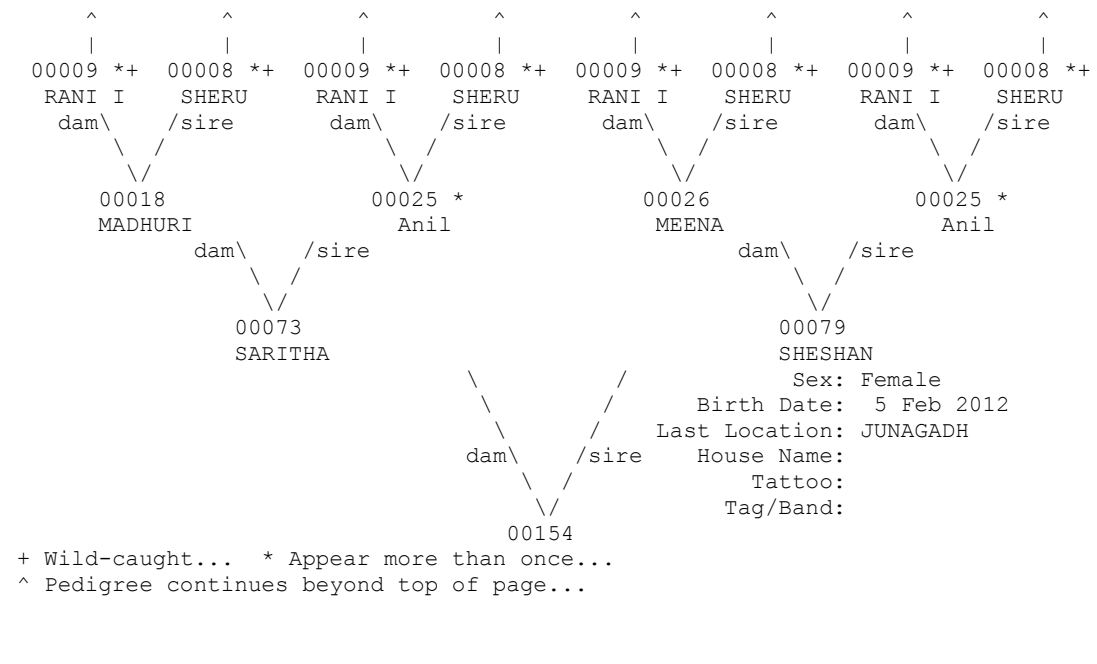
```
================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00147
================================================================================
                                        ^         ^         ^         ^
                                        |         |         |         |
                                    00009 *+  00025 *   00009 *+  00008 *+
                                     RANI I     Anil     RANI I    SHERU
                                      dam\    /sire       dam\    /sire
                                          \  /                \  /
                                           \/                  \/
                                        00065                00025 *
                                        VIOLAINE               Anil
                                               dam\    /sire
                                                   \  /
                                                    \/
                UNK                                 00081
                                                     ASHOKA
                                  \          /       Sex: Unknown
                                   \        /     Birth Date: 26 Aug 2011
                                    \      /    Last Location: CHATBIR Z
                                  dam\    /sire    House Name:
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                     00147
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

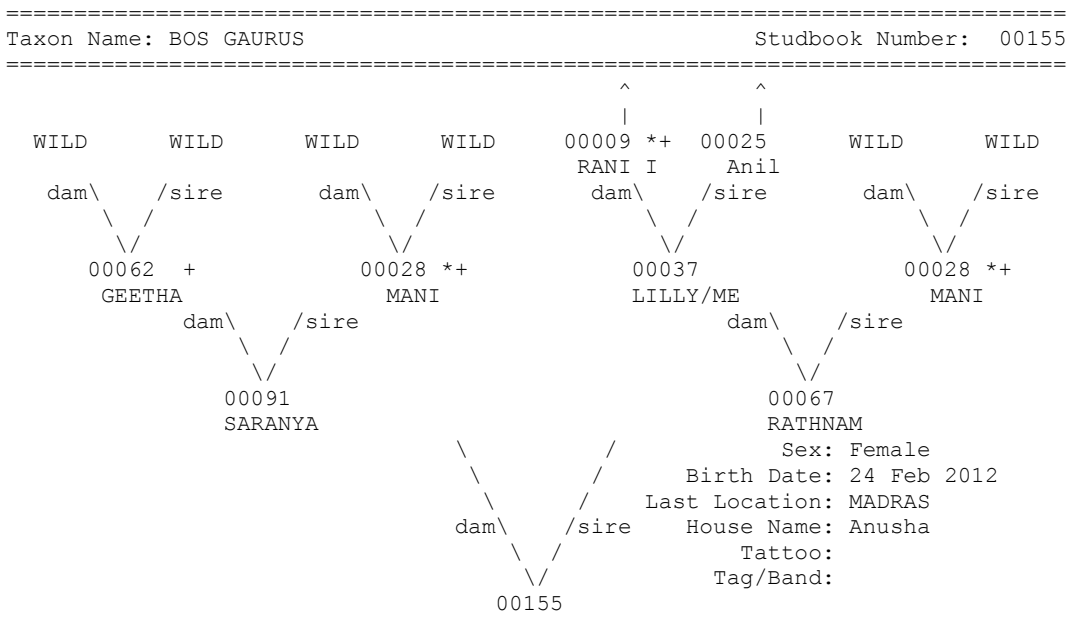
```
 ================================================================================
 Taxon Name: BOS GAURUS                                  Studbook Number:  00148
 ================================================================================
        WILD                 WILD
              dam\    /sire
                  \  /
                   \/
                  00141  +                                WILD
                                      \          /        Sex: Male
                                       \        /     Birth Date: 13 Sep 2011
                                        \      /    Last Location: VANVIHAR
                                      dam\    /sire    House Name:
                                          \  /            Tattoo:
                                           \/           Tag/Band:
+ Wild-caught...                          00148

 ================================================================================
 Taxon Name: BOS GAURUS                                  Studbook Number:  00149
 ================================================================================
      ^         ^         ^         ^                               ^         ^
      |         |         |         |                               |         |
  00018     00025     00021 *+  00022 *    WILD      WILD     00009 *+  00008 *+
  MADHURI     Anil    Thunge/S   SACHIN                        RANI I    SHERU
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
       00035               00034 *             00021 *+            00022 *
         ROSE                LAARA               Thunge/S            SACHIN
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                  00106                                   00034 *
                  GANGUBAI                                 LAARA
                                      \          /            Sex: Female
                                       \        /     Birth Date: 17 Sep 2011
                                        \      /    Last Location: BANNERGHA
                                      dam\    /sire    House Name: DEEPA
                                          \  /            Tattoo:
                                           \/           Tag/Band: CZA CBO 192
 + Wild-caught...                        00149     * Appear more than once...
 ^ Pedigree continues beyond top of page...

 ================================================================================
 Taxon Name: BOS GAURUS                                  Studbook Number:  00150
 ================================================================================
      ^         ^         ^         ^                               ^         ^
      |         |         |         |                               |         |
  00009 *+  00008 *+  00009 *+  00008 *+   WILD      WILD     00009 *+  00008 *+
   RANI I    SHERU     RANI I    SHERU                         RANI I    SHERU
    dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
        \  /                \  /                \  /                \  /
         \/                  \/                  \/                  \/
       00018               00025               00021  +            00022
       MADHURI               Anil              Thunge/S             SACHIN
              dam\    /sire                           dam\    /sire
                  \  /                                    \  /
                   \/                                      \/
                  00035                                   00034
                    ROSE                                   LAARA
                                      \          /            Sex: Female
                                       \        /     Birth Date: 28 Oct 2011
                                        \      /    Last Location: BANNERGHA
                                      dam\    /sire    House Name: KUMTA
                                          \  /            Tattoo:
                                           \/           Tag/Band: CZA CBO 194 (UN
 + Wild-caught...                        00150     * Appear more than once...
 ^ Pedigree continues beyond top of page...
```

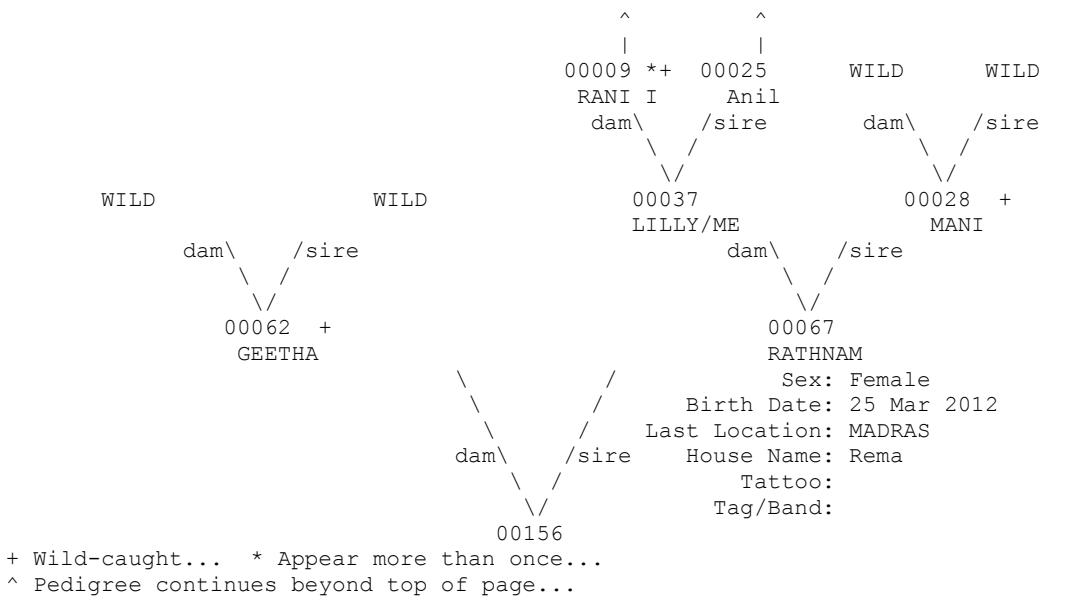

Taxon Name: BOS GAURUS
Studbook Number: 00151
WILD dam
WILD sire
WILD dam
WILD sire
00009 + RANI I
00008 + SHERU
dam
sire
00018 MADHURI
UNK
Sex: Male
Birth Date: 30 Dec 2011
Last Location: MYSORE (dead)
House Name: BUDDHA
Tattoo:
Tag/Band:
dam
sire
00151
+ Wild-caught...


Taxon Name: BOS GAURUS
Studbook Number: 00152
^
^
^
^
WILD
WILD
WILD
WILD
00018 MADHURI
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
dam
sire
00009 *+ RANI I
00008 *+ SHERU
00031 SUNDARI
00025 Anil
dam
sire
00026 MEENA
00070 PREETHAM
Sex: Male
Birth Date: 14 Jan 2012
Last Location: MYSORE
House Name: TRIBHUVAN
Tattoo:
Tag/Band: CZA 199 (UNK)
dam
sire
00152
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

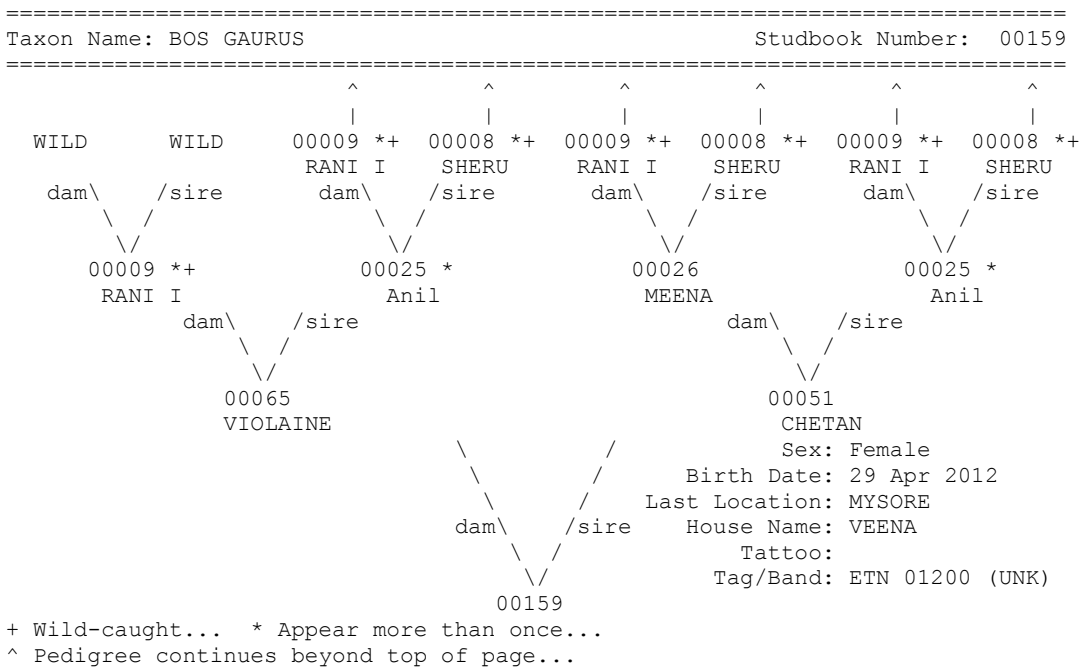

Taxon Name: BOS GAURUS
Studbook Number: 00153
00018 * MADHURI dam
00025 * Anil sire
00021 *+ Thunge/S dam
00022 * SACHIN sire
00035 * ROSE dam
00034 * LAARA sire
00021 *+ Thunge/S dam
00022 * SACHIN sire
00035 * ROSE
00034 * LAARA
00058 AKILA
00034 * LAARA
00089 RAGINI
00080 ADITHYA
Sex: Male
Birth Date: 28 Jan 2012
Last Location: RANCHI
House Name:
Tattoo:
Tag/Band:
00153
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

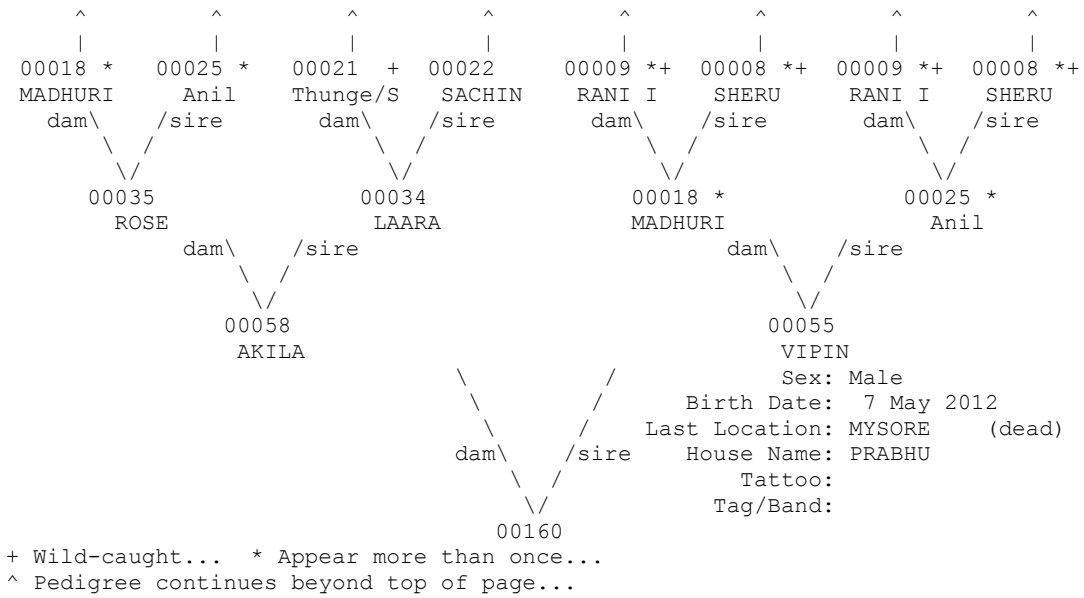

Taxon Name: BOS GAURUS
Studbook Number: 00154
00009 *+ RANI I dam
00008 *+ SHERU sire
00009 *+ RANI I dam
00008 *+ SHERU sire
00009 *+ RANI I dam
00008 *+ SHERU sire
00009 *+ RANI I dam
00008 *+ SHERU sire
00018 MADHURI
00025 * Anil
00026 MEENA
00025 * Anil
00073 SARITHA
00079 SHESHAN
Sex: Female
Birth Date: 5 Feb 2012
Last Location: JUNAGADH
House Name:
Tattoo:
Tag/Band:
00154
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00155
^
|
WILD
WILD
WILD
WILD
00009 *+
RANI I
00025
Anil
WILD
WILD
dam\
/sire
00062 +
GEETHA
00028 *+
MANI
00037
LILLY/ME
00028 *+
MANI
00091
SARANYA
00067
RATHNAM
Sex: Female
Birth Date: 24 Feb 2012
Last Location: MADRAS
House Name: Anusha
Tattoo:
Tag/Band:
00155
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00156
^
|
00009 *+
RANI I
00025
Anil
WILD
WILD
WILD
WILD
00037
LILLY/ME
00028 +
MANI
00062 +
GEETHA
00067
RATHNAM
Sex: Female
Birth Date: 25 Mar 2012
Last Location: MADRAS
House Name: Rema
Tattoo:
Tag/Band:
00156
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

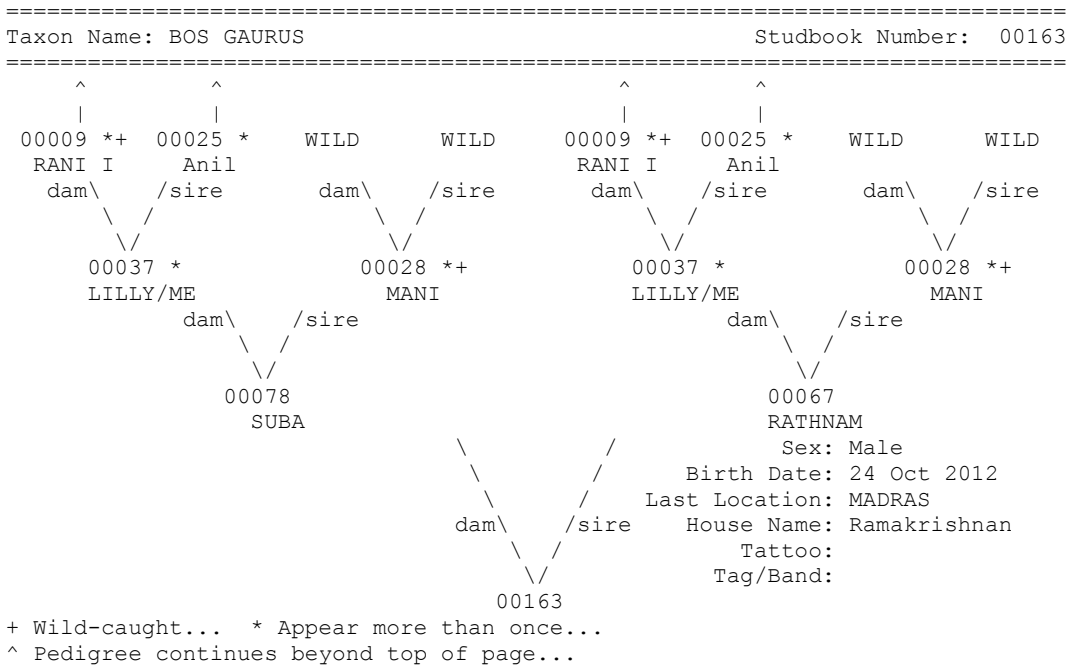
```
================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00157
================================================================================
                                          ^         ^         ^         ^
                                          |         |         |         |
                                       00009 *+  00025 *   00009 *+  00008 *+
                                       RANI I     Anil     RANI I    SHERU
                                        dam\    /sire       dam\    /sire
                                            \  /               \  /
                                             \/                 \/
                                          00065               00025 *
                                          VIOLAINE              Anil
                                                 dam\    /sire
                                                     \  /
                                                      \/
                UNK                                  00081
                                                      ASHOKA
                                  \          /        Sex: Male
                                   \        /     Birth Date: 20 Apr 2012
                                    \      /    Last Location: CHATBIR Z (dead)
                                  dam\    /sire    House Name:
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                     00157
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00158
================================================================================
     ^         ^         ^         ^         ^         ^         ^         ^
     |         |         |         |         |         |         |         |
 00026 *   00025 *   00021  +  00022     00009 *+  00008 *+  00009 *+  00025 *
  MEENA      Anil    Thunge/S   SACHIN    RANI I    SHERU     RANI I     Anil
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /               \  /               \  /               \  /
        \/                 \/                 \/                 \/
      00036               00034              00026 *             00057
      JASMINE              LAARA               MEENA               AMITH
             dam\    /sire                           dam\    /sire
                 \  /                                    \  /
                  \/                                      \/
               00092                                   00087
                HAMSA                                   PRAKASH
                                  \          /           Sex: Male
                                   \        /     Birth Date: 23 Apr 2012
                                    \      /    Last Location: PUNE      (dead)
                                  dam\    /sire    House Name: SHAMBHU
                                      \  /            Tattoo:
                                       \/           Tag/Band:
                                     00158
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

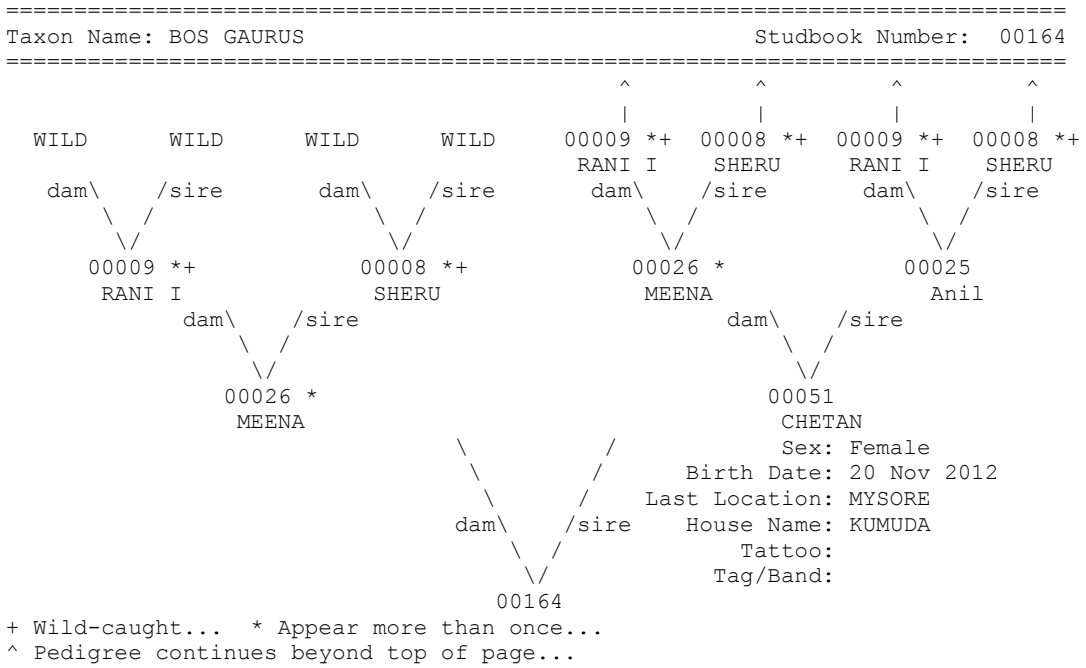

Taxon Name: BOS GAURUS
Studbook Number: 00159
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00009 *+ RANI I
00025 * Anil
00026 MEENA
00025 * Anil
dam\ /sire
00065 VIOLAINE
00051 CHETAN
Sex: Female
Birth Date: 29 Apr 2012
Last Location: MYSORE
House Name: VEENA
Tattoo:
Tag/Band: ETN 01200 (UNK)
00159
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

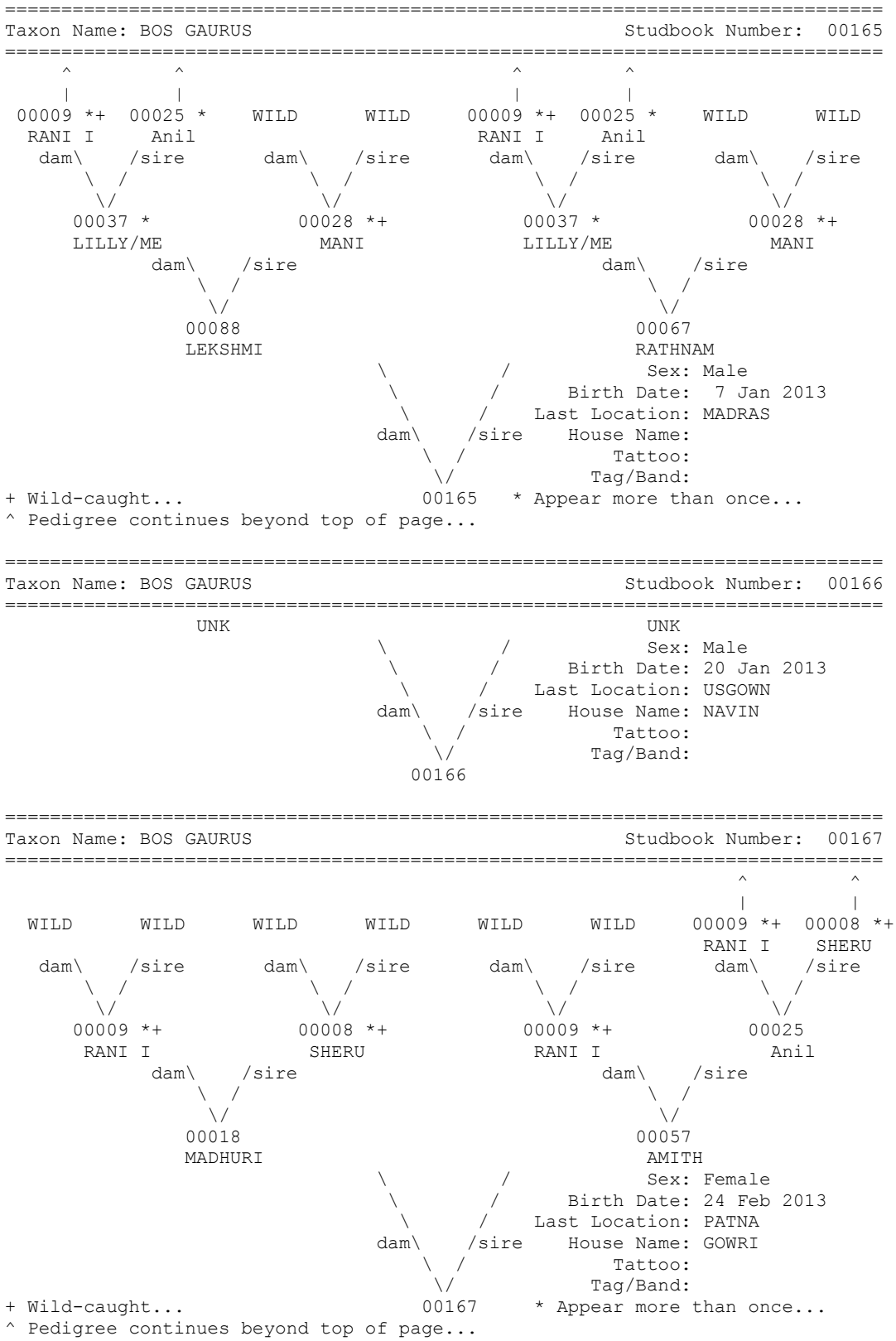

Taxon Name: BOS GAURUS
Studbook Number: 00160
00018 * MADHURI
00025 * Anil
00021 + Thunge/S
00022 SACHIN
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00035 ROSE
00034 LAARA
00018 * MADHURI
00025 * Anil
dam\ /sire
00058 AKILA
00055 VIPIN
Sex: Male
Birth Date: 7 May 2012
Last Location: MYSORE (dead)
House Name: PRABHU
Tattoo:
Tag/Band:
00160
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

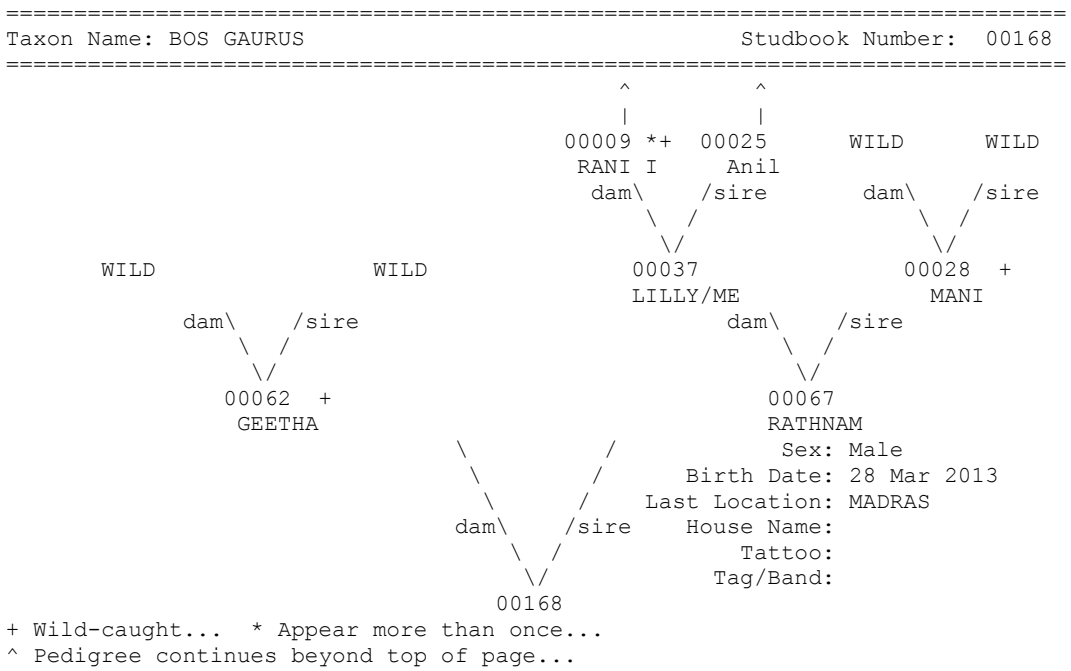
```
================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00161
================================================================================
     ^         ^         ^         ^         ^         ^         ^         ^
     |         |         |         |         |         |         |         |
 00009 *+  00008 *+  00009 *+  00008 *+  00009 *+  00008 *+  00009 *+  00008 *+
  RANI I    SHERU     RANI I    SHERU     RANI I    SHERU     RANI I    SHERU
    \        /          \        /          \        /          \        /
     \      /            \      /            \      /            \      /
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /                \  /                \  /                \  /
        \/                  \/                  \/                  \/
      00026                00025 *             00018                00025 *
       MEENA                 Anil               MADHURI               Anil
             dam\    /sire                               dam\    /sire
                 \  /                                        \  /
                  \/                                          \/
               00036                                       00055
               JASMINE                                      VIPIN
                                    \          /            Sex: Male
                                     \        /      Birth Date: 16 Jun 2012
                                      \      /    Last Location: MYSORE
                                    dam\    /sire    House Name: DHEERAJ
                                        \  /            Tattoo:
                                         \/           Tag/Band:
                                      00161
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

```
================================================================================
Taxon Name: BOS GAURUS                                Studbook Number:  00162
================================================================================
                                          ^         ^         ^         ^
                                          |         |         |         |
                                      00009 *+  00025 *   00009 *+  00008 *+
                                       RANI I     Anil     RANI I    SHERU
                                        dam\    /sire       dam\    /sire
                                            \  /                \  /
                                             \/                  \/
                                          00065                00025 *
                                          VIOLAINE               Anil
                                                 dam\    /sire
                                                     \  /
                                                      \/
                UNK                                 00081
                                                     ASHOKA
                                    \          /     Sex: Unknown
                                     \        /      Birth Date:  3 Aug 2012
                                      \      /    Last Location: CHATBIR Z
                                    dam\    /sire    House Name:
                                        \  /            Tattoo:
                                         \/           Tag/Band:
                                      00162
+ Wild-caught...  * Appear more than once...
^ Pedigree continues beyond top of page...
```

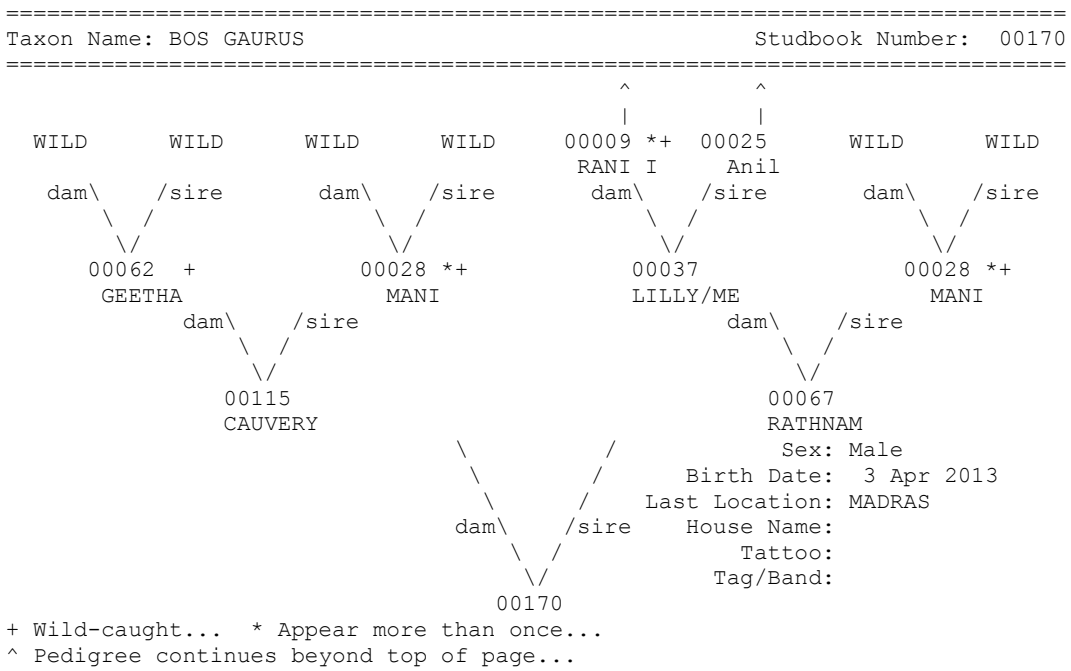

Taxon Name: BOS GAURUS
Studbook Number: 00163
00009 *+ RANI I
00025 * Anil
WILD
WILD
00009 *+ RANI I
00025 * Anil
WILD
WILD
dam\ /sire
00037 * LILLY/ME
00028 *+ MANI
00037 * LILLY/ME
00028 *+ MANI
00078 SUBA
00067 RATHNAM
Sex: Male
Birth Date: 24 Oct 2012
Last Location: MADRAS
House Name: Ramakrishnan
Tattoo:
Tag/Band:
00163
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

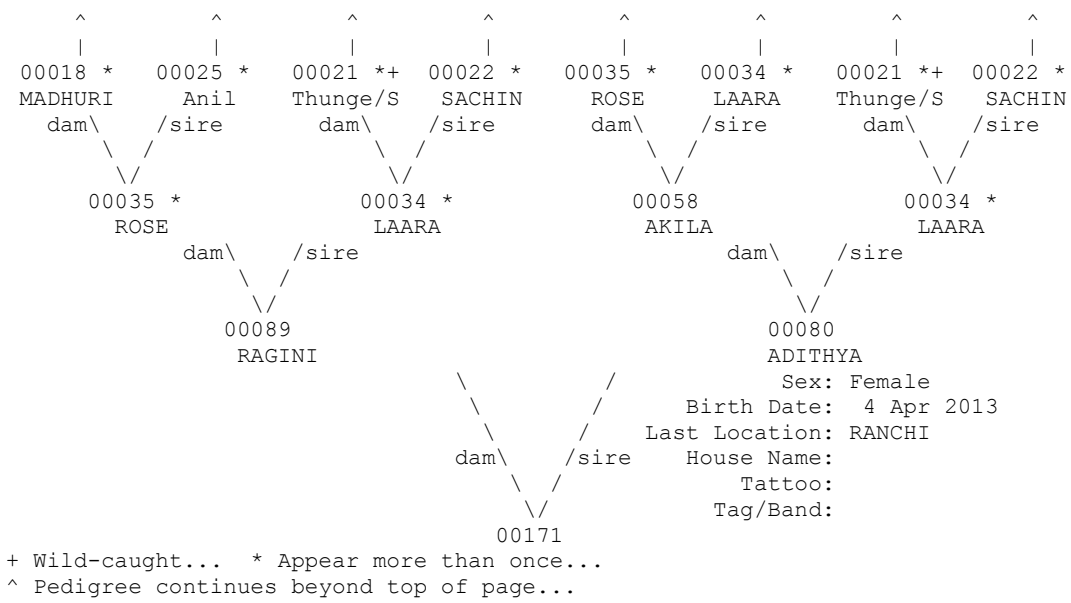

Taxon Name: BOS GAURUS
Studbook Number: 00164
WILD
WILD
WILD
WILD
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00026 * MEENA
00025 Anil
00026 * MEENA
00051 CHETAN
Sex: Female
Birth Date: 20 Nov 2012
Last Location: MYSORE
House Name: KUMUDA
Tattoo:
Tag/Band:
00164
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

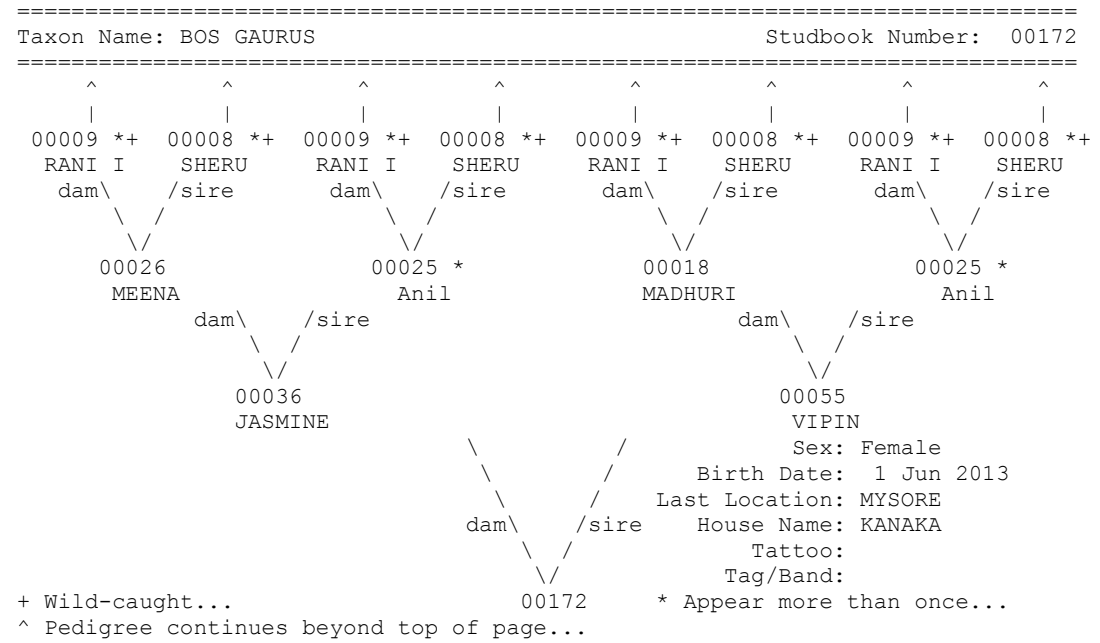

Taxon Name: BOS GAURUS
Studbook Number: 00165
00009 *+ 00025 * WILD WILD 00009 *+ 00025 * WILD WILD
RANI I Anil RANI I Anil
dam\ /sire dam\ /sire dam\ /sire dam\ /sire
00037 * 00028 *+ 00037 * 00028 *+
LILLY/ME MANI LILLY/ME MANI
dam\ /sire dam\ /sire
00088 00067
LEKSHMI RATHNAM
Sex: Male
Birth Date: 7 Jan 2013
Last Location: MADRAS
House Name:
Tattoo:
Tag/Band:
00165
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...
Taxon Name: BOS GAURUS
Studbook Number: 00166
UNK UNK
Sex: Male
Birth Date: 20 Jan 2013
Last Location: USGOWN
House Name: NAVIN
Tattoo:
Tag/Band:
00166
Taxon Name: BOS GAURUS
Studbook Number: 00167
WILD WILD WILD WILD WILD WILD 00009 *+ 00008 *+
RANI I SHERU
dam\ /sire dam\ /sire dam\ /sire dam\ /sire
00009 *+ 00008 *+ 00009 *+ 00025
RANI I SHERU RANI I Anil
dam\ /sire dam\ /sire
00018 00057
MADHURI AMITH
Sex: Female
Birth Date: 24 Feb 2013
Last Location: PATNA
House Name: GOWRI
Tattoo:
Tag/Band:
00167
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...

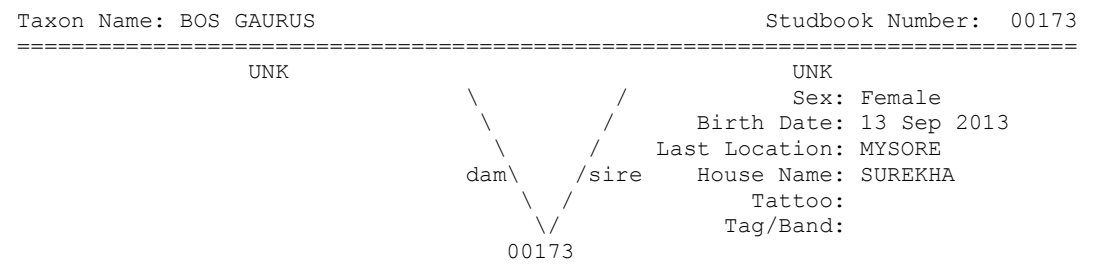

Taxon Name: BOS GAURUS
Studbook Number: 00168
^
|
00009 *+ 00025 WILD WILD
RANI I Anil
dam\ /sire dam\ /sire
WILD WILD 00037 00028 +
LILLY/ME MANI
dam\ /sire dam\ /sire
00062 + 00067
GEETHA RATHNAM
Sex: Male
Birth Date: 28 Mar 2013
Last Location: MADRAS
dam\ /sire House Name:
Tattoo:
Tag/Band:
00168
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

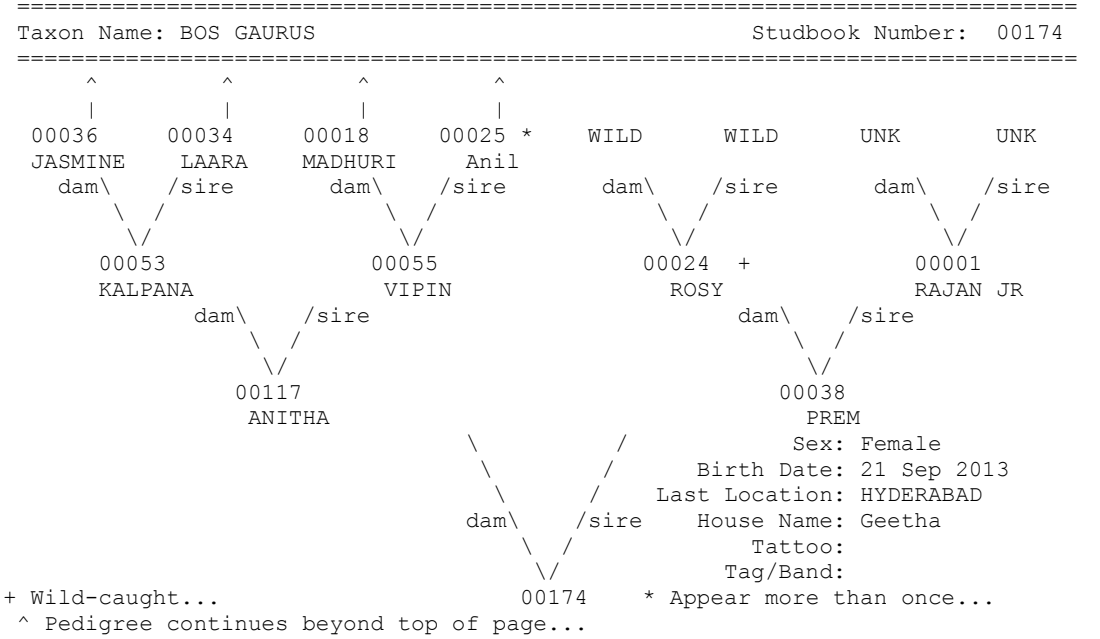

Taxon Name: BOS GAURUS
Studbook Number: 00169
^ ^ ^ ^
| | | |
WILD WILD 00009 *+ 00008 *+ WILD WILD 00009 *+ 00008 *+
RANI I SHERU RANI I SHERU
dam\ /sire dam\ /sire dam\ /sire dam\ /sire
00009 *+ 00025 * 00009 *+ 00025 *
RANI I Anil RANI I Anil
dam\ /sire dam\ /sire
00065 00057
VIOLAINE AMITH
Sex: Female
Birth Date: 29 Mar 2013
Last Location: MYSORE
dam\ /sire House Name: VANITHA
Tattoo:
Tag/Band:
00169
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

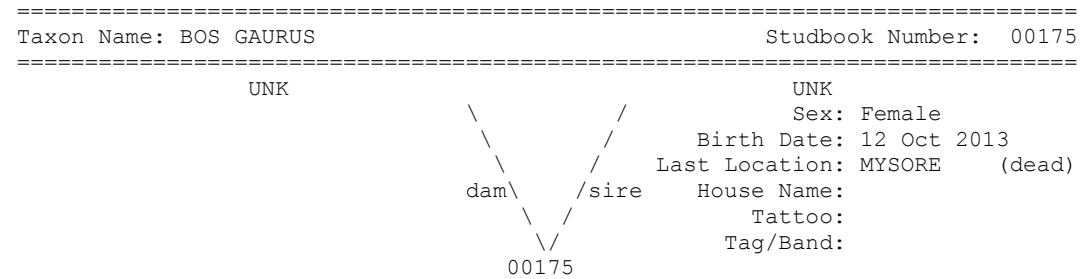

Taxon Name: BOS GAURUS
Studbook Number: 00170
WILD
WILD
WILD
WILD
00009 *+
RANI I
00025
Anil
WILD
WILD
dam\
/sire
00062 +
GEETHA
00028 *+
MANI
00037
LILLY/ME
00028 *+
MANI
00115
CAUVERY
00067
RATHNAM
Sex: Male
Birth Date: 3 Apr 2013
Last Location: MADRAS
House Name:
Tattoo:
Tag/Band:
00170
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

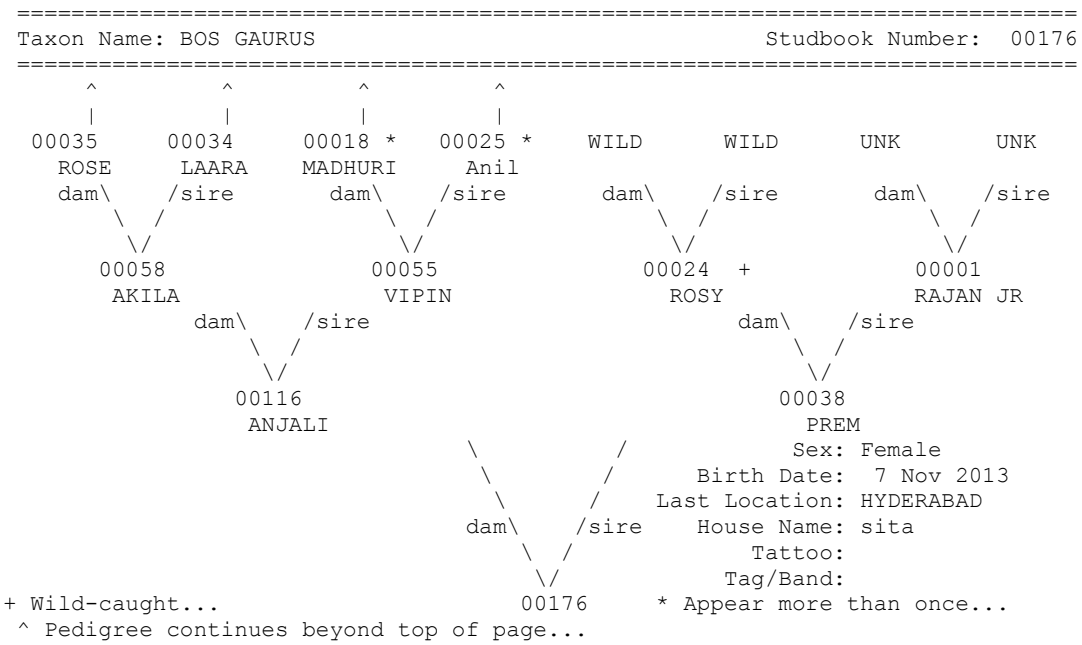

Taxon Name: BOS GAURUS
Studbook Number: 00171
00018 *
MADHURI
00025 *
Anil
00021 *+
Thunge/S
00022 *
SACHIN
00035 *
ROSE
00034 *
LAARA
00058
AKILA
00034 *
LAARA
00089
RAGINI
00080
ADITHYA
Sex: Female
Birth Date: 4 Apr 2013
Last Location: RANCHI
House Name:
Tattoo:
Tag/Band:
00171
+ Wild-caught... * Appear more than once...
^ Pedigree continues beyond top of page...

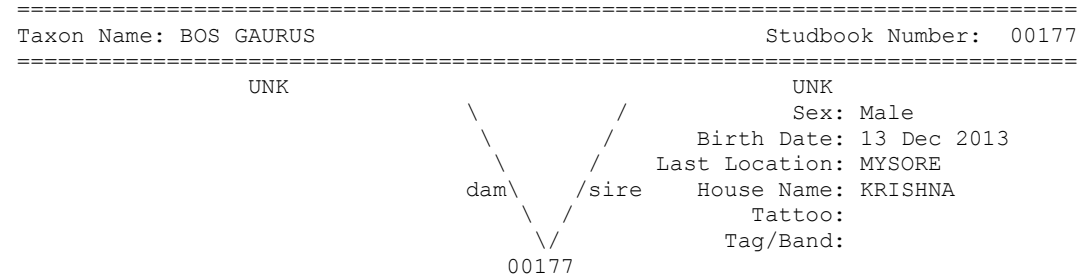

Taxon Name: BOS GAURUS
Studbook Number: 00172
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
00009 *+ RANI I
00008 *+ SHERU
dam\ /sire
00026 MEENA
00025 * Anil
00018 MADHURI
00025 * Anil
00036 JASMINE
00055 VIPIN
Sex: Female
Birth Date: 1 Jun 2013
Last Location: MYSORE
House Name: KANAKA
Tattoo:
Tag/Band:
00172
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...

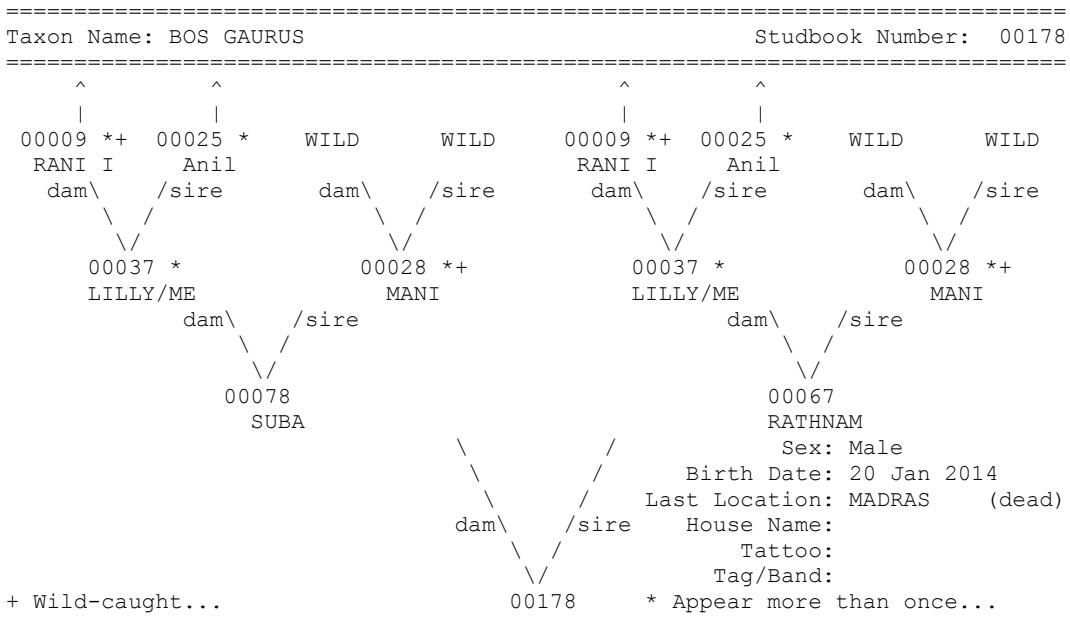

Taxon Name: BOS GAURUS
Studbook Number: 00173
UNK
UNK
Sex: Female
Birth Date: 13 Sep 2013
Last Location: MYSORE
House Name: SUREKHA
Tattoo:
Tag/Band:
00173

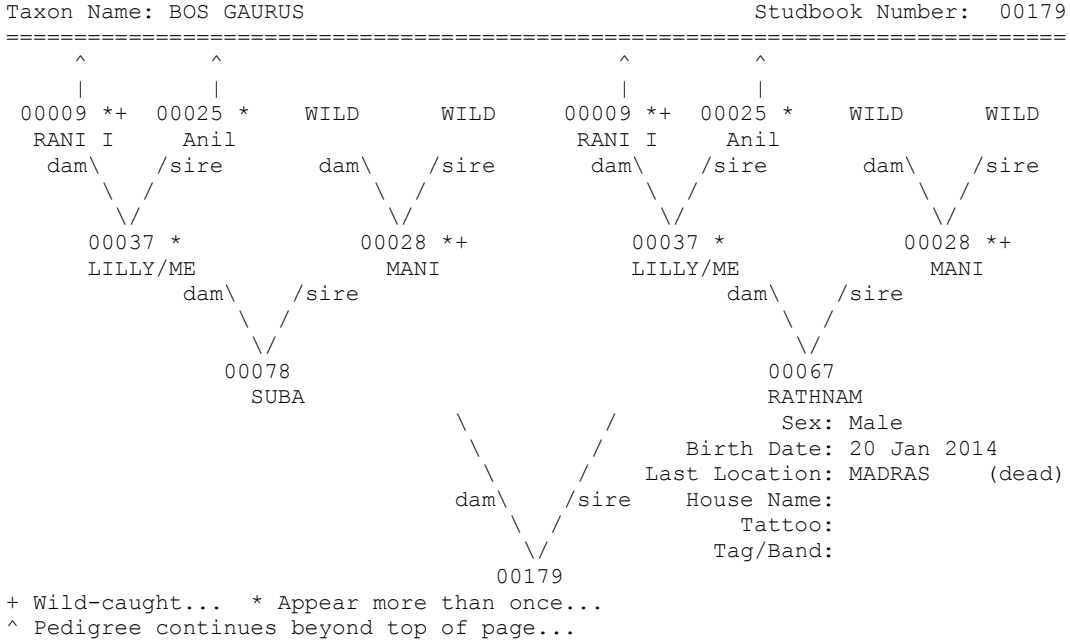

Taxon Name: BOS GAURUS
Studbook Number: 00174
00036 JASMINE
00034 LAARA
00018 MADHURI
00025 * Anil
WILD
WILD
UNK
UNK
00053 KALPANA
00055 VIPIN
00024 + ROSY
00001 RAJAN JR
00117 ANITHA
00038 PREM
Sex: Female
Birth Date: 21 Sep 2013
Last Location: HYDERABAD
House Name: Geetha
Tattoo:
Tag/Band:
00174
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00175
UNK
UNK
Sex: Female
Birth Date: 12 Oct 2013
Last Location: MYSORE (dead)
House Name:
Tattoo:
Tag/Band:
dam\ /sire
00175


Taxon Name: BOS GAURUS
Studbook Number: 00176
00035 ROSE
00034 LAARA
00018 * MADHURI
00025 * Anil
WILD
WILD
UNK
UNK
00058 AKILA
00055 VIPIN
00024 + ROSY
00001 RAJAN JR
00116 ANJALI
00038 PREM
Sex: Female
Birth Date: 7 Nov 2013
Last Location: HYDERABAD
House Name: sita
Tattoo:
Tag/Band:
00176
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00177
UNK
UNK
Sex: Male
Birth Date: 13 Dec 2013
Last Location: MYSORE
House Name: KRISHNA
Tattoo:
Tag/Band:
dam\ /sire
00177


Taxon Name: BOS GAURUS
Studbook Number: 00178
00009 *+ RANI I
00025 * Anil
WILD
WILD
00037 * LILLY/ME
00028 *+ MANI
00078 SUBA
00067 RATHNAM
Sex: Male
Birth Date: 20 Jan 2014
Last Location: MADRAS (dead)
House Name:
Tattoo:
Tag/Band:
00178
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...


Taxon Name: BOS GAURUS
Studbook Number: 00179
00009 *+ RANI I
00025 * Anil
WILD
WILD
00037 * LILLY/ME
00028 *+ MANI
00078 SUBA
00067 RATHNAM
Sex: Male
Birth Date: 20 Jan 2014
Last Location: MADRAS (dead)
House Name:
Tattoo:
Tag/Band:
00179
+ Wild-caught...
* Appear more than once...
^ Pedigree continues beyond top of page...

```
================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00180
================================================================================
     ^         ^                                  ^         ^
     |         |                                  |         |
 00009 *+  00025 *    WILD      WILD     00009 *+  00025 *    WILD      WILD
  RANI I     Anil                        RANI I     Anil
   dam\    /sire       dam\    /sire       dam\    /sire       dam\    /sire
       \  /                \  /                \  /                \  /
        \/                  \/                  \/                  \/
      00037 *             00028 *+            00037 *             00028 *+
      LILLY/ME              MANI              LILLY/ME              MANI
             dam\    /sire                               dam\    /sire
                 \  /                                        \  /
                  \/                                          \/
               00088                                       00067
               LEKSHMI                                     RATHNAM
                                  \          /              Sex: Male
                                   \        /      Birth Date: 22 Feb 2014
                                    \      /    Last Location: MADRAS
                                  dam\    /sire    House Name: AAZP-24
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                    00180     * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00181
================================================================================
                                             ^         ^
                                             |         |
                                         00009 *+  00025      WILD      WILD
                                          RANI I     Anil
                                           dam\    /sire       dam\    /sire
                                               \  /                \  /
                                                \/                  \/
       WILD                WILD                00037                00028  +
                                               LILLY/ME               MANI
             dam\    /sire                               dam\    /sire
                 \  /                                        \  /
                  \/                                          \/
               00062  +                                    00067
                GEETHA                                     RATHNAM
                                  \          /              Sex: Female
                                   \        /      Birth Date:  1 Mar 2014
                                    \      /    Last Location: MADRAS
                                  dam\    /sire    House Name: aazp-25
                                      \  /             Tattoo:
                                       \/            Tag/Band:
+ Wild-caught...                    00181     * Appear more than once...
^ Pedigree continues beyond top of page...

================================================================================
Taxon Name: BOS GAURUS                                  Studbook Number:  00182
================================================================================
                UNK                                         UNK
                                  \          /              Sex: Unknown
                                   \        /      Birth Date:  8 Jun 2014
                                    \      /    Last Location: MYSORE
                                  dam\    /sire    House Name:
                                      \  /             Tattoo:
                                       \/            Tag/Band:
                                    00182
```