

NATIONAL STUDBOOK

Golden Langur (*Trachypithecus geei*): III Edition

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Central Zoo Authority

National Studbook of Golden Langur (*Trachypithecus geei*) III Edition

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FOREWORD

Golden langur is a species prone to extinction due to its restricted distribution range and various anthropogenic factors that undermine the habitat of the species. For such species *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 National Studbook of Golden langur (*Trachypithecus geei*): III Edition 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 to enable the timely update of the studbook.

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GOLDEN LANGUR

(*Trachypithecus geei*), (Khajuria, 1956)

Species Information

Golden langurs get their name from the striking golden-orange colour of their fur. The species was discovered in 1953 by E.P. Gee and was later described by Khajuria in 1956 (Khajuria 1956). It is an endangered primate endemic to north-western Assam, India and southern Bhutan.

Taxonomy

Phylum	Chordata
Sub-phylum	Vertebrata
Class	Mammalia
Order	Primates
Family	Cercopithecidae
Sub-family	Colobinae
Genus	<i>Trachypithecus</i>
Species	<i>Trachypithecus geei</i>



Golden Langurs (*Trachypithecus geei*) belong to a large group of Old World monkeys called the colobines (subfamily Colobinae). The Colobines are principally leaf eating primates and have a ruminant like multi-chambered stomach. Phylogeny based on anatomical characteristics of the fore-stomach by Caton (1998) suggests that Asian colobines (*Trachypithecus*, *Semnopithecus* and *Presbytis*) have a three-chambered or “tripartite” fore-stomach. Like other langurs, golden langurs also possess a specialized stomach system with a variety of microflora that helps them ferment and digest nutrients and fibre of leaves. There has been a disagreement about the phylogenetic position of *Trachypithecus geei*, whether it is an independent monophyletic species or a subspecies of the capped langur (*Trachypithecus pileatus*). Based on coat colour differences, Khajuria (1956) designated the golden langur as a separate species. Wangchuk (2005) supports that *Trachypithecus geei* and *Trachypithecus pileatus* are well diverged from and reciprocally monophyletic with each other and should be retained as separate species. A study by Karanth (2008) suggested a reticulate evolution of capped and golden langurs through ancient hybridization between *Semnopithecus* and *Trachypithecus*. Karanth (2010) tentatively assigned these two closely related species to a separate lineage termed ‘golden-capped lineage’, and suggested separate genera may be assigned for the two. In Bhutan, where both the species are found, construction of bridges across the Chamkhar River has allowed the langurs to cross the river and interbreed (Wangchuk 2005). Based on differences in coat colour, Wangchuk (2005) differentiated them into two sub-species: the northern subspecies *Trachypithecus geei bhutanensis* (north-Bhutan) and the southern subspecies *Trachypithecus geei geei* (south-Bhutan).

and India). However, subspecies *Trachypithecus geei bhutanensis* has not been described according to ICBN rules.

Morphology

Golden langurs appear uniformly deep cream colored in dull light and bright golden in sunlight. The coat color varies seasonally, becoming white or cream colored in summer and dark golden to chestnut in winter. Newly born young appear pure white but may also be affected by erythrism (reddish pigmentation). They have a hairless black face except for a long pale beard. An ill-defined whorl of hair on the crown protects their eyes and face from glare while long whiskers around the ears protect them from rainwater during the monsoon season (Khajuria 1977).

Golden langurs are sexually dimorphic. Males are larger and more robust than females. The average body mass for adult males is 10.8 kilograms and for adult females it is 9.5 kilograms (Fleagle 1999). The length of the head and body ranges from 50-75 centimeters, while the tail length ranges from 70-100 centimeters (Gurung and Singh 1996). Tassel at the end of tails are slightly larger in males.

Distribution

Golden langurs, (*Trachypithecus geei*) have a restricted range in southern Bhutan and a small forest belt in western Assam. They occur in lowland evergreen, semi-evergreen and riparian moist deciduous and sal-dominated, moist deciduous forest (Srivastava et al. 2001a; Biswas 2005; Bezbaruah 2004) in the Brahmaputra river valley of Assam and the foothills of the Black mountains of Bhutan (Srivastava et al. 2001b). In Bhutan, golden langurs occur from subtropical forests in the south to temperate and sub-alpine forests in the north (Wangchuk, 1995; Wangchuk et al., 2001). In Assam, the main population resides in the Kachugaon, Ripu and Manas reserve forests with some major populations in other isolated forests south of the Manas Biosphere Reserve (Horwich et al. 2013). The species occupies forested areas of 900 square kilometer in India (Molur et al. 2003) and 1400 square kilometer in Bhutan (Wangchuk et al. 2003).

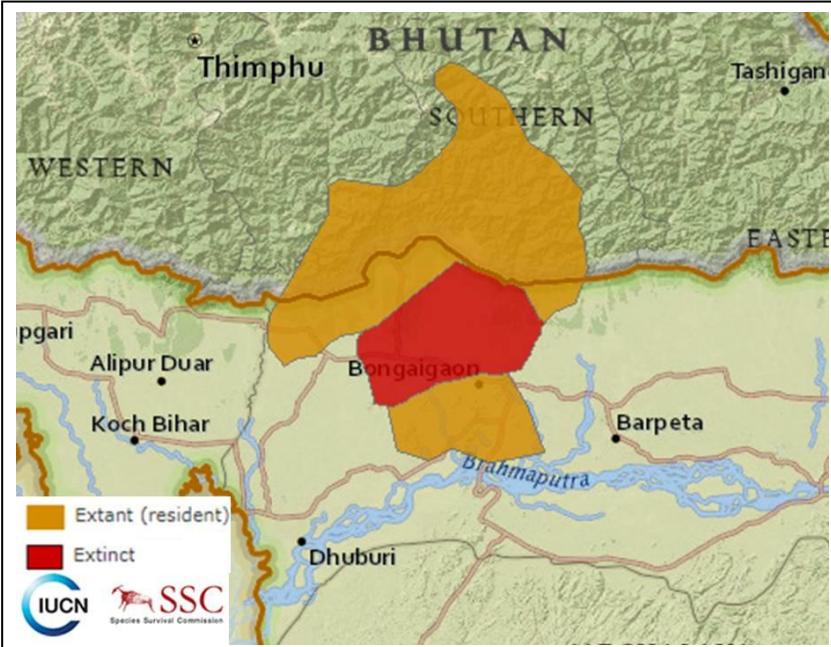


Figure 1: Distribution of Golden langur (Das et al. 2008)

Habitat

Trachypithecus geei occur in subtropical and temperate broadleaf forests in Assam in India and Bhutan. A substantial range in elevation of near sea-level in the south to above 3,000 m in the north has been observed for the species (Wangchuk *et al.* 2003). The total known suitable habitat of the golden langur in India was found to be less than 500 square kilometer (Srivastava 2006). Hybrids of *Trachypithecus geei* and *Trachypithecus pileatus* occur in subtropical and temperate broadleaf forests between 800 and 2,600 meter in Bhutan (Wangchuk 2005).

Behavioral ecology

Activity patterns

Golden langurs are diurnal in habit. They are arboreal and come to the ground occasionally to drink water, lick salt earth and for crossing large canopy gaps (Gee 1961; Wangchuk 1995; Biswas 2004; Wangchuk 2005). However; troops have been reported to exploit village fruit and ground crops in severely disturbed forest fragments (Biswas 2005). The activity budget of the species in Chakrashila Wildlife Sanctuary, Assam, as reported by Chetry *et al.* (2002) was: resting (54.75%), feeding (29.26%), travelling (8.59%), monitoring (3.93%), playing (2.03%) and grooming (1.45%). Their activities slow down with the progression of the day. Tall trees providing good cover are generally used for roosting during summer while trees exposed to sunlight are preferred during winter (Mukherjee 2000). Social grooming and social play are important mid-day rest activities (Mukherjee 2000). Activity is again resumed in the late afternoon but on cloudy days troops were found to be active even during the regular resting periods (Wangchuk 2005). Troop members move to their sleeping trees in the evening and these trees are often the same as were used for foraging during evening and may be used for activity next morning (Mukherjee and Saha 1974). For a newborn, most of its time is spent in sleeping and sitting (55.05%), followed by, pulling and pushing (21.61%), and suckling (13.76%) (Medhi and Bhattacharjee 2002).

Feeding ecology

Trachypithecus geei like most langurs, have a predominantly folivorous diet. Their diet consists of young and mature leaves, ripe and unripe fruits, leaf buds, flower buds, seeds, twigs, and flowers. The main proportion of their diet consists of young leaves throughout the year (Gupta and Chivers 2000). Yellow blossoms and buds of balu tree (*Dillenia pentagyna*) are other preferred food items (Wayre 1968). Drinking water is obtained from water holes during summer while in other seasons it is obtained from the foliage (Khajuria 1977).

Golden langurs prefer foraging in deciduous trees that are budding and have also been seen to forage on leguminous shrubs. Food is often supplemented with exotic plant species (Gupta and Dasgupta, 2004). During summer feeding starts at around 0430 hours while in winter it starts at 0530 hours (Gupta and Chivers 2000). Their activity patterns show two feeding peaks, one in the morning (between 0630

and 0800 hours) and the other in the late afternoon (between 1530 and 1700 hours) just before roosting (Mukherjee and Saha 1974; Biswas 2004; Gupta and Chivers 2000). They feed at an average height of 15 to 21 meters, occasionally coming down to lower branches (Mukherjee and Saha, 1974).

Social organization and behavior

Golden langurs live in troops of 3 to 15 individuals, mostly as single male/multi-female or two-male/multi-female groups and sometimes in all male groups (Chetry *et al.* 2010). A mean group size of 7.4 and an adult sex ratio of 1:1.53 have been recorded by Chetry *et al.* (2010). Friendly relations are shared between the troop members. Hostile behavior among the group members and between other sympatric species (capped langur and Phayre's leaf monkey) have not been observed except for issuing mild threats when coming in close contact during foraging or moving (Mukherjee 2000). Srivastava *et al.* (1998) observed that in degraded habitats the species lived in larger groups with higher population density, but with lower birth rates.

The dominant male controls the movement of the group. In case of an alarm, the dominant male allows the other members to retreat first and then follows the group (Mukherjee and Saha 1974). The dominant male may occasionally attempt to frighten away the provoker by making short, sharp repeated sounds and making aggressive gestures. Social play is found to occur in trees only and includes activities like: chasing, wrestling, climbing, running, and jumping and is mainly restricted to juveniles, with infants occasionally joining in (Mukherjee and Saha 1974).

Little is known about the reproduction and breeding patterns of the species. However, their reproduction is believed to be similar to hanuman langurs (Napier and Napier 1967). Although not much is known, it has been observed that Golden langurs are co-operative breeders and births take place year-round. However, births may be concentrated during certain months of the year, depending on changes in climate and vegetation, as has been observed by Subba (1989) and Subba and Santiapillai (1989) (January-February in Manas National Park, Bhutan). Mounting, solicitation, copulation, chasing, aggression and other socio-sexual activities of the langurs were found to increase during monsoon and retreating monsoon as compared to other seasons (Biswas 2004). The newborn is completely dependent on its mother (Medhi and Bhattacharjee 2002; Mukherjee and Saha 1974). Care for the young is provided by the mother and other females in the group.

Table 1: Life history traits of Golden langur

Inter birth interval	Not known
Breeding season	Year round
Average number of offspring	1
Generation time	6 years (Wangchuk 2005)
Gestation period	180 days (Subba 1989; Subba and Santiapillai 1989)

Population status in the wild

In 2001, the population in India was estimated to be less than 1,500 langurs (Srivastava 2006). In Bhutan the population was estimated to be 6,637 individuals in 2003 (Wangchuk 2005). He however, noted that the census being carried out in relatively pristine habitats, such high density of golden langurs may not occur in highly populated areas of southern Bhutan. Several studies have indicated a declining population trend of the species in India (Mukherjee and Southwick 1997; Srivastava *et al.* 2001b; Srivastava 2004, 2006). Further, they occur in very small groups with a higher proportion of adults than juveniles and infants (Mukherjee *et al.* 1997). Recent censuses conducted under the Golden Langur Conservation Project (GLCP) in India have recorded over 5,600 langurs in 2008–2012 (Horwich *et al.* 2013). The Golden langur population in India and Bhutan is estimated at over 12,000 individuals (Horwich *et al.* 2013).

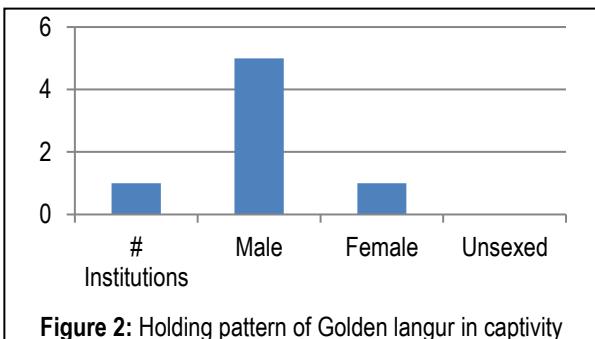
Threats

Loss of habitat and habitat fragmentation are the major threats for the Golden langur in India (Srivastava 2001b; Choudhury 2002). Large scale logging due to political unrest and inter-tribal violence has caused a major reduction of their habitat in India. Forest reserves with varying degrees of disturbance constitute 93% of the entire Golden langur habitat (Srivastava 2006). This has resulted in the actual area being available reduced by 1/3rd of its original in the last ten years (Forest Survey of India, 1997) resulting in severe fragmentation and subsequent degradation of their habitats. Its area is predicted to decline by >20% in the next 10 years due to encroachment and anthropogenic activities (Molur *et al.* 2003).

Langurs are often killed by people, dogs or due to electrocution when jumping onto power lines in areas of close human proximity (Medhi *et al.* 2004). High juvenile mortality and inbreeding are other major problems faced by the species (Molur *et al.* 2003). Moreover, spray of insecticides on rubber plants in Kokrajhar district of Assam has exposed them to life-threatening insecticide poisoning (Pathak 2011).

Conservation status and measures

In the IUCN Red Data Book threatened species (2008), Golden langur is under Endangered (A2c; C2a) category. It is also placed in Appendix-I of CITES. It has the highest legal protection in India, being placed under Schedule-I of Indian Wildlife Protection Act, 1972 (amended in 1991) which prohibits killing, trapping, capturing, and keeping them as pets. In the year 1998, the Golden



Langur Conservation Project (GLCP) was initiated as an extension of the Indo-US Primate Project, with a goal of protecting the golden langur and its habitat in western Assam (Horwich *et al.* 2010). It is believed that community reforestation and forest protection efforts have led to a major increase in the

Golden langur population from an estimated 1,500 langurs in 1997 to currently over 5,600 langurs (Horwich *et al.* 2013). The Central Zoo Authority (CZA), India, has identified Golden langur as a species for conservation breeding in Indian zoos at Assam State Zoo-cum-Botanical Garden.

Status in Captivity

The species is held at a single location, Assam State Zoo cum Botanical Garden with only 7 (5.2.0) specimens (as per the information provided by the Assam State Zoo and Botanical Garden, Guwahati). The CZA inventory (Table 1) indicates the presence of 6 (5.1.0) specimens, at 1 Indian zoo while the holding pattern of the specie according to Species360 website (16 April 2018) indicates the presence of 6(5.1.0) langurs at a single location globally.

Table 2: Status of Golden Langur in zoos

Zoo Name	Species360				CZA Inventory				Studbook			
	Male	Female	Unsexed	Total	Male	Female	Unsexed	Total	Male	Female	Unsexed	Total
Assam State Zoo cum Botanical Garden	5	1	0	6	5	1	0	6	5	2	0	7

Methods

Data on individual history was collected by means of questionnaires, zoo visits and from the websites of CZA and Species360. Questionnaires were sent to the institutions housing Golden langur 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 PMxv 1.2 (Ballou *et al.*, 2011) for further analysis.

Scope of the Studbook

- The CZA inventory was used as a benchmark for population estimates and deviations from the same (Table 1).
- The studbook includes all specimens present in Indian zoos for which records were available from the holding institution. Efforts were made to retrieve information on their holding from the taxon report of the species from the Species360 website.
- Based on the data retrieved in April 2018 from the Species360 website a male was acquired from the wild. The same has not been included in the data made available by the zoo. The specimen with studbook no. 172 has been included in the studbook.
- The mnemonics present in the SPARKS software were used as names for individual institutions; while for those institutions for which mnemonics were not present in the SPARKS Software, the same were assigned based on their location listed on the CZA Website and the same are listed in the location glossary (Annexure IV). The mnemonic India was used for all specimens acquired from the wild.

Analysis

Demographic Status

Historical Population

The studbook includes a total of 173(81.90.2) specimens that have been housed at 19 Indian zoos during the history of the species in captivity. The first recorded entry of the species in captivity was at Assam State Zoo cum Botanical Garden in 1860, with a wild origin female being acquired by the zoo. The population has consistently remained small, peaking to a maximum of 27(10.17.0) specimens in 1989 (Figure 3). The captive population is characterized with limited captive births (9%) and approximately 90% of the population consists of wild origin specimens. Limited reproductive activity has occurred in the species with approximately only 7% of the specimens being reproductively active. Figure 3 and Table 3 summarize the trends of the historical population while Annexure I includes detailed event-wise information on individual specimens.

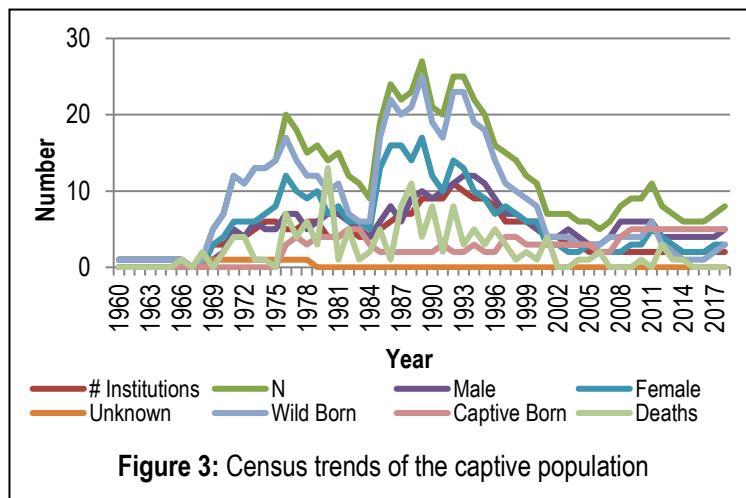


Table 3: Summary of the Historical Population

	Males	Females	Unknown	Total
Studbook size	81	90	2	173
Acquisition from wild	69	84	2	155
Captive Born	10	5	0	15
Origin Unknown	2	1	0	3
Deaths	76	87	0	163
Breeding individuals	6	6	0	12
Released	1	3	0	4
Lost to follow up	5	3	0	8

Living Population

The living population includes 7 (5.2.0) specimens housed at Assam State Zoo; with 5 (3.2.0) wild origin specimens. None of the seven individuals have so far reproduced. Table 4 summarizes the status of the living population while Annexure II provides location-wise specimen details of the living individuals. A perusal of Table 2 and Annexure II reveals the presence of the population at a single location.

Table 4: Summary of living population

	Males	Females	Unknown	Total
Living	5	2	0	7
Wild-born	3	2	0	5
Captive-born	2	0	0	2
Breeding individuals	0	0	0	0

Population Vital Rates

The extremely small size of the captive population critically undermines detailed demographic analysis of the captive population. The vital rates of the population in table 5 are only included to indicate the drastic decline the captive population is undergoing.

Further demographic analysis was not carried out as the small population size and limited reproductive output limit the accuracy and utility of detailed demographic analysis.

Table 5: Vital rates of the captive population

	Males	Females	Total
λ : Population growth rate	0.870	0.789	0.828
T: Generation time	12.1	9.4	10.7
N 20: Projected population after 20 years	0.8	0.4	1.2

Genetic Status

The genetic status of the living population is summarized in Table 6. Analysis indicates that it originated from 2 founders (Studbook Numbers: 160 and 162) although it includes 5 (3.2) wild origin specimens. The living population of 7 specimens retains only 62.50% of the genetic diversity brought in by these 2 founders. Limitations to effective record keeping due to inadequate marking of individual specimens are reflected in 88% of the specimens having known pedigrees. The unequal representation of the 2 founders in the living population has resulted in the population having the founder genome equivalents of only 1.33 wild origin specimens.

Table 6: Genetic Summary of the current population

Genetic parameters	Current
Founders	2
Living Animals	7
Percent Ancestry Known	88
Gene Diversity (GD)	0.6250
Founder Genome Equivalent (FGE)	1.33
Mean Inbreeding (F)	0.000

Pairing Recommendations

The living population consists of only wild origin specimens; they may accordingly be mated with each other after ascertaining relatedness using appropriate molecular genetics tools.

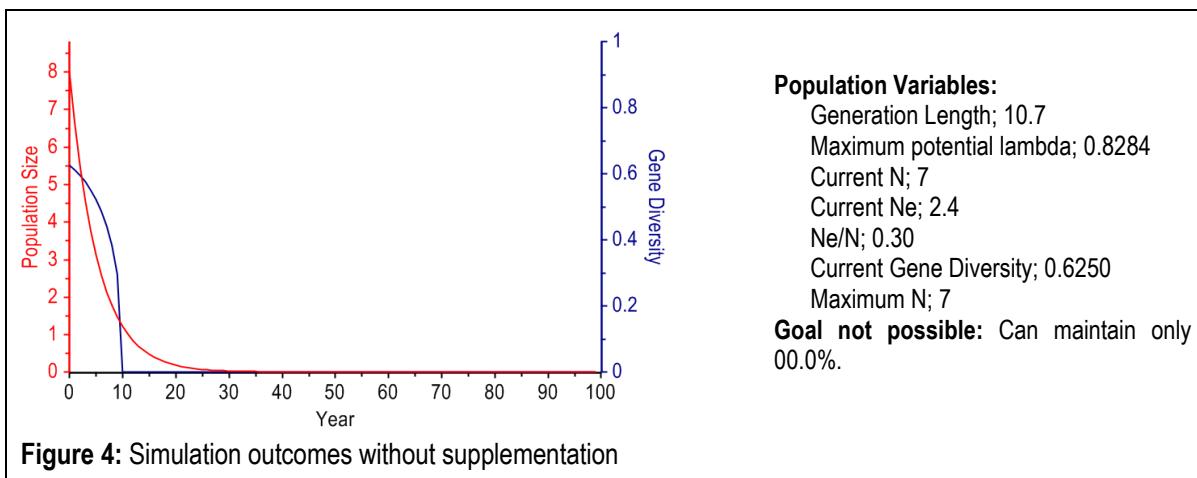
Targets for Population Management

The current captive population of Golden langurs includes 7 (5.2.0) individuals. It includes 5 (3.2.0) wild origin specimens; none of which have so far reproduced in captivity. The population is currently declining with a λ of 0.828 per annum. The population retains a limited amount of genetic diversity (62.50% introduced from 2 founders). Achieving conservation goals for the population is thus of critical importance.

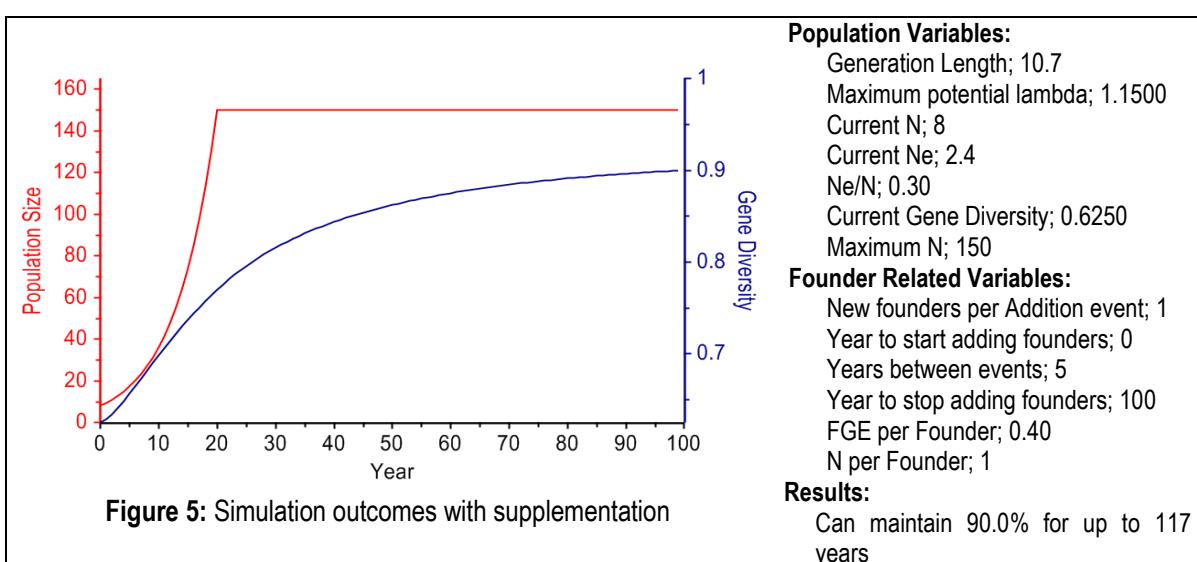
Multiple simulations were run using PMx to determine the fate of the current population for assessing the effect of management interventions that result in an increased population growth rate desired for achieving demographic stability and supplementation with effective founders for ensuring genetic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

Scenario I:

The simulation was run using the current population variables without supplementation with additional animals while retaining the current population size (7). The outcomes indicate that the population in captivity is likely to become extinct within 10 years due to the current rate of decline. The population variables used and the outcomes of the simulation are presented in Figure 4.

**Scenario II:**

The outcomes of the simulation that was run using a maximum potential lambda of 1.1500; i.e. the population needs to increase at a rate of approximately 15% per annum and a maximum population size of 150 specimens. Supplementation by one effective founder every five years provided a population that was able to achieve the goals of maintaining 90% of the genetic diversity and a demographically stable population at the end of 100 years. The population and founder related variables, and the simulation outcome are presented as Figures 5. The increase in population growth rate can be achieved by ensuring that all reproductively active specimens get an opportunity to contribute to the growth of the population.



Conclusions and Recommendations

Golden langurs continue to face threats to their long term survival in their natural habitats across their distribution range and are accordingly listed in the Schedule I of the Wildlife Protection Act of India and as endangered in the IUCN Redlist of threatened species (2008). The threats faced by the species remain operational and the populations shows continued decline. Maintenance of demographically stable and genetically viable *ex-situ* populations is thus crucial for ensuring the continued survival of the species.

A review of the status of the current captive population in Indian zoos based on analysis of available pedigree records indicates that the species has a small population size 7(5.2.0) that shows a declining trend ($\lambda = 0.828$). It further retains only 62.5% of the genetic diversity originating from a small founder base (2). Additional causes of concern for the captive population include:

- The living population is maintained in an inappropriate social group at a single location (Assam State Zoo cum Botanical Garden).
- A large number of wild origin animals have entered the captive population. However; the contribution by wild origin animals to the gene pool has been limited with skewed founder representation.

The trends of the captive population are suggestive of the following:

- Housing and husbandry practices adopted for managing the captive population may be species inappropriate, thus undermining reproductive output.
- The animals that are being acquired from the wild may be reproductively senescent or in poor health thus undermining reproductive output.

The concerns can be addressed by assessing the effectiveness of the existing housing and husbandry protocols followed in meeting the species needs in captivity. This would also enable identification of shortcomings and development of strategies that address the emergent concerns.

A thorough health assessment of the animals that includes both their physical and genetic status at the time of entry into captivity would ensure the entry of fit animals into captivity.

Additional animals from the wild may be acquired only after the issues that undermine reproductive effort in captivity are identified and addressed as continued extraction from the wild may adversely impact the free ranging population.

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Annexure I**Historical population of Golden langur (*Trachypithecus geei*) in Indian Zoos**

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
1	F	????	WILD	WILD	INDIA ASSAM MANAS	~ 1960 01-Jun-60 06-Jul-67	Capture Transfer Release	Captured from Goalpara
2	M	????	WILD	WILD	INDIA ASSAM	~ 1965 20-May-65 ????	Capture Transfer Death	Captured from Kachugaon
3	M	????	WILD	WILD	INDIA ASSAM	~ 1966 14-Mar-66 06-Apr-66	Capture Transfer Death	Captured from Goalpara
4	M	????	WILD	WILD	INDIA ASSAM	~ 1966 14-Mar-66 ????	Capture Transfer Death	Captured from Goalpara
5	M	????	WILD	WILD	INDIA ASSAM	~ 1966 14-Mar-66 ????	Capture Transfer Death	
6	M	~ 1963	WILD	WILD	INDIA DELHI AHMEDABAD	~ 1968 20-Jan-68 25-Jan-75 18-Aug-76	Capture Transfer Transfer Death	Purchased from Animal Dealer
7	F	????	WILD	WILD	INDIA DELHI	~ 1968 02-Apr-68 02-Nov-68	Capture Transfer Death	
8	F	????	WILD	WILD	INDIA DELHI	~ 1968 02-Apr-68 24-Nov-68	Capture Transfer Death	
9	F	????	WILD	WILD	INDIA DELHI	~ 1969 11-Aug-69 23-Jun-71	Capture Transfer Death	Received by way of donation
10	F	~ 1964	WILD	WILD	INDIA ASSAM	~ 1969 18-Dec-69 02-Jul-80	Capture Transfer Death	
11	F	~ 1964	WILD	WILD	INDIA ASSAM	~ 1969 18-Dec-69 07-Aug-72	Capture Transfer Death	
12	F	????	WILD	WILD	INDIA ASSAM	~ 1970 24-Mar-70 ????	Capture Transfer Death	Captured from Goalpara
13	F	????	WILD	WILD	INDIA ASSAM	~ 1970 24-Mar-70 ????	Capture Transfer Death	
14	M	????	WILD	WILD	INDIA ASSAM	~ 1970 24-Mar-70 ????	Capture Transfer Death	

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
15	M	????	WILD	WILD	INDIA ASSAM	~ 1970 24-Mar-70 ????	Capture Transfer Death	
16	M	????	WILD	WILD	INDIA ASSAM	~ 1970 24-Mar-70 11-Sep-70	Capture Transfer Death	
17	M	????	WILD	WILD	INDIA ASSAM	~ 1970 24-Mar-70 07-Nov-71	Capture Transfer Death	
18	M	~ 1962	WILD	WILD	INDIA ASSAM	~ 1970 11-Apr-70 ????	Capture Transfer Death	
19	F	~ 1962	WILD	WILD	INDIA ASSAM	~ 1970 11-Apr-70 01-Jul-80	Capture Transfer Death	
20	M	????	WILD	WILD	INDIA ASSAM	~ 1970 21-Apr-70 29-Aug-70	Capture Transfer Death	Captured from Goalpara
21	M	????	WILD	WILD	INDIA CALCUTTA	~ 1971 ~ Mar 1971 ~ Jan 1980	Capture Transfer Death	
22	M	????	WILD	WILD	INDIA CALCUTTA	~ 1971 ~ Mar 1971 ~ Feb 1972	Capture Transfer Death	
23	M	????	WILD	WILD	INDIA CALCUTTA	~ 1971 ~ Mar 1971 05-Aug-73	Capture Transfer Death	
24	F	????	WILD	WILD	INDIA CALCUTTA	~ 1971 ~ Mar 1971 ~ Mar 1972	Capture Transfer Death	
25	F	????	WILD	WILD	INDIA CALCUTTA	~ 1971 ~ Mar 1971 09-Jun-77	Capture Transfer Death	
26	F	????	WILD	WILD	INDIA CALCUTTA	~ 1971 ~ Mar 1971 ~ Feb 1979	Capture Transfer Death	
27	M	????	WILD	WILD	INDIA ASSAM	~ 1971 13-Mar-71 30-Sep-71	Capture Transfer Death	Brought from dealer
28	M	????	WILD	WILD	INDIA ASSAM MANAS	~ 1971 13-Mar-71 25-Sep-71	Capture Transfer Release	Released in Manas Tiger Reserve
29	F	????	WILD	WILD	INDIA ASSAM MANAS	~ 1971 13-Mar-71 25-Sep-71	Capture Transfer Release	Released in Manas Tiger Reserve
30	M	????	WILD	WILD	INDIA NANDANKAN	~ 1971 ~ Apr 1971 ~ Dec 1971	Capture Transfer Death	
31	M	????	WILD	WILD	INDIA CALCUTTA	~ 1971 ~ Dec 1971	Capture Transfer	Bought from Animal Dealer

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
						18-Jul-74	Death	
32	?	????	WILD	WILD	INDIA TRIVANDRU	~1972 20-Jun-72 22-Dec-72	Capture Transfer Death	
33	F	~ Dec 1970	WILD	WILD	INDIA ASSAM KANPUR	~15 Dec 1972 16-Dec-72 17-Oct-79 04-Sep-80	Capture Transfer Transfer Death	
34	M	~ 1969	WILD	WILD	INDIA ASSAM	~ 8 Jan 1973 09-Jan-73 04-Oct-76	Capture Transfer Death	
35	M	~ 1973	WILD	WILD	INDIA ASSAM CHATBIR Z	~ 1973 09-Jan-73 21-Aug-75 10-Mar-80	Capture Transfer Transfer Death	
36	M	~ 1973	WILD	WILD	INDIA ASSAM	~ 1973 21-Feb-76 04-Apr-76	Capture Transfer Death	
37	M	~ 1970	WILD	WILD	INDIA ASSAM CHATBIR Z	~ 1976 02-Apr-76 29-Jul-78 02-Aug-78	Capture Transfer Transfer Death	
38	F	????	WILD	WILD	INDIA ASSAM CHATBIR Z	~ 1976 02-Apr-76 29-Jul-78 02-Aug-78	Capture Transfer Transfer Death	
39	F	????	WILD	WILD	INDIA ASSAM	~ 1976 02-Apr-76 11-Nov-76	Capture Transfer Death	
40	M	????	WILD	WILD	INDIA ASSAM	~ 1976 28-Apr-76 26-Jun-76	Capture Transfer Death	
41	M	????	WILD	WILD	INDIA ASSAM	~ 1976 28-Apr-76 22-Apr-78	Capture Transfer Death	
42	F	????	WILD	WILD	INDIA ASSAM	~ 1976 28-Apr-76 07-Jul-76	Capture Transfer Death	
43	F	????	WILD	WILD	INDIA ASSAM	~ 1976 28-Apr-76 23-Jun-76	Capture Transfer Death	
44	M	????	WILD	WILD	INDIA ASSAM UNKNOWN	~ 1976 21-May-76 26-May-76	Capture Transfer Ltf	
45	M	????	WILD	WILD	INDIA ASSAM UNKNOWN	~ 1976 21-May-76 26-May-76	Capture Transfer Ltf	
46	F	????	WILD	WILD	INDIA ASSAM UNKNOWN	~ 1976 21-May-76 26-May-76	Capture Transfer Ltf	

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
47	F	????	WILD	WILD	INDIA ASSAM UNKNOWN	~ 1976 21-May-76 26-May-76	Capture Transfer Ltf	Sold to Animal Dealer
48	M	29-May-76	UNK	10	ASSAM	29-May-76 19-Feb-84	Birth Death	
49	M	????	WILD	WILD	INDIA KANPUR	06-Nov-74 ???? ~ 1977	Capture Transfer Death	
50	F	????	WILD	WILD	INDIA KANPUR	~ 1974 ~ 1974 04-Sep-80	Capture Transfer Death	
51	M	30-Jun-76	49	50	KANPUR	30-Jun-76 ~ 1978	Birth Death	
52	M	~ 1972	WILD	WILD	INDIA ASSAM CHATBIR Z	~ 1976 07-Mar-76 03-Mar-77 22-Sep-77	Capture Transfer Transfer Death	
53	F	????	WILD	WILD	INDIA ASSAM CHATBIR Z	~ 1976 07-Mar-76 03-Mar-77 21-May-77	Capture Transfer Transfer Death	
54	F	????	WILD	WILD	INDIA ASSAM CHATBIR Z	~ 1976 07-Mar-76 03-Mar-77 23-Dec-79	Capture Transfer Transfer Death	
55	M	27-Dec-77	5	UNK	ASSAM	27-Dec-77 06-Jan-85	Birth Death	
56	M	????	WILD	WILD	INDIA ASSAM	~ 1978 18-Mar-78 01-Apr-82	Capture Transfer Death	
57	M	????	WILD	WILD	INDIA ASSAM	~ 1978 18-Mar-78 07-May-78	Capture Transfer Death	
58	F	????	WILD	WILD	INDIA ASSAM	~ 1978 18-Mar-78 26-May-78	Capture Transfer Death	
59	F	03-Mar-79	UNK	UNK	ASSAM	03-Mar-79 24-Mar-84	Birth Death	
60	F	????	WILD	WILD	INDIA LUCKNOW KANPUR	???? ???? 09-Dec-79 31-Aug-80	Capture Transfer Transfer Death	
61	F	????	WILD	WILD	INDIA ASSAM	~ 1980 11-Feb-80 08-Feb-82	Capture Transfer Death	Bought from Animal Dealer
62	M	????	WILD	WILD	INDIA ASSAM	~ 1980 25-Feb-80	Capture Ltf	
63	M	????	WILD	WILD	INDIA ASSAM	~ 1980 25-Feb-80 08-Aug-82	Capture Transfer Death	

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
64	F	????	WILD	WILD	INDIA ASSAM	~ 1980 25-Feb-80 01-Jan-81	Capture Transfer Death	
65	F	????	WILD	WILD	INDIA ASSAM	~ 1980 25-Feb-80 14-Apr-80	Capture Transfer Death	
66	F	????	WILD	WILD	INDIA ASSAM	~ 1980 25-Feb-80 11-Apr-80	Capture Transfer Death	
67	F	????	WILD	WILD	INDIA ASSAM	~ 1980 25-Feb-80 08-Aug-82	Capture Transfer Death	
68	M	????	WILD	WILD	INDIA ASSAM	~ 1980 03-Jun-80	Capture Ltf	
69	M	????	WILD	WILD	INDIA ASSAM	~ 1980 03-Jun-80 12-Nov-85	Capture Transfer Death	
70	F	????	WILD	WILD	INDIA KANPUR	~ 1980 ~ Jun 1980 30-Sep-80	Capture Transfer Death	
71	M	????	WILD	WILD	INDIA KANPUR	~ 1980 ~ Jun 1980 ~ Oct 1980	Capture Transfer Death	
72	M	????	WILD	WILD	INDIA KANPUR	~ 1980 ~ Jun 1980 ????	Capture Transfer Death	
73	M	????	WILD	WILD	INDIA KANPUR	~ 1980 ~ Jun 1980 01-Apr-82	Capture Transfer Death	
74	F	????	WILD	WILD	INDIA ASSAM	~ 1981 04-Mar-81 02-Oct-85	Capture Transfer Death	
75 200009	F	~ 1981	WILD	WILD	INDIA ASSAM	~ 1981 04-Mar-81 29-Dec-85	Capture Transfer Death	
76 M2 SHERU	M	09-Oct-82	UNK	UNK	KANPUR	09-Oct-82 15-Jul-99	Birth Death	
77	M	????	WILD	WILD	INDIA CHATBIR Z	~ 1982 22-Jun-82 16-Apr-83	Capture Transfer Death	Bought from Animal Dealer
78	F	????	WILD	WILD	INDIA CHATBIR Z	~ 1982 22-Jun-82 ????	Capture Transfer Death	
79 200001	F	~ 1985	WILD	WILD	INDIA ASSAM	~ 1985 22-Jan-85 24-Apr-87	Capture Transfer Death	Bought from Jorahat
80	F	????	WILD	WILD	INDIA ASSAM	~ 1985 22-Jan-85 14-Jun-87	Capture Transfer Death	

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
81	F	~ Jan 1985	WILD	WILD	INDIA ASSAM	~ 1985 25-Jan-85 01-Jan-88	Capture Transfer Death	Bought from Kidling
82	F	?????	WILD	WILD	INDIA ASSAM	~ 1985 10-Feb-85 24-Feb-88	Capture Transfer Death	Bought from Meghalaya
83	F	~ 1985	WILD	WILD	INDIA ASSAM	~ 1985 18-Feb-85 25-Jul-88	Capture Transfer Death	
84	F	~ 1985	WILD	WILD	INDIA ASSAM	~ 1985 14-Mar-85 14-Oct-88	Capture Transfer Death	Bought from Meghalaya
85	F	~ 1985	WILD	WILD	INDIA ASSAM	~ 1985 14-Mar-85 25-Jul-88	Capture Transfer Death	Bought from Paukhty
86	F	~ 1985	WILD	WILD	INDIA ASSAM	~ 1985 22-May-85 14-Feb-89	Capture Transfer Death	
87	F	?????	WILD	WILD	INDIA ASSAM	~ 1985 22-May-85 22-Feb-90	Capture Transfer Death	
88	M	?????	WILD	WILD	INDIA TRIVANDRU	~ 1985 03-Feb-85	Capture Ltf	Transferred to Animal Dealer
89	F	?????	WILD	WILD	INDIA TRIVANDRU	~ 1985 03-Jun-85 23-May-88	Capture Transfer Death	
90	M	?????	WILD	WILD	INDIA TRIVANDRU	~ 1985 25-Nov-85 22-Jul-87	Capture Transfer Death	
91	M	~ 1981	WILD	WILD	INDIA ASSAM	~ 1985 17-Dec-85 10-Aug-89	Capture Transfer Death	
92	M	~ 1981	WILD	WILD	INDIA ASSAM	~ 1985 17-Dec-85 08-Nov-87	Capture Transfer Death	
93	M	~ 1981	WILD	WILD	INDIA ASSAM	~ 1985 17-Dec-85 02-Jan-88	Capture Transfer Death	
94	F	~ 1981	WILD	WILD	INDIA ASSAM	~ 1985 17-Dec-85 ?????	Capture Transfer Death	
95	F	~ 1983	WILD	WILD	INDIA ASSAM NANDANKAN	~ 1986 18-Mar-86 15-Mar-89 09-Sep-95	Capture Transfer Transfer Death	
96	F	~ 1983	WILD	WILD	INDIA ASSAM NANDANKAN	~ 1986 18-Mar-86 15-Mar-89 01-Jun-90	Capture Transfer Transfer Death	
97	F	?????	WILD	WILD	INDIA	~ 1986	Capture	

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
SUDHA					HYDERABAD	26-Jan-86 25-Aug-86	Transfer Death	
98 RADHA	F	????	WILD	WILD	INDIA HYDERABAD	~ 1986 26-Jan-86 27-Mar-92	Capture Transfer Death	
99 VALI	M	????	WILD	WILD	INDIA HYDERABAD	~ 1986 29-Dec-86 29-Oct-87	Capture Transfer Death	
100	F	~ 1983	WILD	WILD	INDIA ASSAM	~ 1987 04-May-87 03-Jul-90	Capture Transfer Death	
101	F	~ 1983	WILD	WILD	INDIA ASSAM	~ 1987 04-May-87 11-May-87	Capture Transfer Death	
102	F	~ 1983	WILD	WILD	INDIA ASSAM	~ 1987 04-May-87 10-Jul-90	Capture Transfer Death	
103	M	~ 1983	WILD	WILD	INDIA ASSAM	~ 1987 03-Aug-87 04-Oct-89	Capture Transfer Death	
104	M	????	WILD	WILD	INDIA CALCUTTA	???? ~ Nov 1987 ~ Oct 1997	Capture Transfer Death	
105	M	08-Feb-88	UNK	UNK	ASSAM	08-Feb-88 24-Feb-88	Birth Death	
106	F	10-Feb-88	UNK	UNK	ASSAM	10-Feb-88 11-Feb-88	Birth Death	
107	F	????	WILD	WILD	INDIA ASSAM	~ 1988 06-May-88 10-May-88	Capture Transfer Death	
108	F	????	WILD	WILD	INDIA ASSAM	~ 1988 06-May-88 29-Oct-90	Capture Transfer Death	
109	F	????	WILD	WILD	INDIA ASSAM	~ 1988 06-May-88 15-Jan-91	Capture Transfer Death	
110	M	????	WILD	WILD	INDIA ASSAM	~ 1988 06-May-88 18-Dec-90	Capture Transfer Death	
111	M	????	WILD	WILD	INDIA ASSAM	~ 1988 06-May-88 30-Sep-88	Capture Transfer Death	
112	M	????	WILD	WILD	INDIA ASSAM	~ 1988 06-May-88 15-Mar-90	Capture Transfer Death	
113	F	~ 1984	WILD	WILD	INDIA ASSAM	~ 1988 15-Sep-88 22-Jun-91	Capture Transfer Death	
114	M	~ 1985	WILD	WILD	INDIA ASSAM	~ 1988 26-Nov-88	Capture Transfer	

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
						18-Apr-92	Death	
115	F	~ 1985	WILD	WILD	INDIA ASSAM	~ 1988 26-Nov-88 20-Jan-92	Capture Transfer Death	
116	M	????	WILD	WILD	INDIA BANNERGHA	???? ~ 1988 25-Feb-94	Capture Transfer Death	
117	F	????	WILD	WILD	INDIA BANNERGHA	???? ~ 1988 ????	Capture Transfer Death	
118	M	~ 1986	WILD	WILD	INDIA ASSAM NANDANKAN	~ 1989 16-Jan-89 18-Sep-91 27-Aug-92	Capture Transfer Transfer Death	
119 SAMUNDA	M	~ 1984	WILD	WILD	INDIA ASSAM	~ 1989 15-Mar-89 20-Sep-12	Capture Transfer Death	
120	M	~ 1984	WILD	WILD	INDIA ASSAM	~ 1989 15-Mar-89 30-Aug-92	Capture Transfer Death	
121	F	~ 1984	WILD	WILD	INDIA ASSAM	~ 1989 15-Mar-89 11-Oct-99	Capture Transfer Death	
122	F	~ Jun 1986	WILD	WILD	INDIA ASSAM	~ 1989 08-Apr-89 19-Oct-94	Capture Transfer Death	
123	F	????	WILD	WILD	INDIA ASSAM	~ 1989 29-May-89 30-May-89	Capture Transfer Death	
124	M	21-Jun-91	120	121	ASSAM	21-Jun-91 07-May-92	Birth Death	
125 HANUMAN	M	????	WILD	WILD	INDIA HYDERABAD	~ 1990 05-Mar-90 23-Nov-94	Capture Transfer Death	
126 SITA	F	????	WILD	WILD	INDIA HYDERABAD	~ 1990 05-Mar-90 24-Feb-96	Capture Transfer Death	
127	F	~ 1987	WILD	WILD	INDIA ASSAM	~ 1992 20-May-92 04-May-94	Capture Transfer Death	
128	F	~ 1987	WILD	WILD	INDIA ASSAM	~ 1992 20-May-92 ????	Capture Transfer Death	
129 SHAKUNTALA	F	????	WILD	WILD	INDIA HYDERABAD	~ 1992 20-Feb-92 14-Jan-01	Capture Transfer Death	
130 SHASI	F	????	WILD	WILD	INDIA HYDERABAD	~ 1992 28-Feb-92 23-Mar-01	Capture Transfer Death	
131	F	~ 1989	WILD	WILD	INDIA	~ 1989	Capture	

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
DOLLY					PATNA KANPUR	???? 05-Aug-92 26-Nov-01	Transfer Transfer Death	
132 ROLLY	F	~ 1991	WILD	WILD	INDIA PATNA KANPUR	~ 1991 ???? 05-Aug-92 27-Jan-94	Capture Transfer Transfer Death	
133 JMBP01	M	~ Jun 1990	WILD	WILD	INDIA BOKARO	~ 1992 20-Jun-92 ~ 2004	Capture Transfer Death	
134	M	~ 1986	WILD	WILD	INDIA ASSAM	14-Apr-93 15-Apr-93 11-Oct-96	Capture Transfer Death	
135	M	10-Nov-93	119	121	ASSAM	10-Nov-93 10-Nov-93	Birth Death	
136	M	04-Feb-94	76	131	KANPUR	04-Feb-94 21-Mar-95	Birth Death	
137 KANAL	M	????	WILD	WILD	INDIA AHMEDABAD HYDERABAD	???? ???? 20-Oct-94 01-Feb-00	Capture Transfer Transfer Death	
138	M	????	WILD	WILD	INDIA PATNA NANDANKAN	???? ???? 24-Mar-95 08-Aug-96	Capture Transfer Transfer Death	
139	F	28-Nov-96	119	121	ASSAM	28-Nov-96 28-Nov-96	Birth Death	
140	F	02-Nov-97	119	157	ASSAM	02-Nov-97 04-Nov-06	Birth Death	
141 JMBP02	F	????	WILD	WILD	INDIA BOKARO	~ 1992 20-Jun-92 17-Oct-92	Capture Transfer Death	
142 JMBP03	F	????	WILD	WILD	INDIA BOKARO	~ 1992 20-Jun-92 20-Oct-92	Capture Transfer Death	
143	?	????	WILD	WILD	INDIA AHMEDABAD	~ 1969 25-Nov-69 15-Jan-79	Capture Transfer Death	Donated
144	M	~ 1990	WILD	WILD	INDIA BORIVILI	~ 1992 21-Nov-92 03-May-97	Capture Transfer Death	
145	M	~ 1990	WILD	WILD	INDIA BORIVILI	~ 1992 21-Nov-92 19-Feb-95	Capture Transfer Death	
146	F	~ 1990	WILD	WILD	INDIA BORIVILI	~ 1992 21-Nov-92 30-Jul-96	Capture Transfer Death	
147	M	~ 1990	WILD	WILD	INDIA BORIVILI	~ 1992 21-Nov-92 04-Oct-97	Capture Transfer Death	

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
148	F	????	WILD	WILD	INDIA AHMEDABAD	~ 1972 21-Jan-72 07-Jun-90	Capture Transfer Death	Bought from Animal Dealer
149	F	~ 1985	WILD	WILD	INDIA AHMEDABAD	~ 1985 20-Sep-85 04-Dec-93	Capture Transfer Death	Bought from Animal Dealer
150	F	~ 1982	WILD	WILD	INDIA TRIPURA TRISHNA	~ 1989 11-Jun-89 01-Feb-03	Capture Transfer Release	
151	F	????	WILD	WILD	INDIA KANPUR	20-Jan-75 20-Jan-75 02-Oct-80	Capture Transfer Death	
152	F	????	WILD	WILD	INDIA GANGTOK KANPUR	???? ???? ~ 1979 16-Aug-80	Capture Transfer Transfer Death	
153	M	????	WILD	WILD	INDIA GANGTOK KANPUR	???? ???? ~ 1979 26-Jun-87	Capture Transfer Transfer Death	
154 200008	F	~ 1980	WILD	WILD	INDIA ASSAM	25-Feb-80 25-Feb-80 22-Aug-85	Capture Transfer Death	
155	M	????	WILD	WILD	INDIA HYDERABAD	???? 29-Dec-86 14-Jan-01	Capture Transfer Death	
156 200001	F	~ 1985	WILD	WILD	INDIA ASSAM	14-Jun-87 14-Jun-87 14-Jun-87	Capture Transfer Death	
157	F	~ 1987	WILD	WILD	INDIA ASSAM	29-May-89 29-May-89 25-Dec-98	Capture Transfer Death	
158 HIRA	M	????	WILD	WILD	INDIA BOKARO	20-Jun-92 20-Jun-92 12-Feb-05	Capture Transfer Death	
159	M	24-Apr-93	UNK	131	KANPUR	24-Apr-93 25-Apr-93	Birth Death	
160 RAMUNDA 0006B761F0	M	~ 1995	WILD	WILD	INDIA ASSAM	~ Apr 2003 22-Apr-03 15-Feb-12	Capture Transfer Death	date of death 09.10.2014 as per taxon report
161 MIRINDA	M	02-Nov-97	119	157	ASSAM	02-Nov-97 04-Nov-06	Birth Death	
162 CHAMELI 200002	F	~ 2000	WILD	WILD	INDIA ASSAM	09-Apr-05 09-Apr-05 15-Feb-12	Capture Transfer Death	
163 JOON 0006B71796	M	03-Nov-06	160	162	ASSAM	03-Nov-06	Birth	
164	M	~ 2005	WILD	WILD	INDIA	03-Jul-07	Capture	

NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
RAMU 0006B71EB7					ASSAM	03-Jul-07	Transfer	
165 MOON 0006B715ED	M	04-Apr-08	160	162	ASSAM	04-Apr-08	Birth	
166 200002	F	30-Jun-10	160	162	ASSAM	30-Jun-10 06-Aug-10	Birth Death	
167 UMA 0006B71EB7	F	~ 2004	WILD	WILD	INDIA ASSAM	13-Feb-11 13-Feb-11 21-Nov-14	Capture Transfer Death	
168 AIEVY 0006CDE41B	F	~ Dec 2008	WILD	WILD	INDIA ASSAM	~ 2011 04-Dec-11 16-Aug-13	Capture Transfer Death	
169 BOLIN	M	~ 2008	WILD	WILD	ASSAM	~ 2008 01-Sep-15	Birth Transfer	
170 NARLEY	F	~ 2009	WILD	WILD	ASSAM	~ 2009 26-Feb-16	Birth Transfer	Acquired from Kokrajar
171	F	03-Apr-76	UNK	UNK	ASSAM PUNJAB I	03-Apr-76 29-Jul-78	Birth Transfer Ltf	
172 UMESH 00GL06	M	02-Feb-10	WILD	WILD	INDIA ASSAM	???? 02-Feb-18	Capture Transfer	Present in Taxon report not included in records provided by zoo
173 HEMA	F	~ 2009	WILD	WILD	INDIA ASSAM	~15 Dec 2017 29-Dec-17	Capture Transfer	
TOTALS: 81.9.2 (173)								

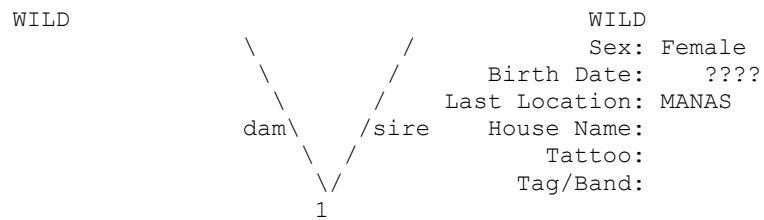
Annexure II

**Living population of Golden langur (*Trachypithecus geei*) in captivity
in Indian Zoos**

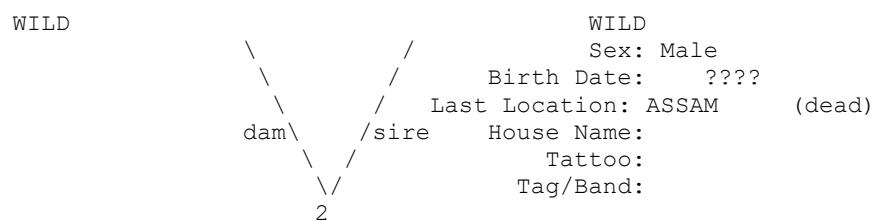
Stud# Local ID Name Transponder	Sex	Birth Date	Sire	Dam	Location	Date	Event	Remarks
Assam State Zoo cum Botanical Garden								
163 JOON 0006B71796	M	03-Nov-06	160	162	ASSAM	03-Nov-06	Birth	
164 RAMU 0006B71EB7	M	~ 2005	WILD	WILD	INDIA ASSAM	03-Jul-07 03-Jul-07	Capture Transfer	
165 MOON 0006B715ED	M	04-Apr-08	160	162	ASSAM	04-Apr-08	Birth	
169 BOLIN	M	~ 2008	WILD	WILD	ASSAM	~ 2008 01-Sep-15	Birth Transfer	
170 NARLEY	F	~ 2009	WILD	WILD	ASSAM	~ 2009 26-Feb-16	Birth Transfer	Acquired from Kokrajar
172 UMESH 00GL06	M	02-Feb-10	WILD	WILD	INDIA ASSAM	???? 02-Feb-18	Capture Transfer	Present in Taxon report not included in records provided by zoo
173 HEMA	F	~ 2009	WILD	WILD	INDIA ASSAM	~15 Dec 2017 29-Dec-17	Capture Transfer	
Total: 7(5.2.0)								

Pedigree report of Golden langur in Indian zoos

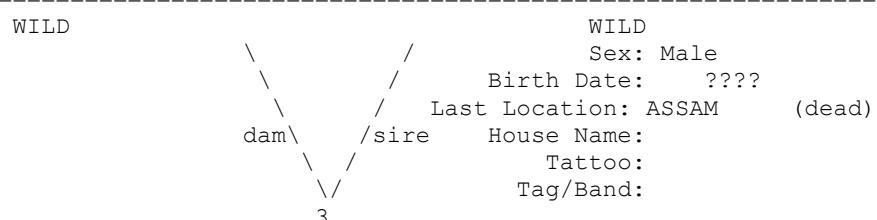
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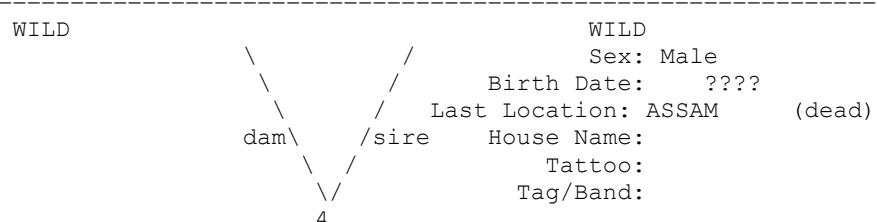
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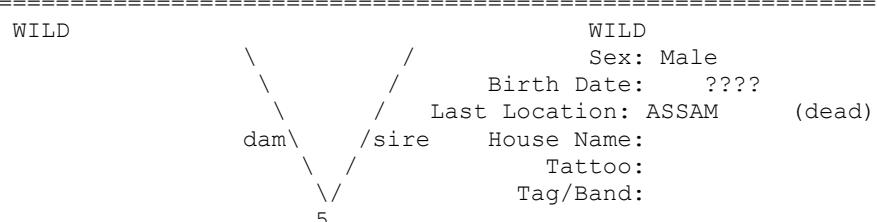
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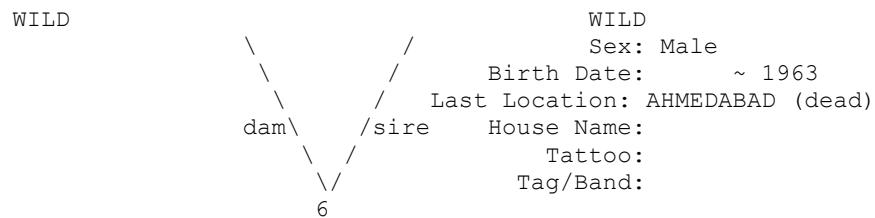


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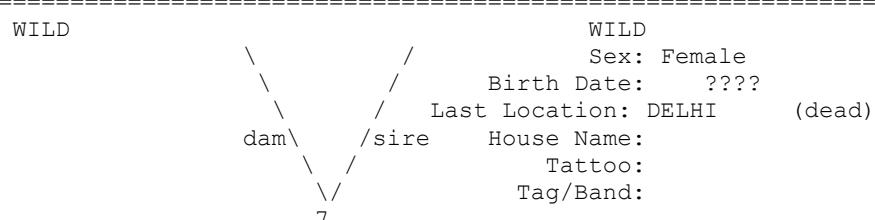


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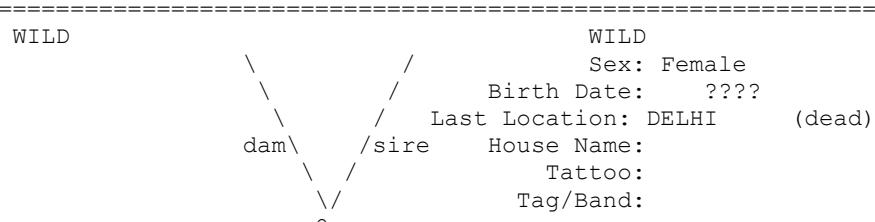
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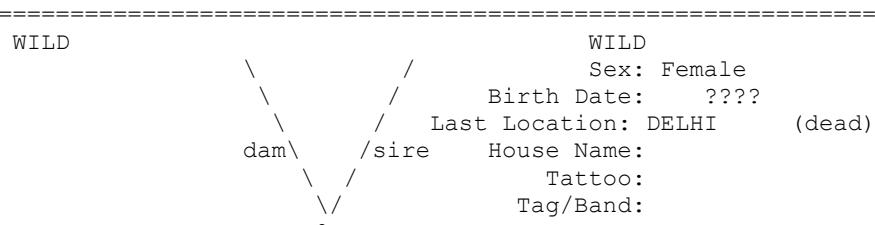
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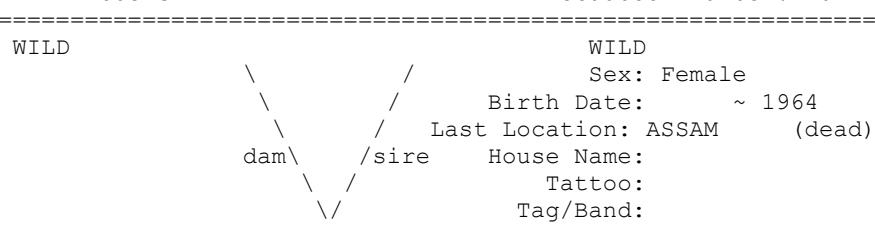
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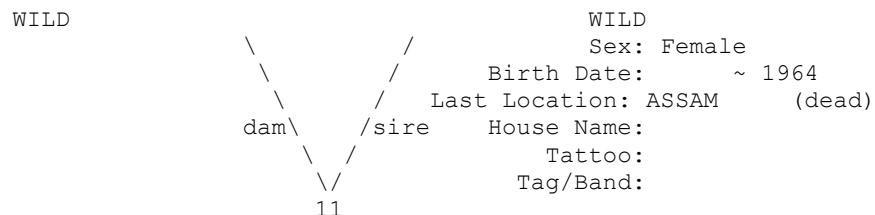


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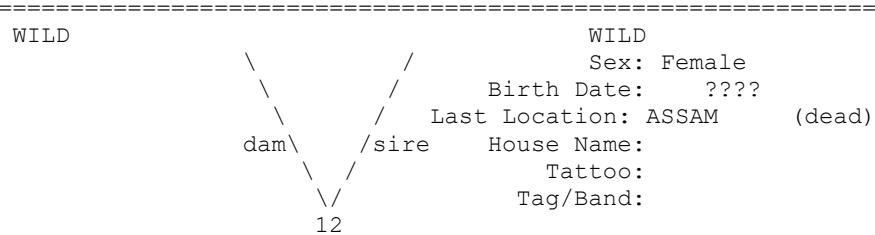


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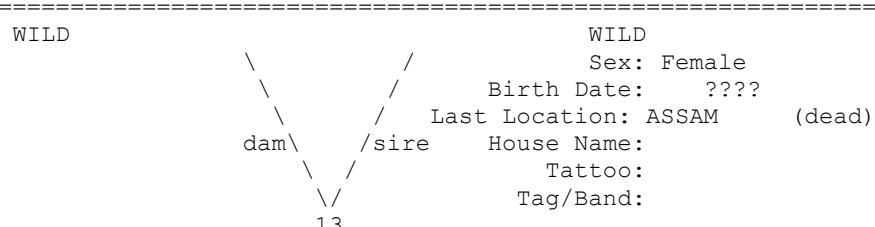
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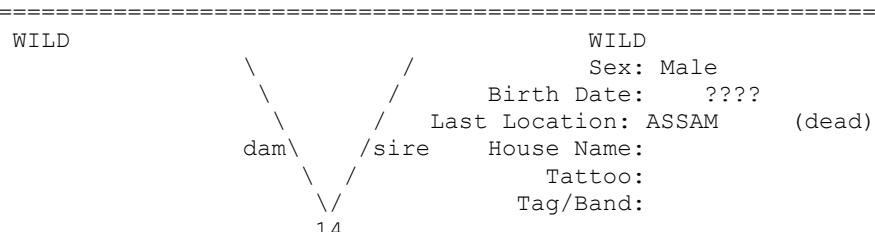
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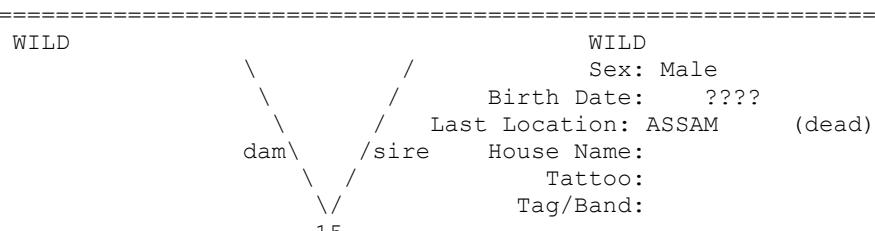
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Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 14



Taxon Name: TRACHYRITHECUS CEEI Studbook Number: 15



NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

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=====
Taxon Name: TRACHYPITHECUS GEEI           Studbook Number: 16
=====

          WILD                               WILD
          \   /                               Sex: Male
          \   /                               Birth Date: ****?
          dam\ /sire                         Last Location: ASSAM      (dead)
          \  /                                House Name:
          \  /                                Tattoo:
          \  /                                Tag/Band:
          16

=====

Taxon Name: TRACHYPITHECUS GEEI           Studbook Number: 17
=====

          WILD                               WILD
          \   /                               Sex: Male
          \   /                               Birth Date: ****?
          dam\ /sire                         Last Location: ASSAM      (dead)
          \  /                                House Name:
          \  /                                Tattoo:
          \  /                                Tag/Band:
          17

=====

Taxon Name: TRACHYPITHECUS GEEI           Studbook Number: 18
=====

          WILD                               WILD
          \   /                               Sex: Male
          \   /                               Birth Date: ~ 1962
          dam\ /sire                         Last Location: ASSAM      (dead)
          \  /                                House Name:
          \  /                                Tattoo:
          \  /                                Tag/Band:
          18

=====

Taxon Name: TRACHYPITHECUS GEEI           Studbook Number: 19
=====

          WILD                               WILD
          \   /                               Sex: Female
          \   /                               Birth Date: ~ 1962
          dam\ /sire                         Last Location: ASSAM      (dead)
          \  /                                House Name:
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          \  /                                Tag/Band:
          19

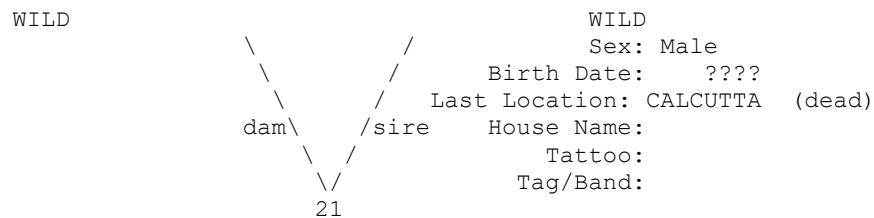
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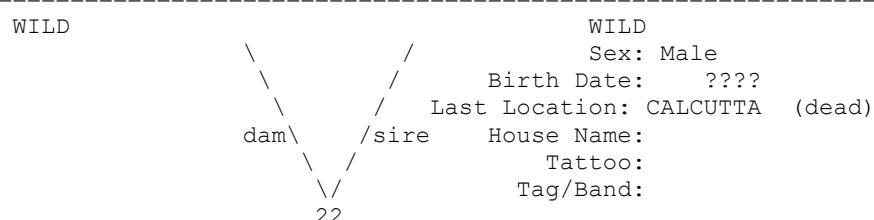
          WILD                               WILD
          \   /                               Sex: Male
          \   /                               Birth Date: ****?
          dam\ /sire                         Last Location: ASSAM      (dead)
          \  /                                House Name:
          \  /                                Tattoo:
          \  /                                Tag/Band:
          20
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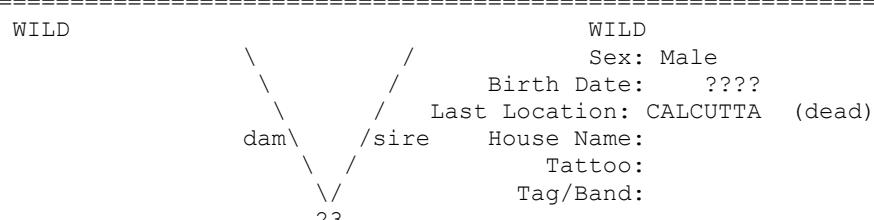
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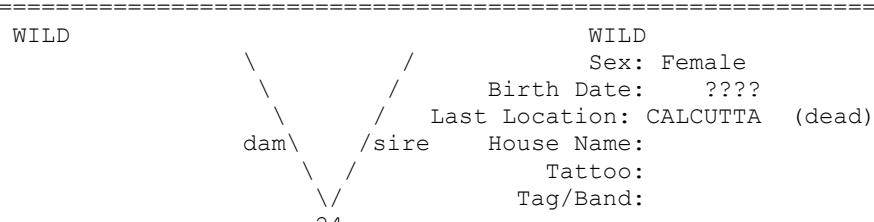
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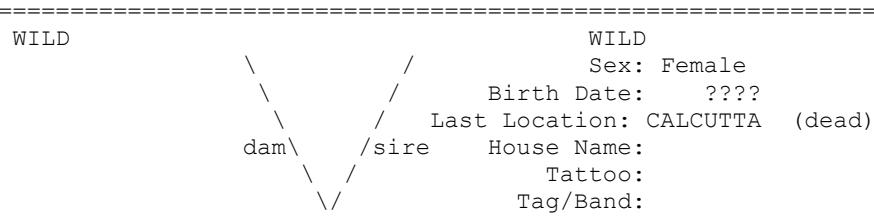
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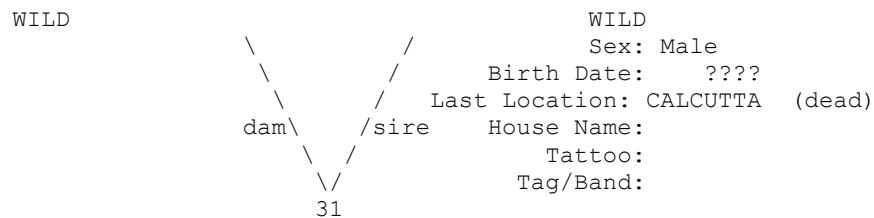
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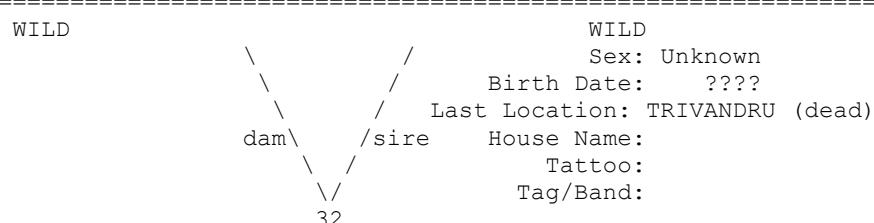
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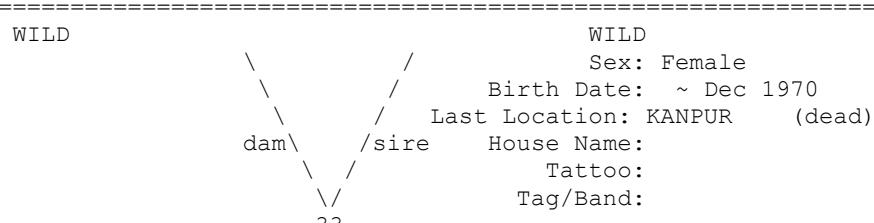
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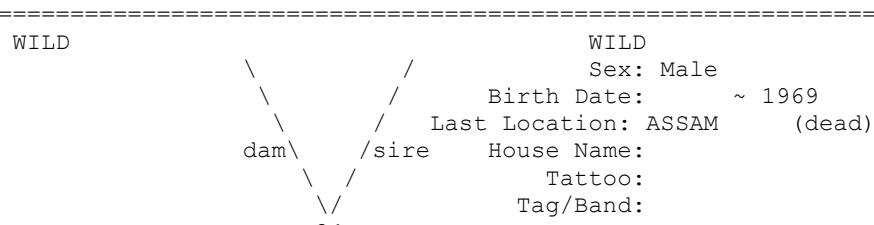
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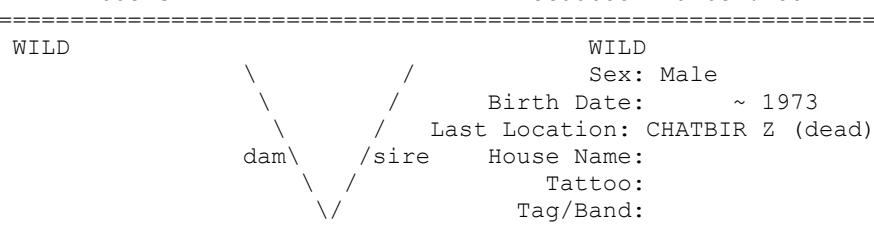
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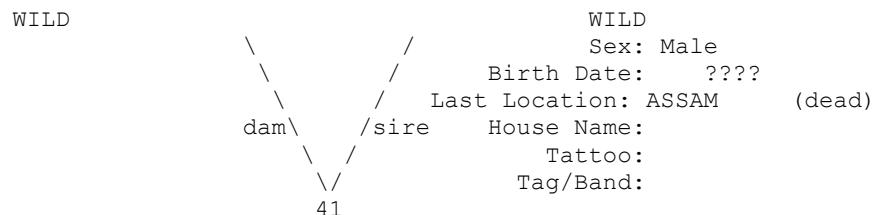
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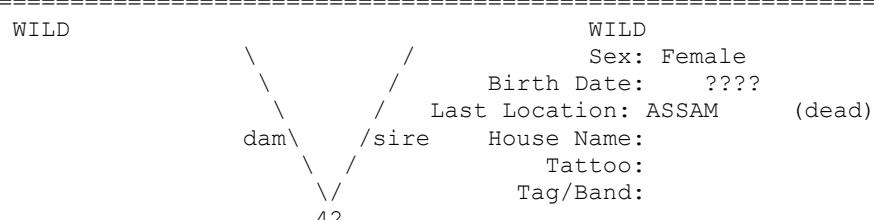
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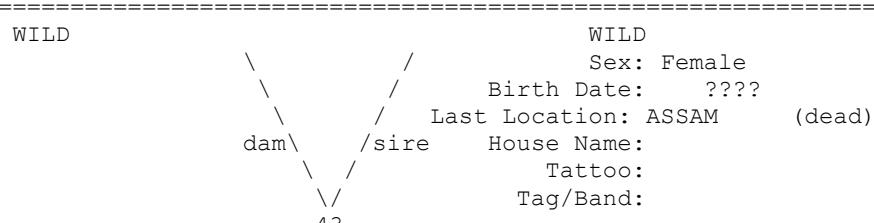
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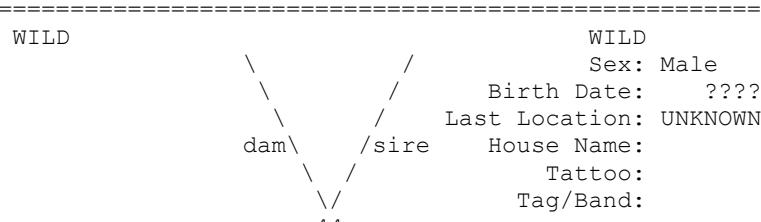
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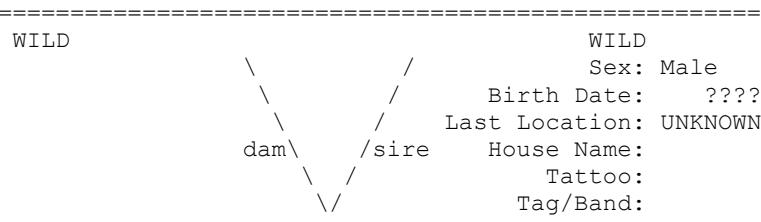
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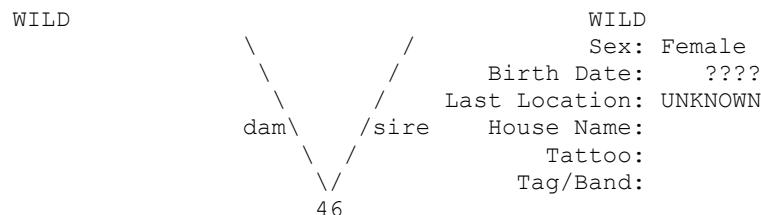
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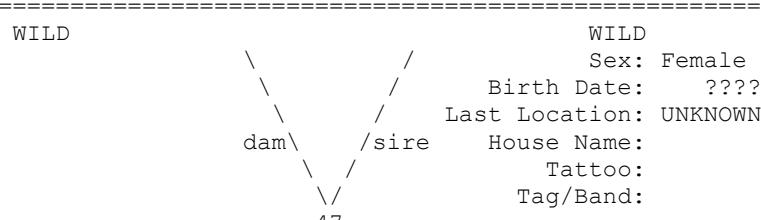
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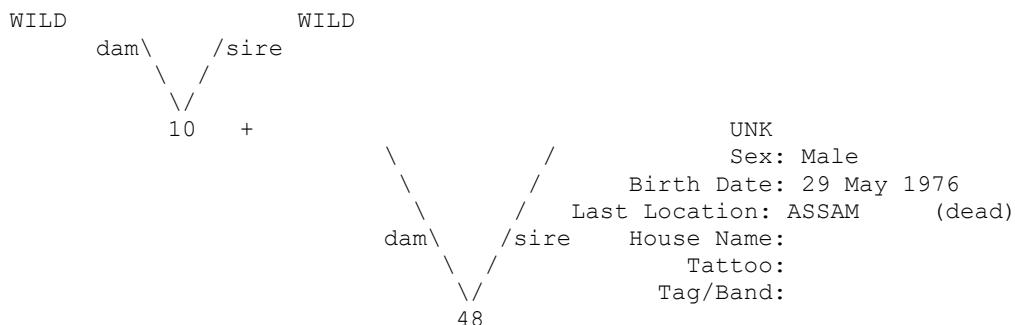
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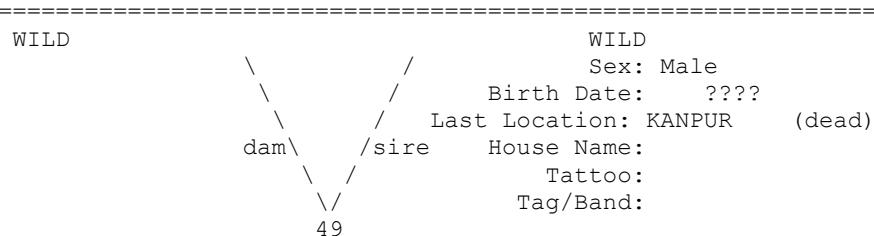


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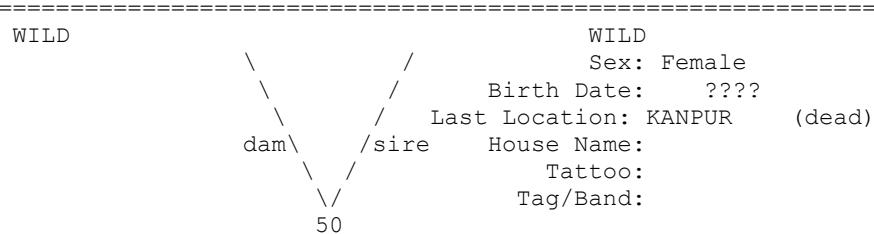


+ Wild-caught...

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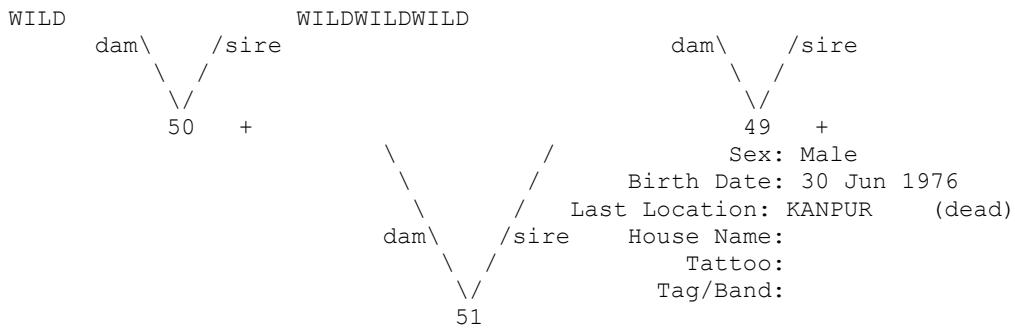
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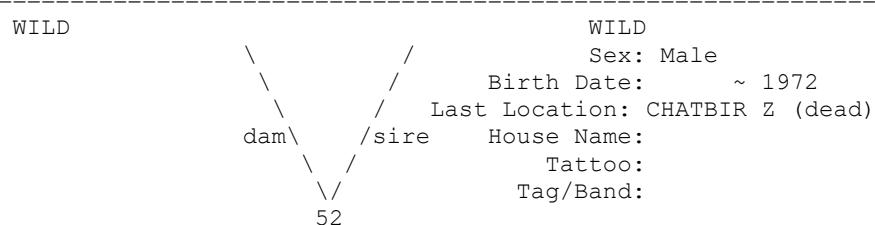
WILD WILD WILD



+ Wild-caught...

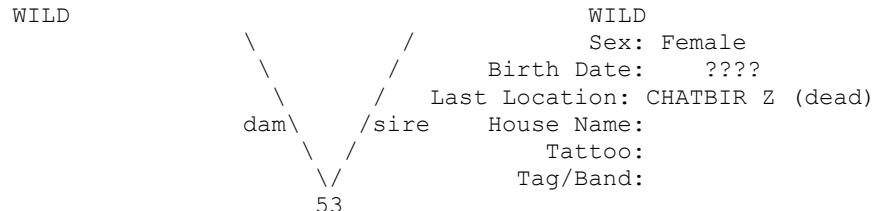
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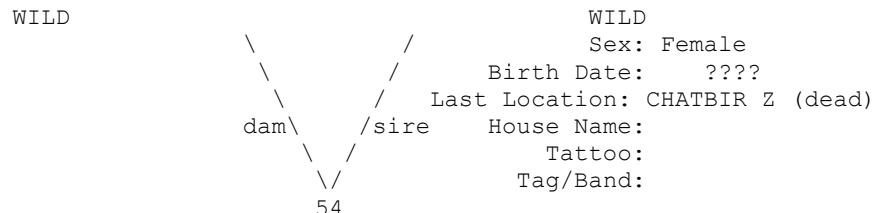
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WILD WILD



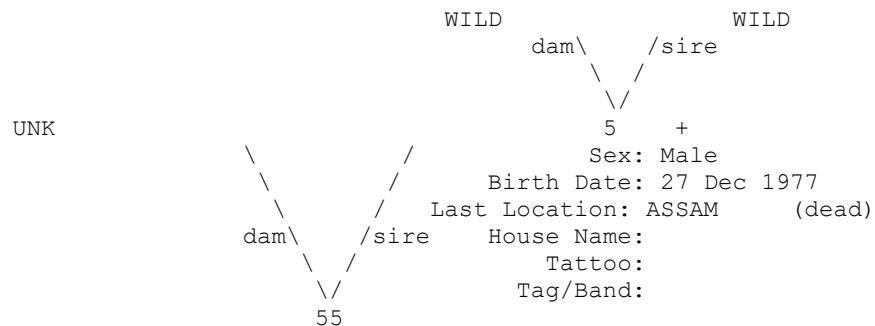
SEARCH NAME: FRANCIS THOMAS GELI

WILD



FANCY NAME: FRANCIS THOMAS GILL DRAWS ON NAME: JES

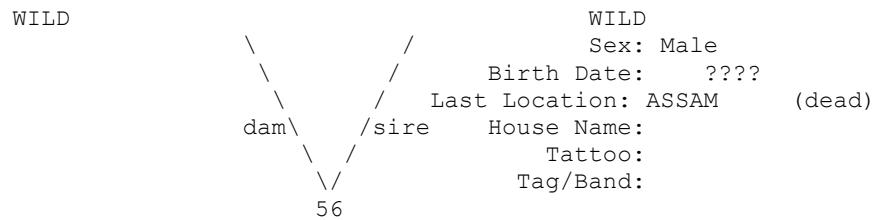
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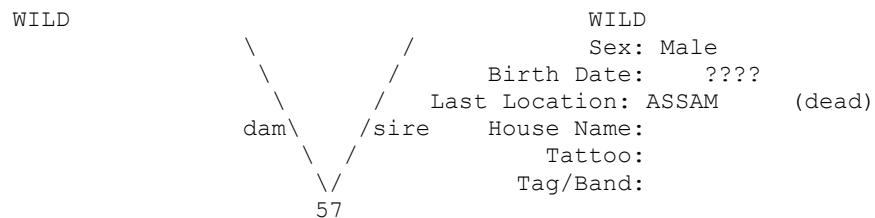
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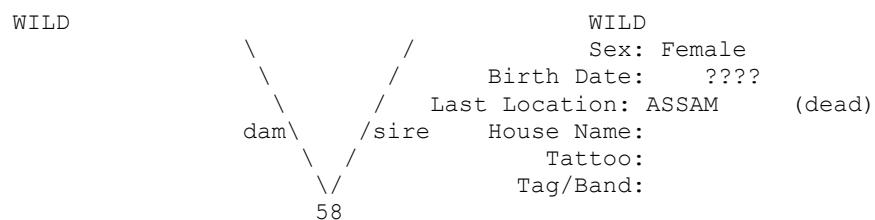
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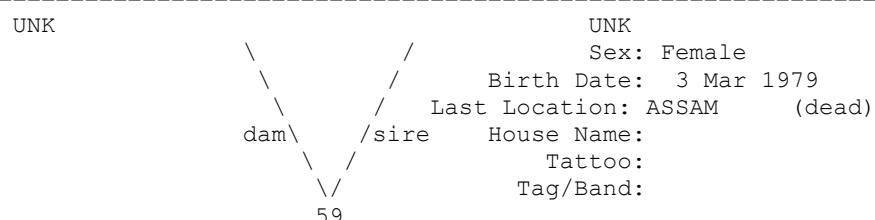
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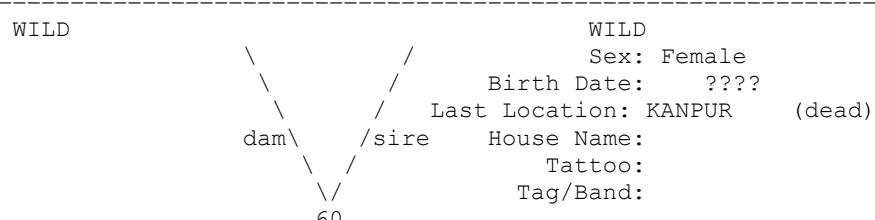
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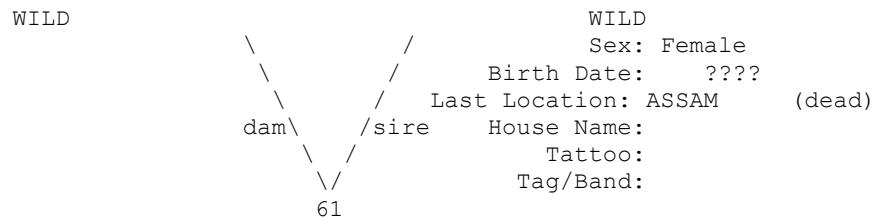


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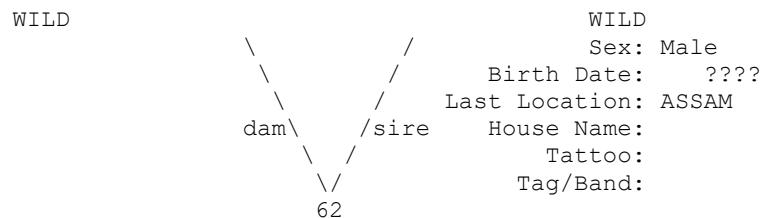


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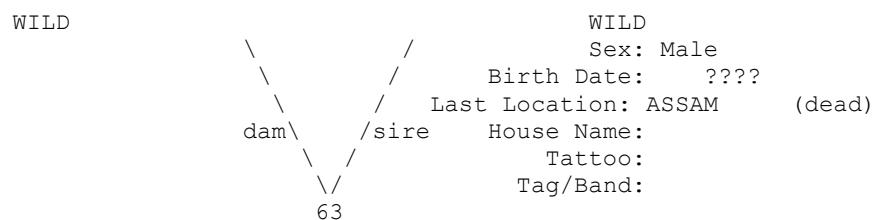
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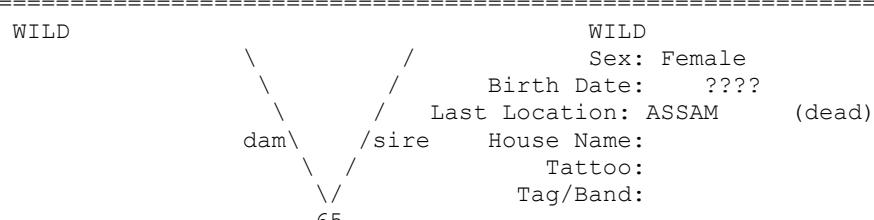
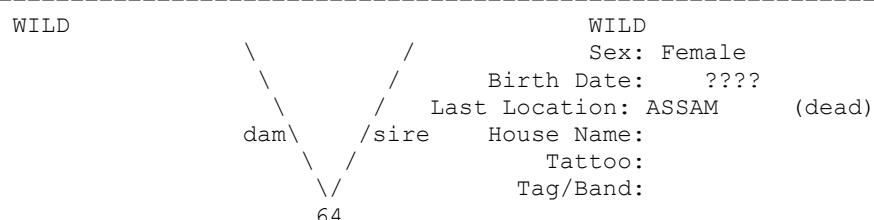
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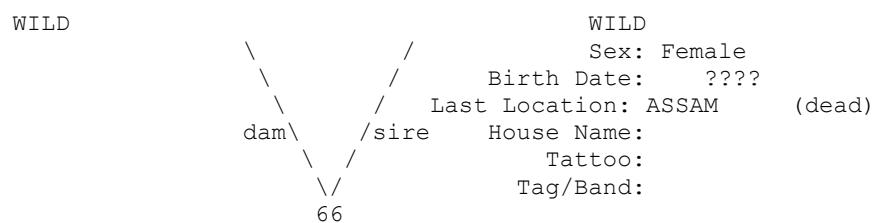


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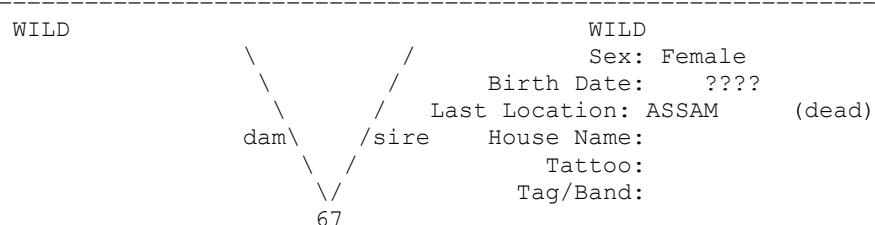


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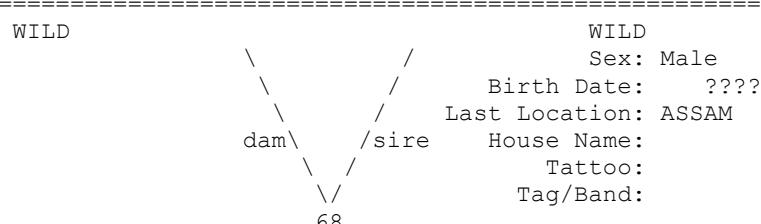
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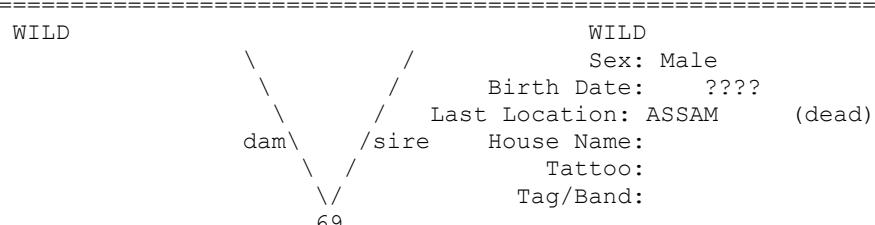
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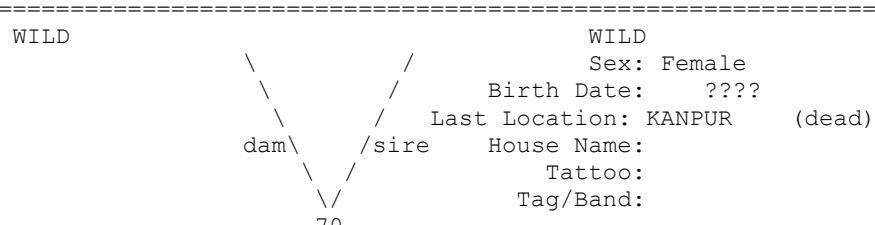
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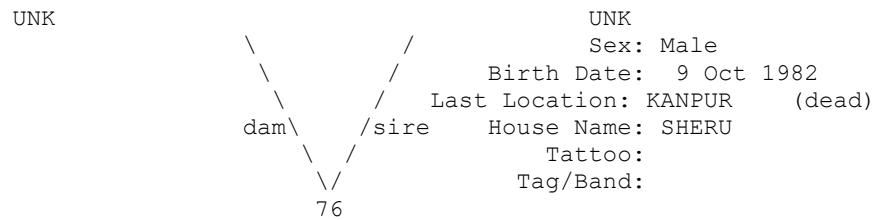


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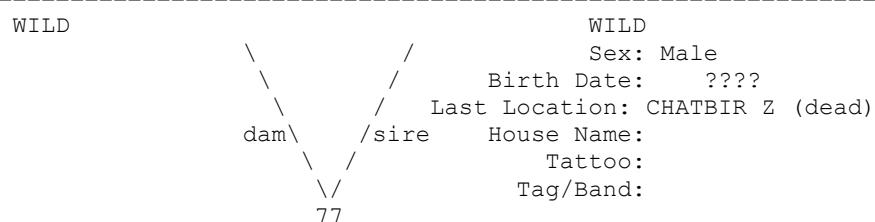


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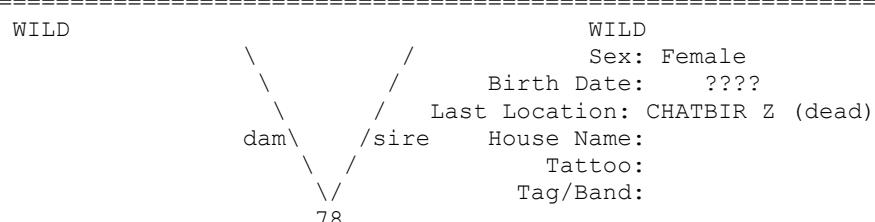
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Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 76
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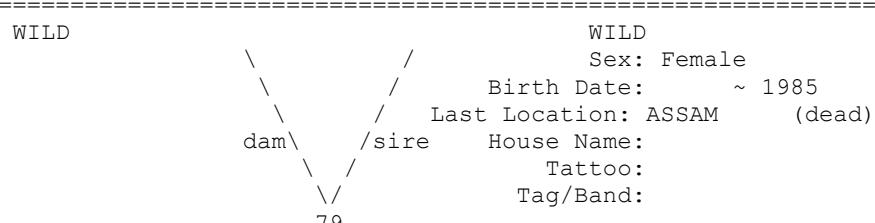
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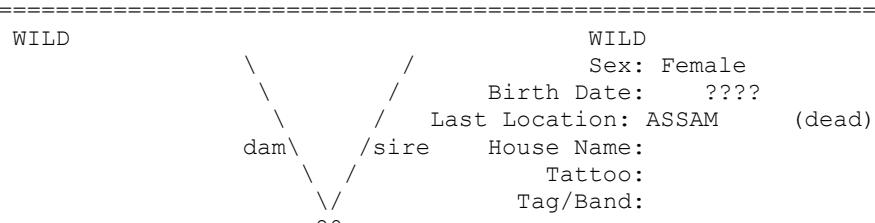
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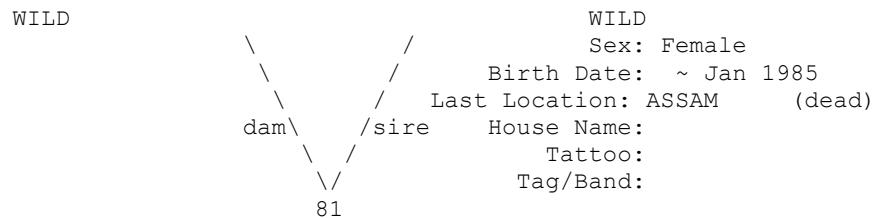


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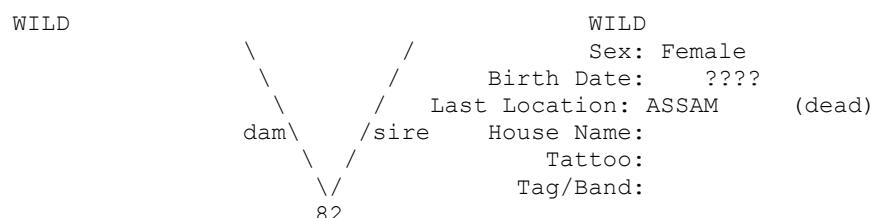


NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

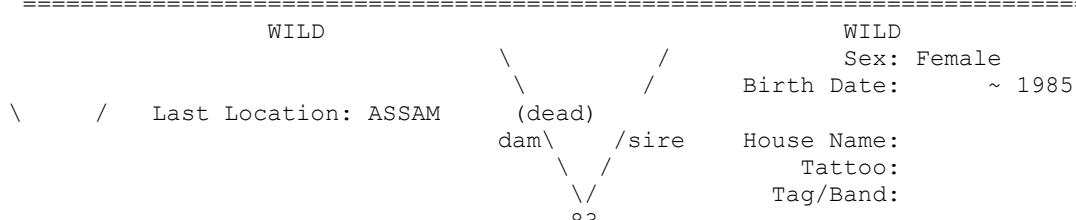
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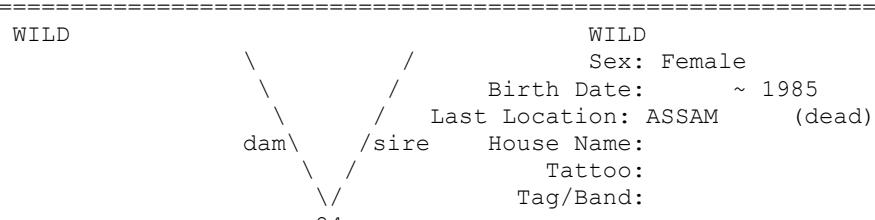
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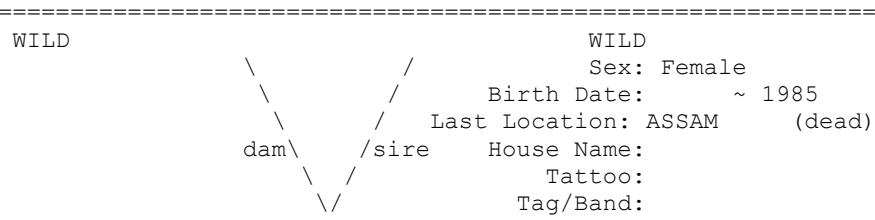
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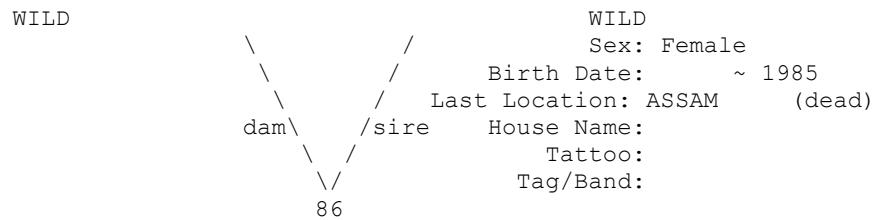


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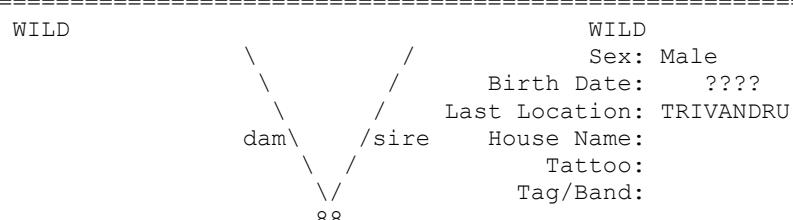
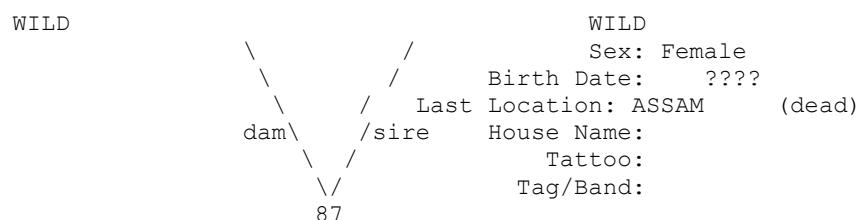


NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

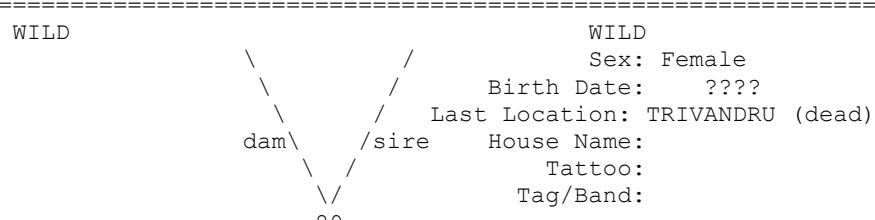
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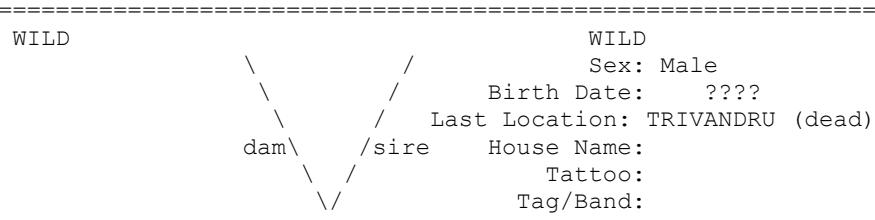
Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 87



Taxon Name: TRACHYPITHECUS GEETI Studbook Number: 89



Taxon Name: TRACHYPITHECUS GEETI Studybook Number: 90



NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 91

WILD

SEARCH NUMBER: 91

Sex: Male
Birth Date: ~ 1981
Last Location: ASSAM (dead)
House Name:
Tattoo:
Tag/Band:

dam \ / sire /
 \ /
 \ /
91

Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 92

WILD

udbook Number: 92

Sex: Male
Birth Date: ~ 1981
Last Location: ASSAM (dead)
House Name:
Tattoo:
Tag/Band:
dam \ / sire
92

Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 93

WILD

Studbook Number: 93

WILD
Sex: Male
Birth Date: ~ 1981
Last Location: ASSAM (dead)
House Name:
Tattoo:
Tag/Band:
dam \\ / sire /
\\ /
93

Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 94

WED

Handbook Number: 94

WILD
Sex: Female
Birth Date: ~ 1981
Last Location: ASSAM (dead)
House Name:
Tattoo:
Tag/Band:
dam \ / sire
94

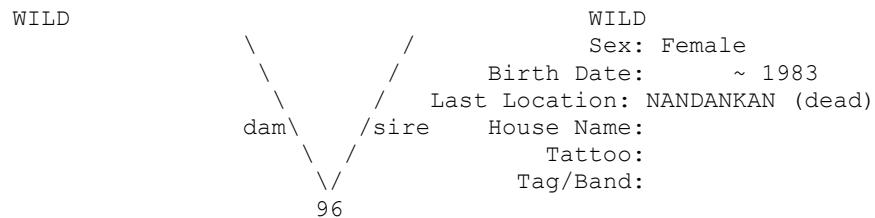
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Handbook Number: 05

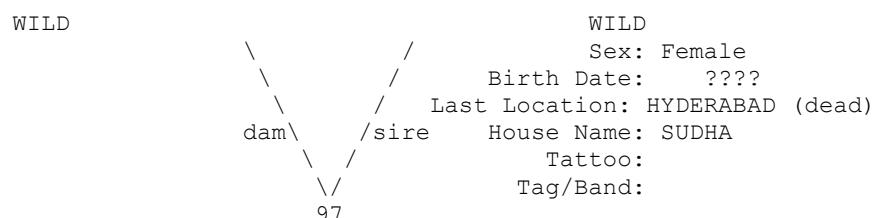
WILD
Sex: Female
Birth Date: ~ 1983
Last Location: NANDANKAN (dead)
House Name:
Tattoo:
Tag/Band:
dam \ / sire
25

NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

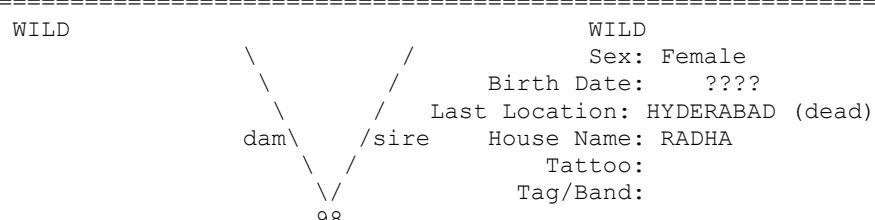
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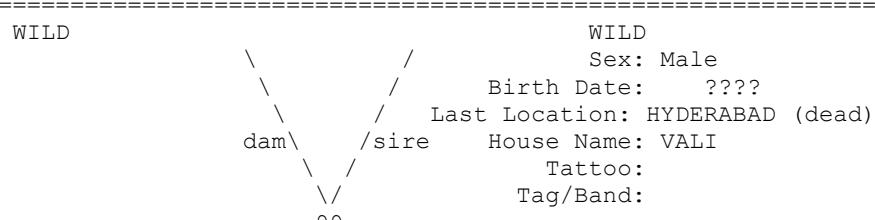
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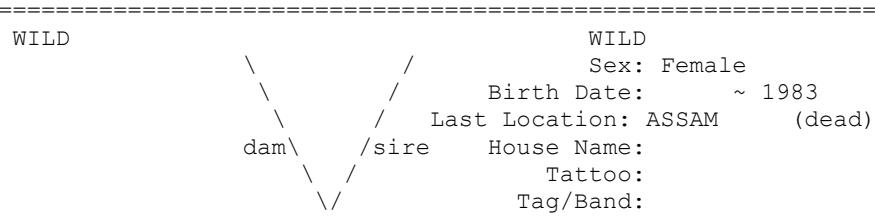
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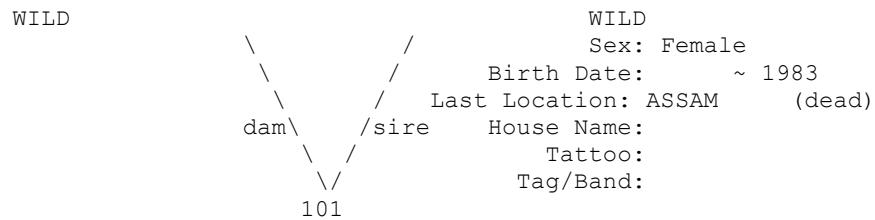


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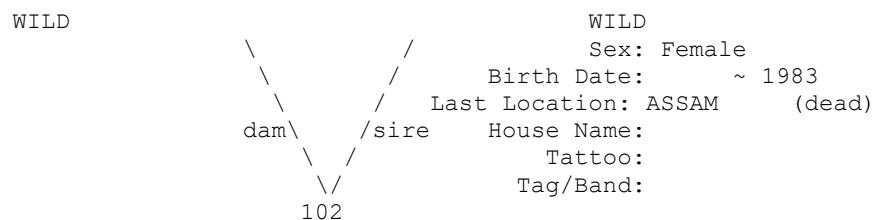


NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

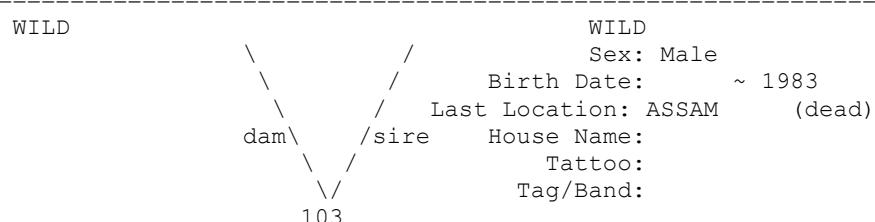
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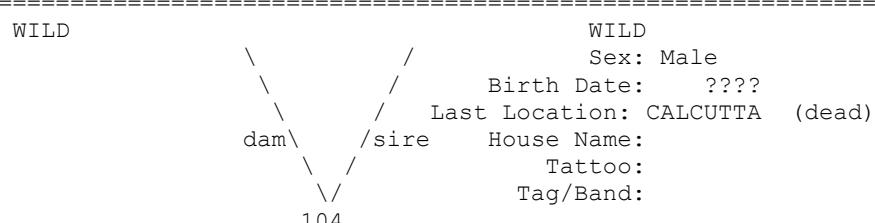
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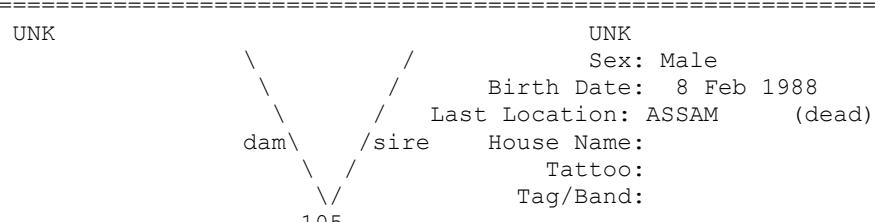
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 Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 104
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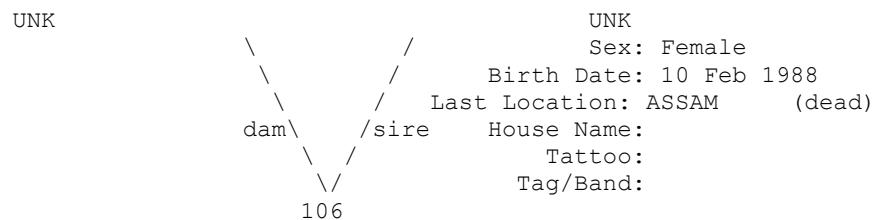


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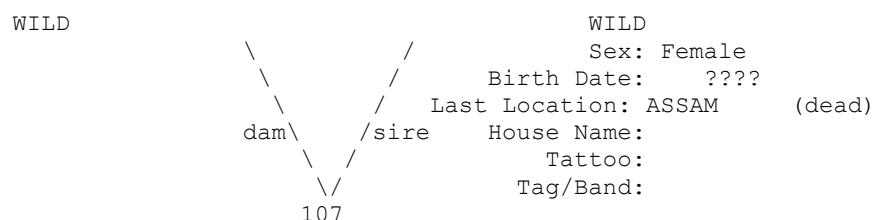


NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

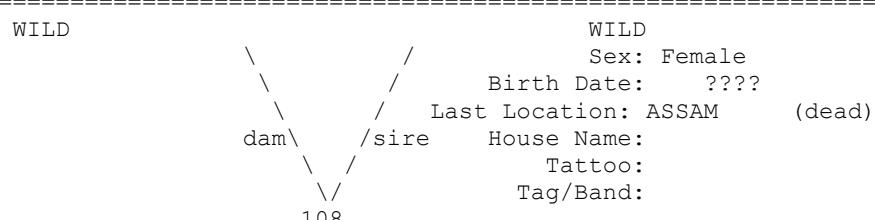
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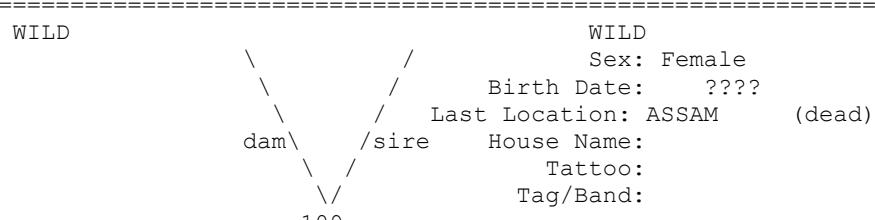
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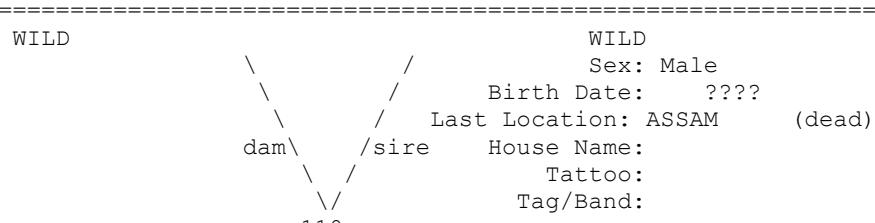
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 Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 109
 =====



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 Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 110
 =====



NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 111

WILD

SEARCH NUMBER: III

Sex: Male
Birth Date: ????
Last Location: ASSAM (dead)
House Name:
Tattoo:
Tag/Band:
dam \ / sire
111

Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 112

Taxon Name: TRACHYPITHECUS GEEI

Studbook Number: 112

WILD

WILL

Taxon Name: TRACHYPITHECUS GEEI

Studbook Number: 113

WILD

WILD

WILD
Sex: Female
Birth Date: ~ 1984
Last Location: ASSAM (dead)
House Name:
Tattoo:
Tag/Band:
dam \ / sire
113

Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 114

Taxon Name: TRACHYPITHECUS GEEI

Studbook Number: 114

WILD

WITT D

WILD
Sex: Male
Birth Date: ~ 1985
Last Location: ASSAM (dead)
House Name:
Tattoo:
Tag/Band:

dam \ / sire /

114

Taxon Name: TRACHYPITHECUS GEETI Studbook Number: 115

Taxon Name: TRACHYBITHUS GEETI

Studybook Number: 115

—

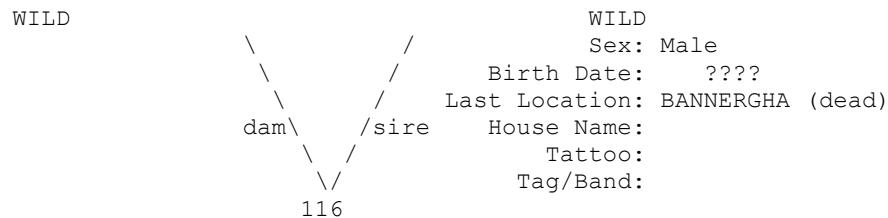
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WILD
Sex: Female
Birth Date: ~ 1985
Last Location: ASSAM (dead)
House Name:
Tattoo:
Tag/Band:

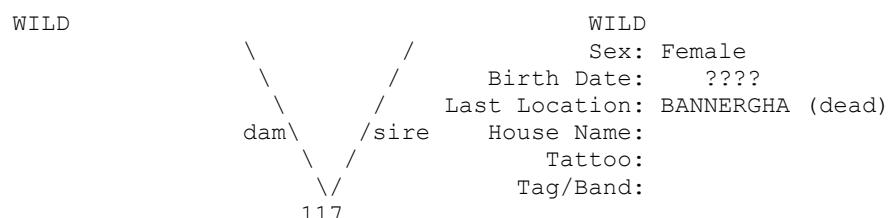
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dam \\ /sire \\ /

NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

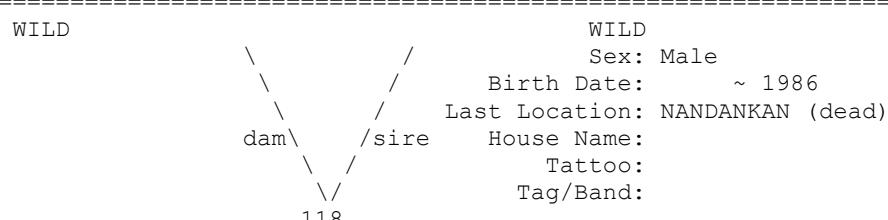
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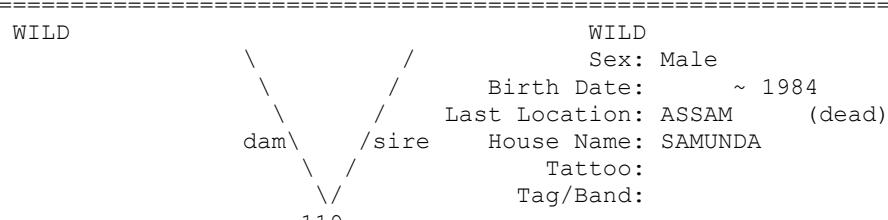
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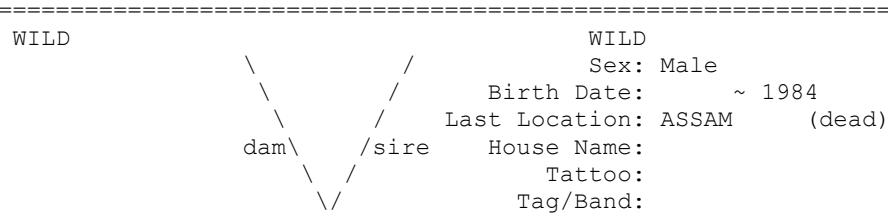
Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 118



Taxon Name: TRACHYPITHECUS GEEI Studbook Number: 119

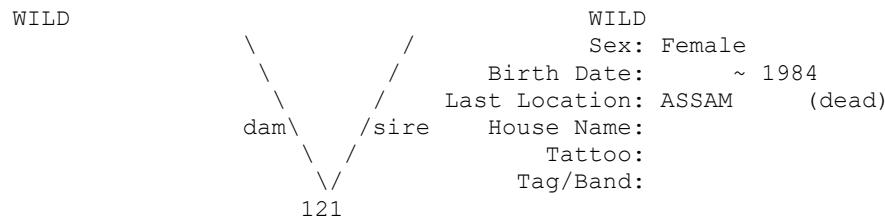


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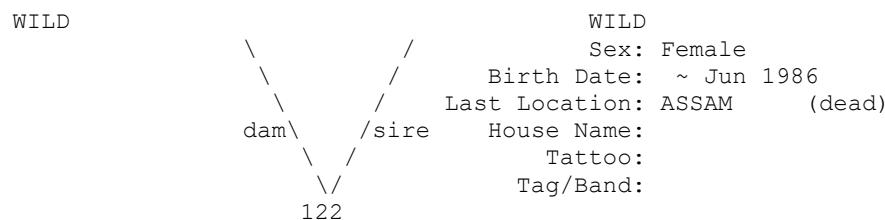


NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

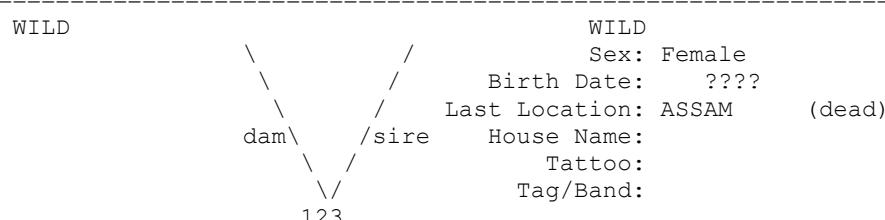
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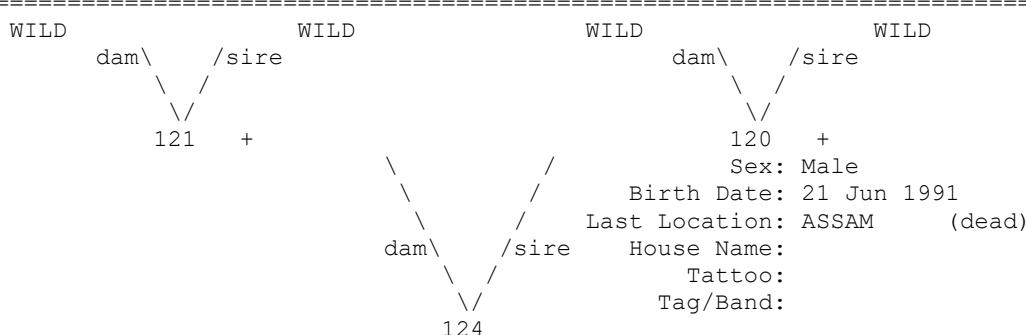
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 Taxon Name: *TRACHYPITHECUS GEEI* Studbook Number: 123
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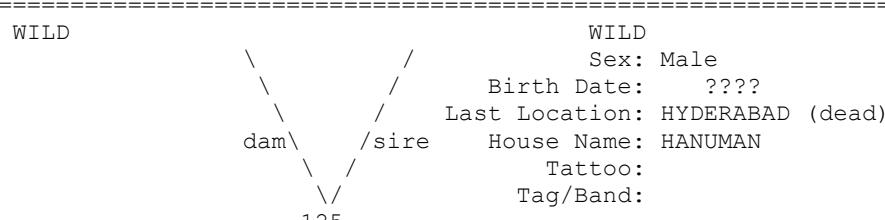


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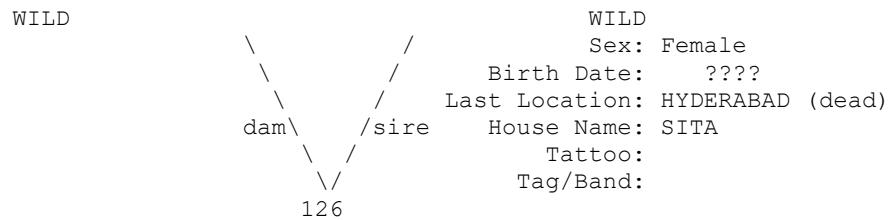
+ Wild-caught...

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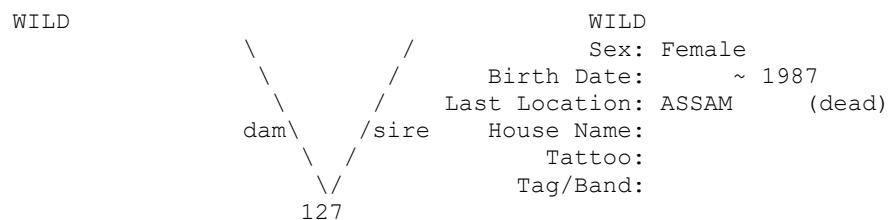


NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

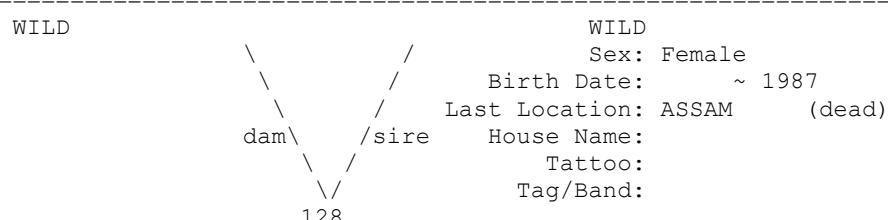
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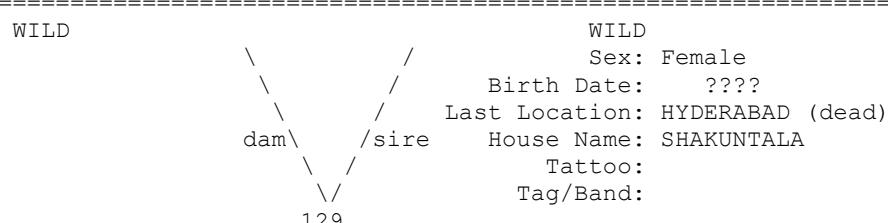
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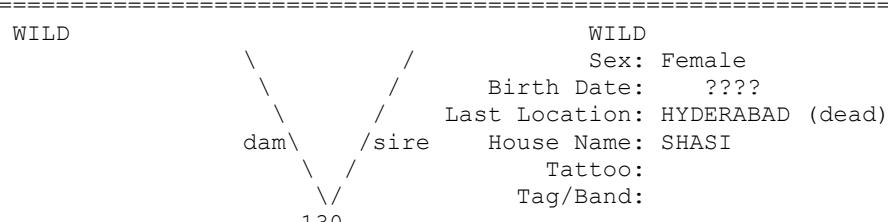
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 Taxon Name: *TRACHYPITHECUS GEEI* Studbook Number: 129
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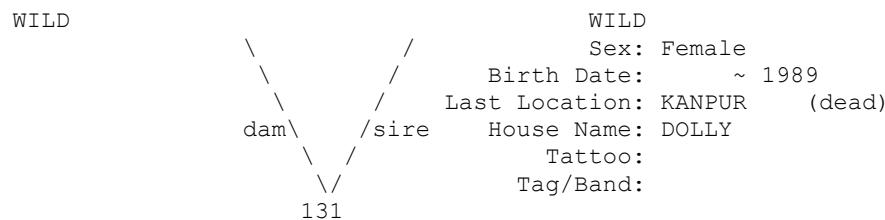


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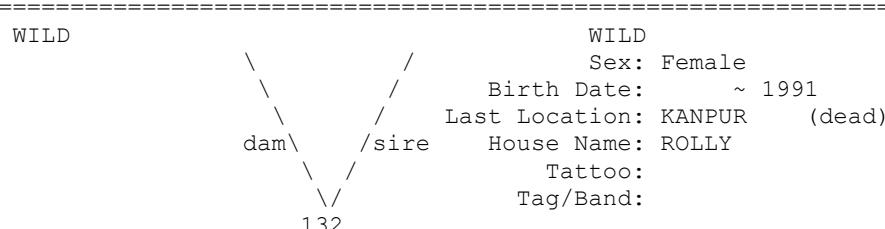


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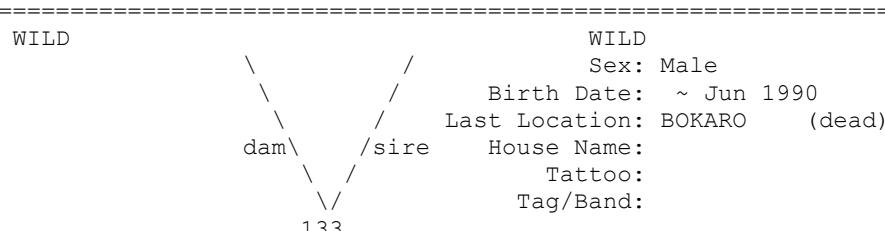
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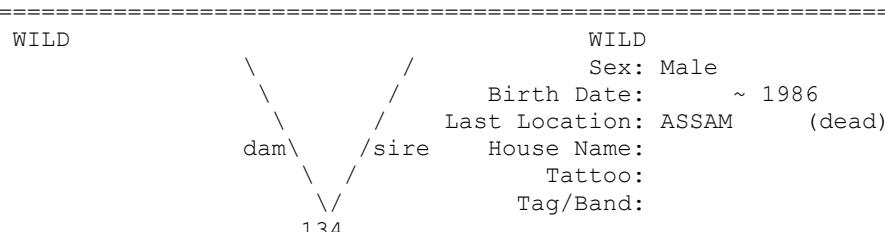
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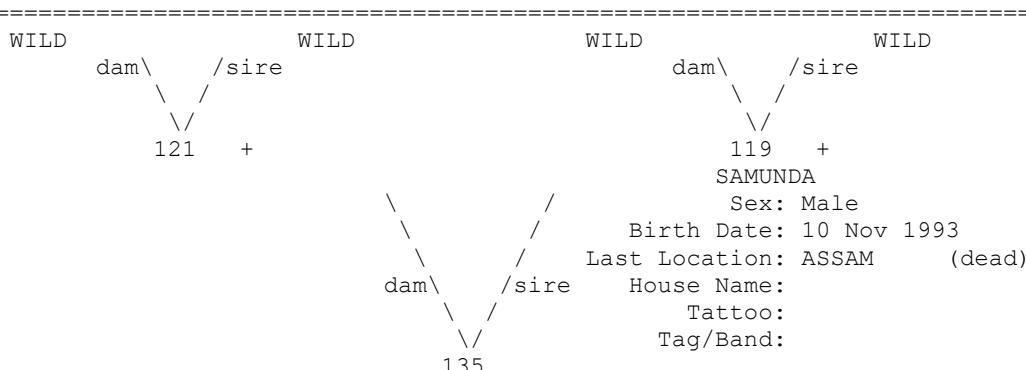
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 Taxon Name: *TRACHYPITHECUS GEEI* Studbook Number: 133
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 Taxon Name: *TRACHYPITHECUS GEEI* Studbook Number: 134
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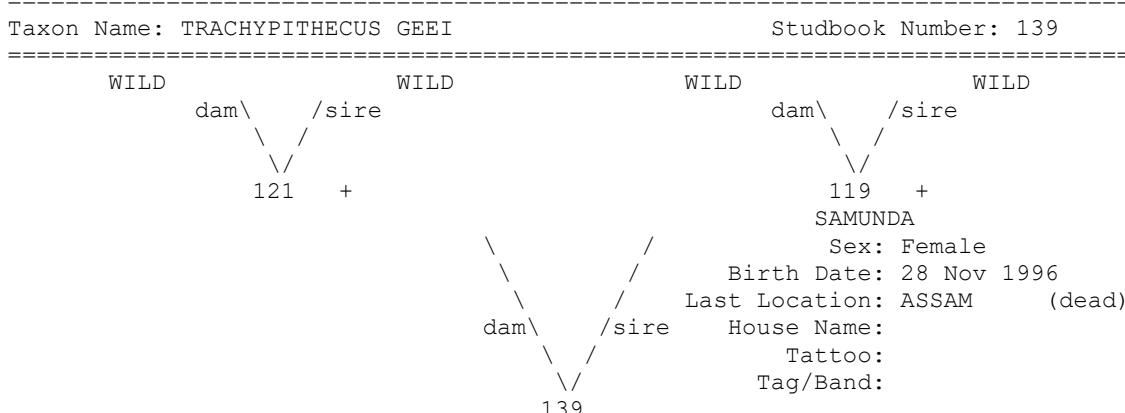
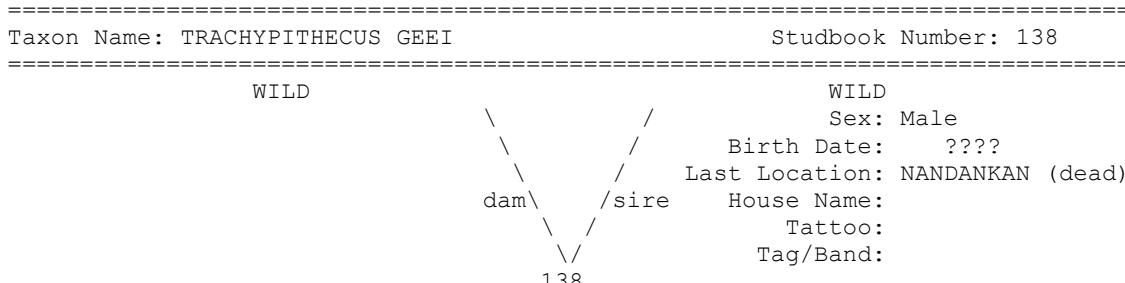
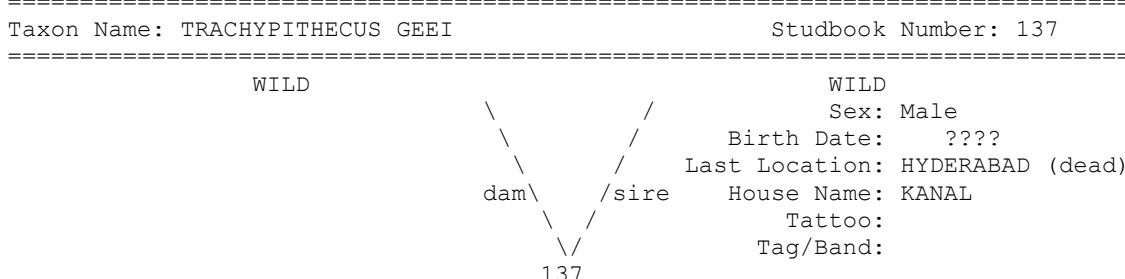
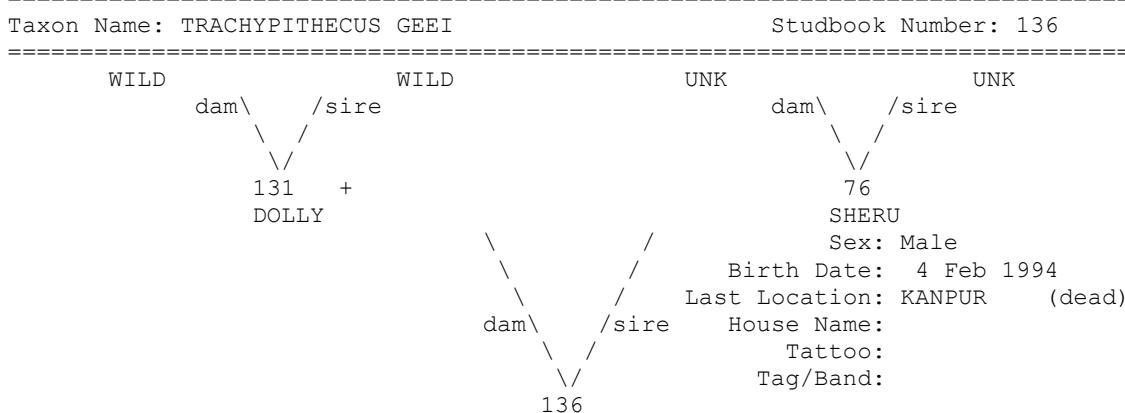


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 Taxon Name: *TRACHYPITHECUS GEEI* Studbook Number: 135
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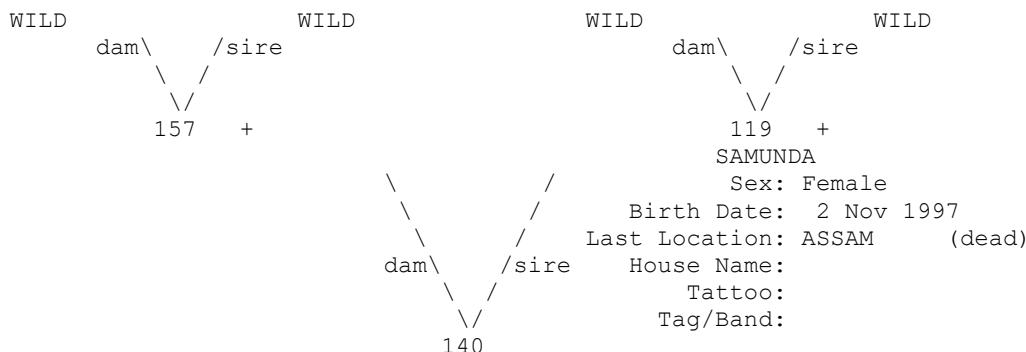
+ Wild-caught...

NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION



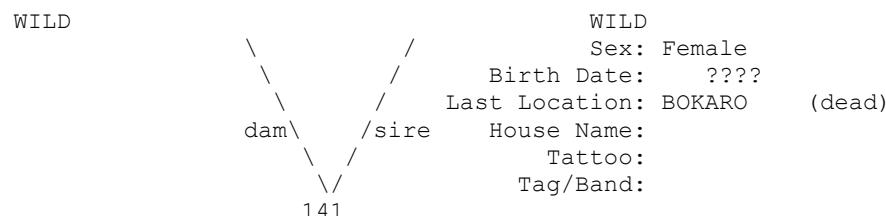
NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

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 Taxon Name: *TRACHYPITHECUS GEEI* Studbook Number: 140
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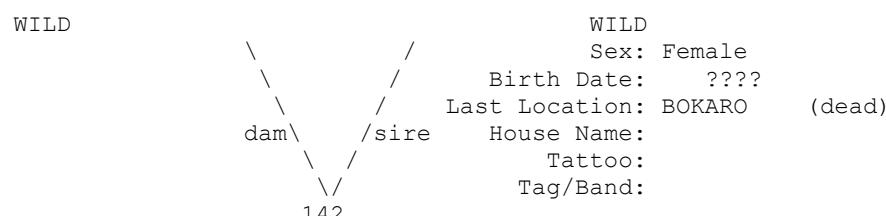


+ Wild-caught...

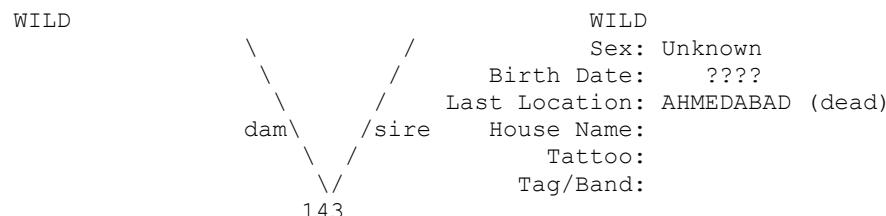
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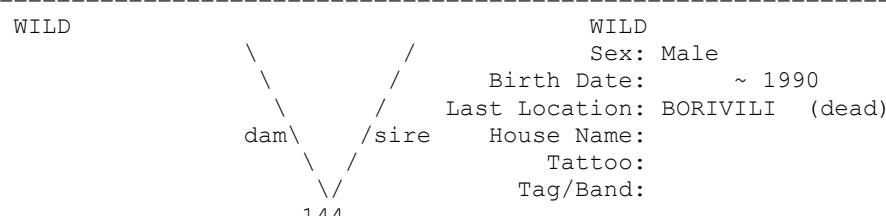
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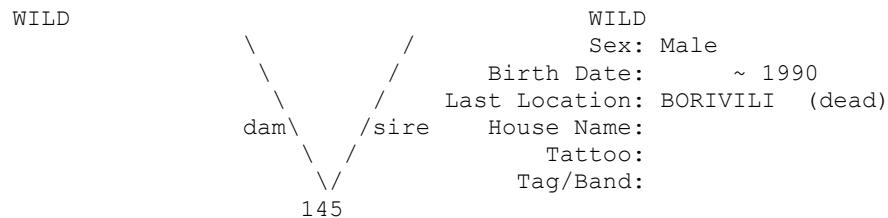
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NATIONAL STUDBOOK OF GOLDEN LANGUR (*TRACHYPITHECUS GEEI*) – III EDITION

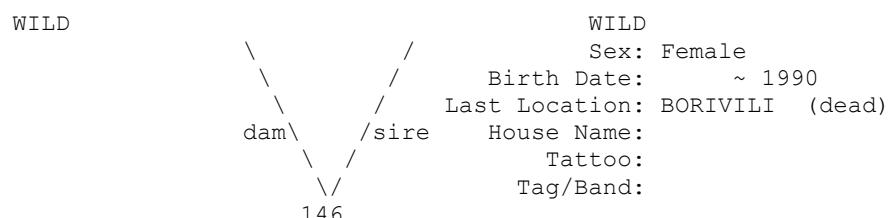
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Studbook Number: 145



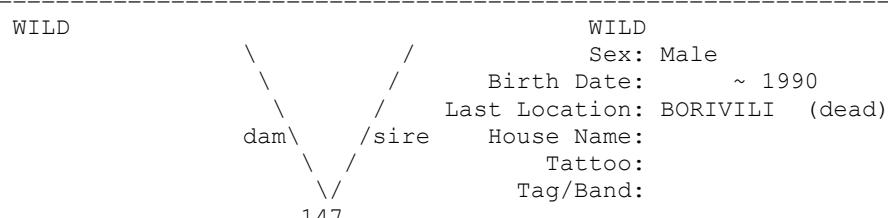
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Studbook Number: 146



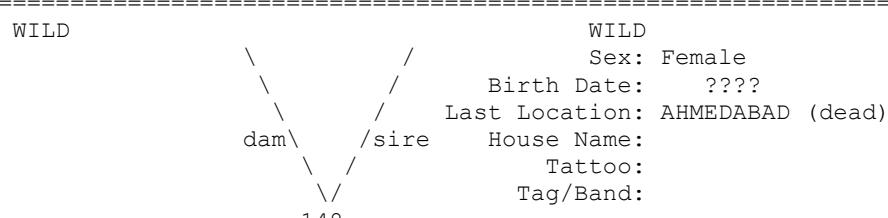
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Studbook Number: 147



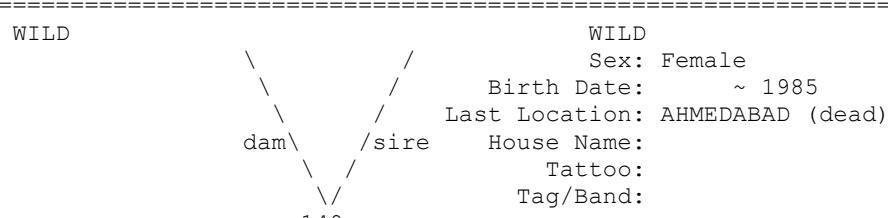
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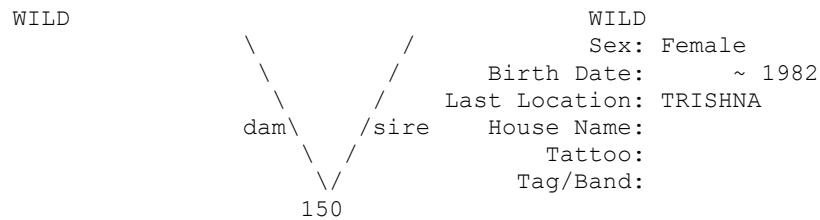
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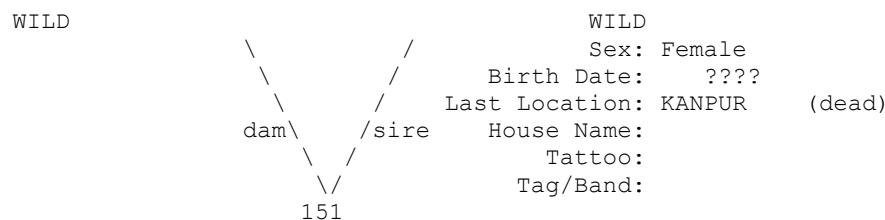


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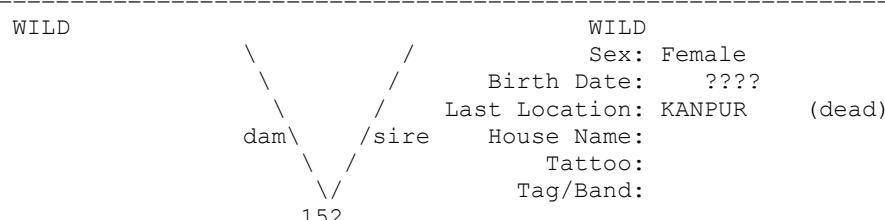
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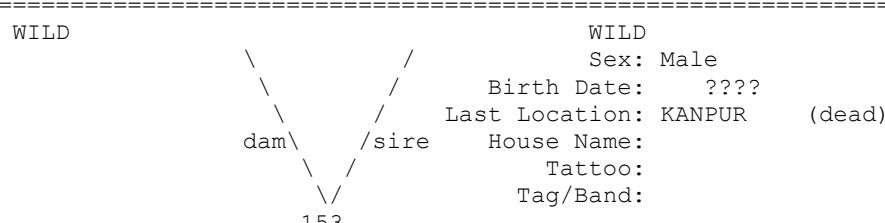
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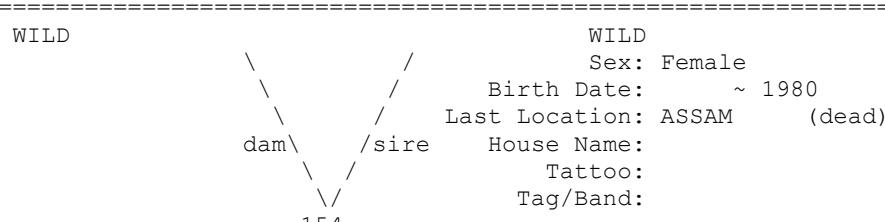
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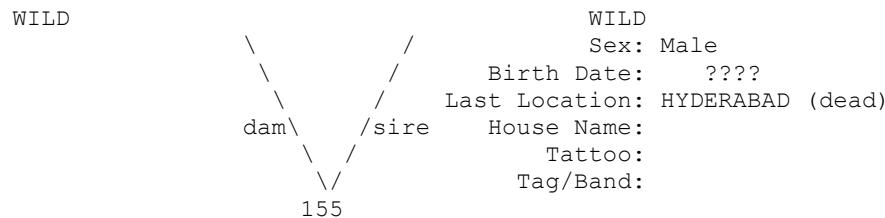


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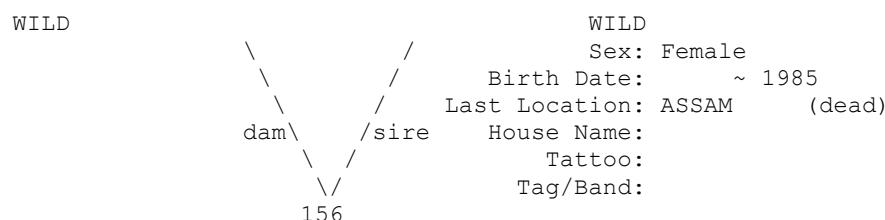


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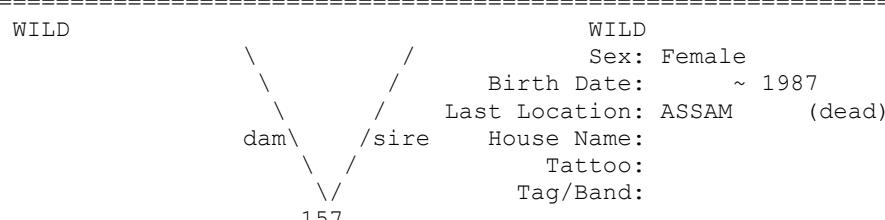
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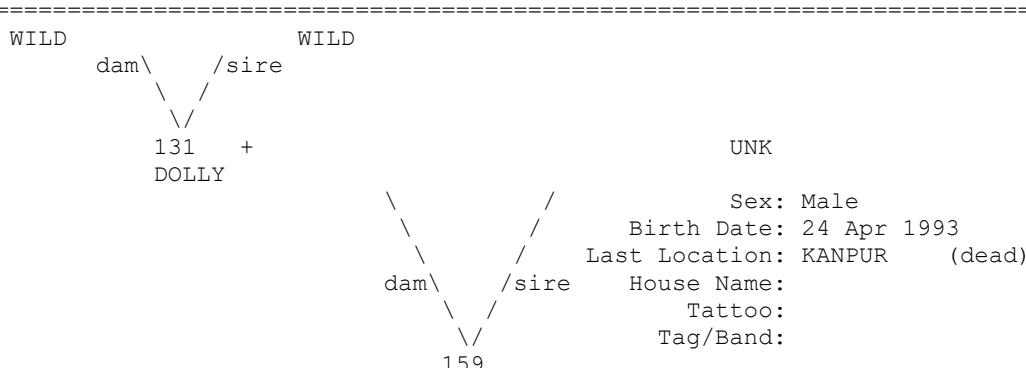
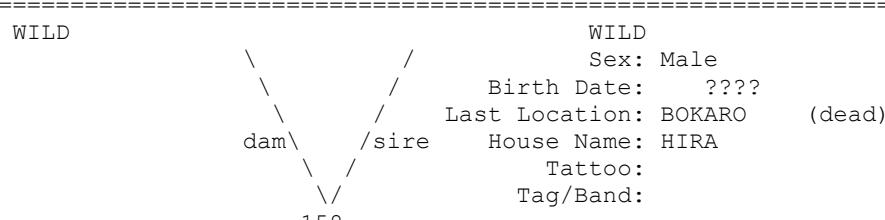
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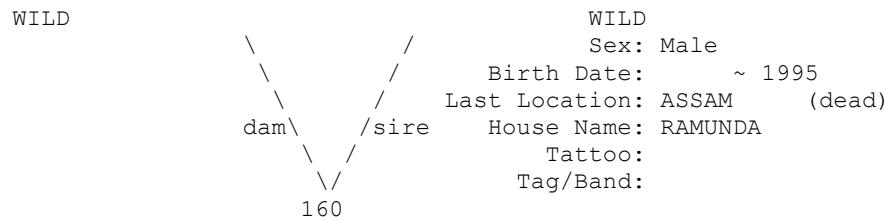
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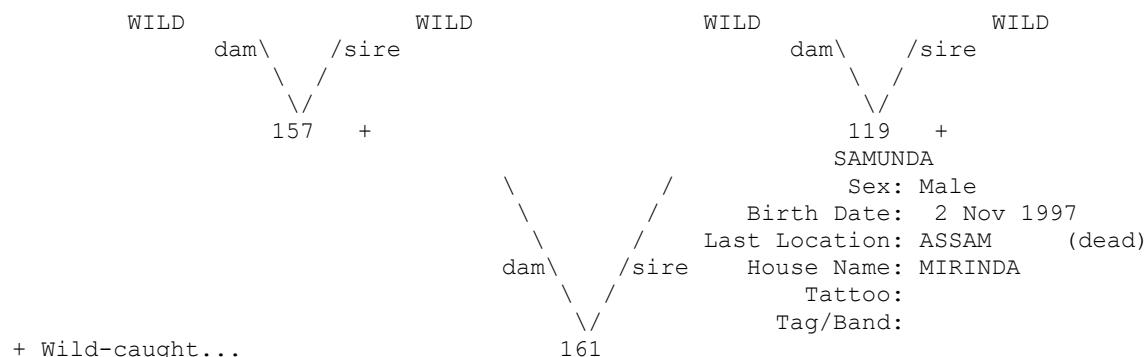
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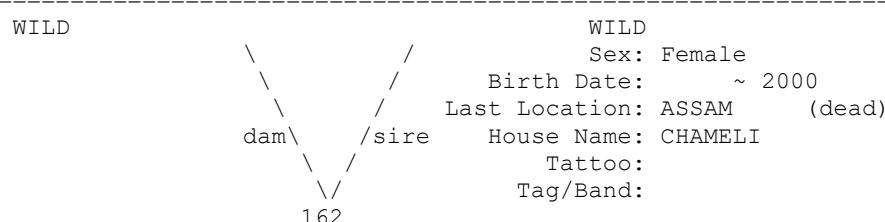
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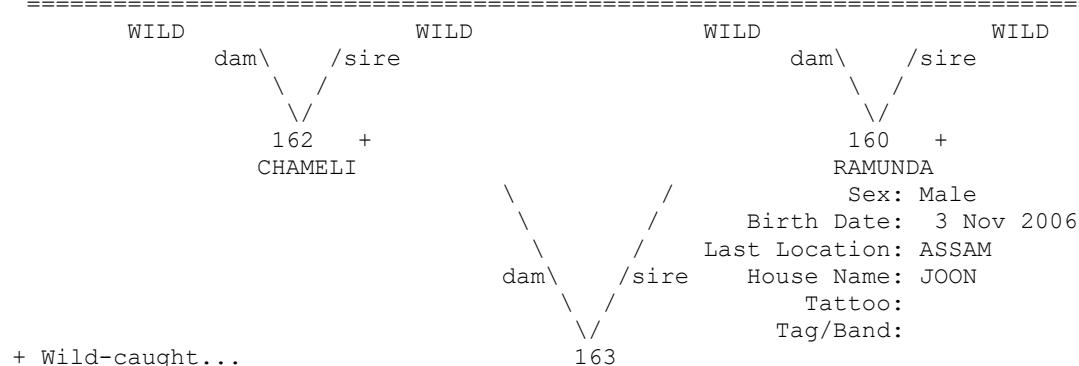
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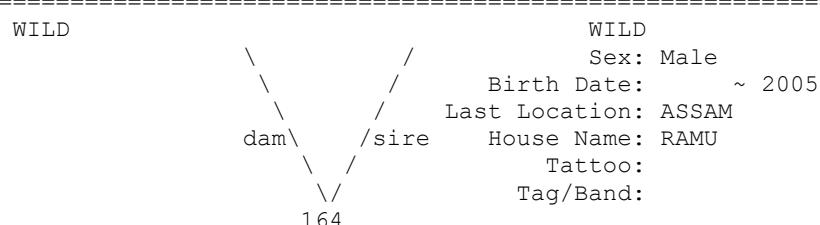
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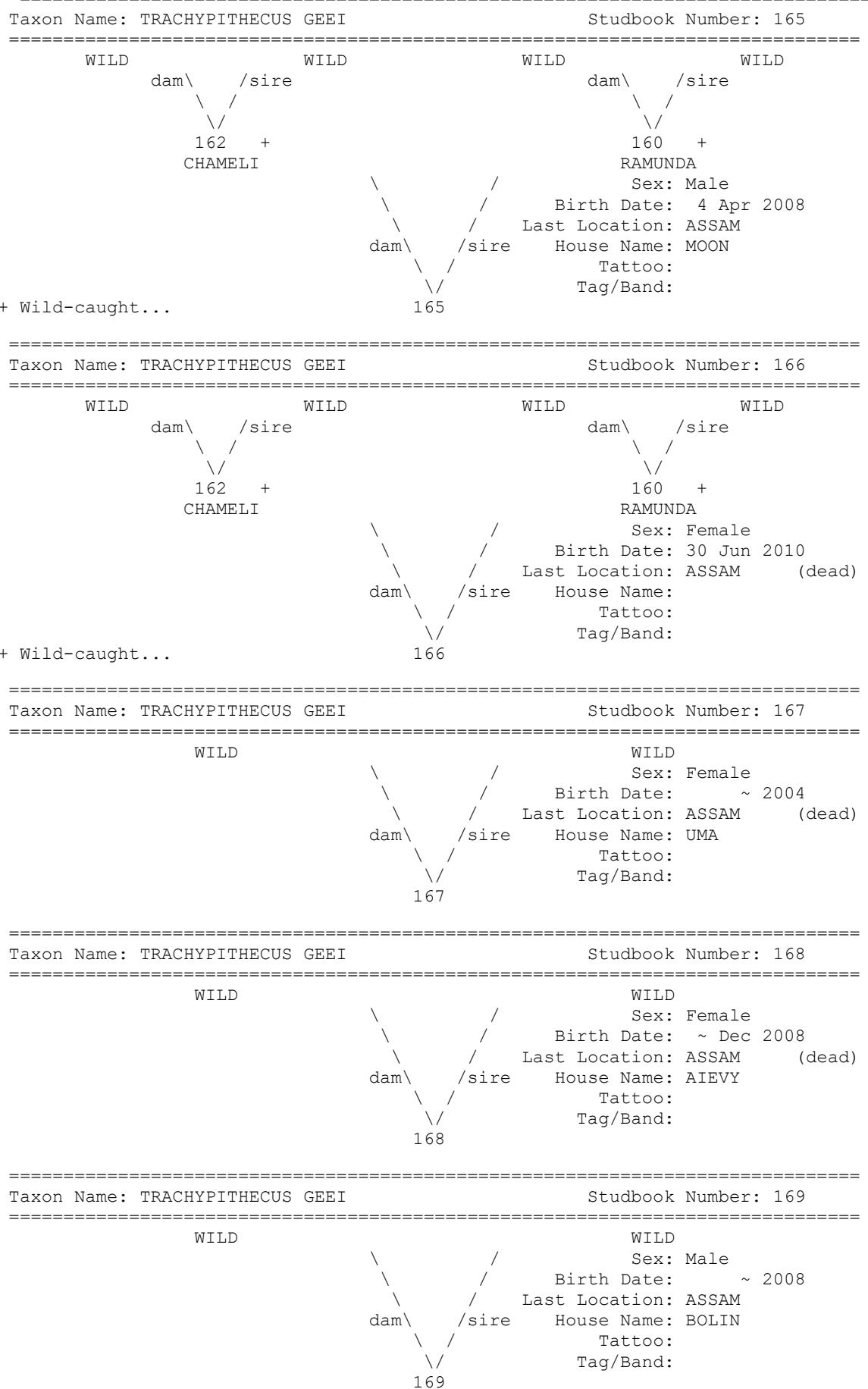
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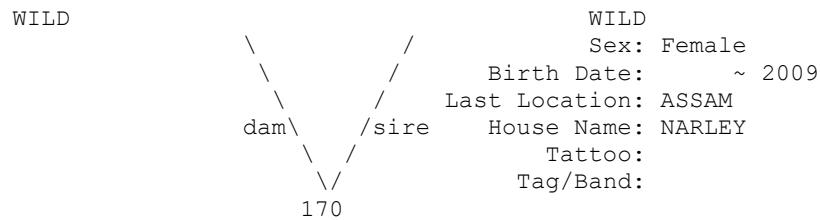
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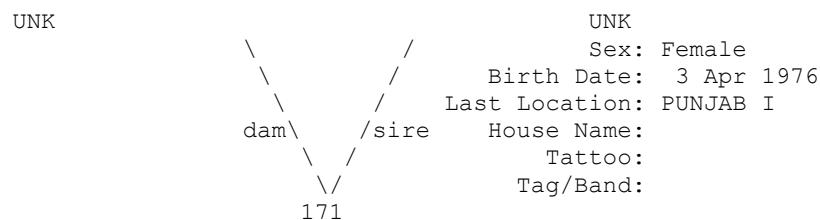
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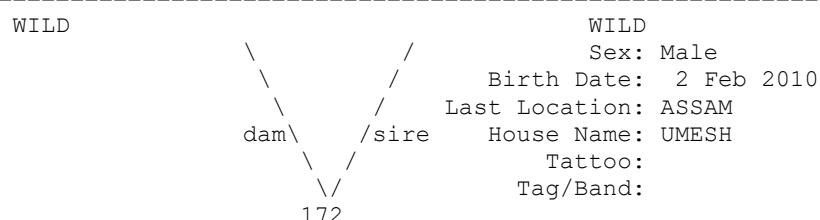
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