# NATIONAL STUDBOOK Cheer Pheasant (Catreus wallichii)

Published as a part of the Central Zoo Authority sponsored project titled "Development and Maintenance of Studbooks for Selected Endangered Species in Indian Zoos" awarded to the Wildlife Institute of India vide sanction order: Central Zoo Authority letter no. 9-2/2012-CZA(NA)/418 dated 7<sup>th</sup> March 2012]

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## **Foreword**

Wildlife species are facing increasing threats due to anthropogenic factors in their natural habitats. 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 'National Studbook of Cheer Pheasant (*Catreus wallichi*)'. 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.

(Dr. D.N. Singh, I.F.S.) Member Secretary Central Zoo Authority

# Acknowledgement

The National Studbook of Cheer Pheasant (*Catreus wallichii*) 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.

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The team sincerely acknowledges the support and help extended by holding zoos listed below towards facilitating the successful development of the studbook.

- 1. Blossom Phesantry, Chail
- 2. Himalayan Nature Park, Kufri
- 3. Khadiyun Cheer Pheasant Breeding Centre, Chail
- 4. Nehru Zoological Park, Hyderabad
- 5. Padmaja Naidu Himalayan Zoological Park, Darjeeling
- 6. Pandit Govind Ballabh Pant High Altitude Zoo, Nainital
- 7. Sarahan Phesantry, Sarahan

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Project team

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# **Species Biology**

# **Taxonomy**

Phylum - Chordata

Class- Aves

Family- Phasianidae

Subphylum- Vertebrata

Order- Galliformes

Subfamily- Phasianinae

Genus- Catreus (Cabanis, 1851) Species- Catreus wallichii (Hardwicke, 1827)

Cheer pheasant is unique among pheasants, being dull in colour and showing poor sexual dimorphism that is atypical for pheasants (Beebe, 1918-22, b; Delacour, 1977). Conventionally, the species was believed to be taxonomically isolated with varying degrees of affinities to *Syrmaticus*, *Phasianus*, *Lophura* and *Crossoptilon* (Delacour, 1977). While the plumage pattern is distinctive and similar to partridges, the species is close to eared pheasants in postures and vocalizations. The long, barred tail bears similarities to the northern pheasants (*Phasianus*) and long-tailed pheasants (*Syrmaticus*); though, the spiky crest resembles that of the Koklass (Johnsgard, 1986). Molecular studies suggest that *Catreus* share characteristics with almost every Phasianidae group, but cannot be categorised into a single group due to their unusual appearance and combination of morphological and behavioural traits. Consequently, the placement of *Catreus wallichii* within the pheasants and its relationship with other Phasianids is still unresolved (Bush and Strobeck, 2003).

# Morphology

It is a medium sized pheasant that does not exhibit the pronounced sexual dimorphism observed in other pheasant species (Johnsgard, 1986). They are characterised by long, narrow occipital crests, large red orbital skin patches with a plumage that ranges from grey to brown-yellow colour bearing black bars and

Table 1: Morphometrics details

Feature	Male	Female
Length	9.0 - 11.8 cm	6.1 - 7.6 cm
Wings	23.5 – 27.0 cm	22.5 – 24.5 cm
Tarsus	7.4 - 7.8 cm	6.0 - 6.3 cm
Tail	45.0 - 58.0 cm	32.0 – 47.0 cm
Weight	1475 - 1700 g	900 - 1360 g

(Source: Madge and McGowan, 2002)

spots. The wings are rounded with long retrices (tail feathers). The central pair of retrices may be upto five times the length of the outermost pair (Johnsgard, 1986).

Table 2: Features for sex identification

Feature	Male	Female
Crown	Dark brown coloured with a	Similar to males, but with ochre edged feathers
	paler edge and grey tips	
Nape	Similar to head with larger	Pale grey tending to white with black centres
	grey tips	
Orbital skin	Bright red	Dull red
Hackle and shoulder and	Barred ashy grey and black	Similar to males with a noticeable red-brown
lesser wing coverts	narrowly fringed with grey.	tinge
Tail	Longer, light grey with broad	Shorter than males, with mottled bars of reddish
	mottled black and dark grey	borwn and black with broader bars of black and
	bars	light grey
Spur	Prominent	Absent

[Source: Johnsgard (1986); Madge and McGowan (2002)]

#### Distribution

Known populations of the species are small (<10 birds) and isolated, inhabiting patches of suitable habitat (Gaston *et al.*, 1981). It is distributed throughout the southern foothills of the western Himalayas, occurring in northern Pakistan, India and central Nepal (Birdlife International, 2014). The western limits of its range in Pakistan are the mountains of eastern North-West Frontier Province; while the historical range extended to the



mountains of Kahaber-Pakhtoon-Khawa (Birdlife International, 2003). In Pakistan, it persists in the Jhelum valley (Islam and Crawford, 1986; Young *et al.*, 1987) whereas in India, it is now confined to Himachal Pradesh (Sharma and Pandey, 1989) and Uttarakhand. In Nepal, it appears to be localised, with few recent records that indicate a declining population (BirdLife International, 2014).

#### **Habitat**

The species inhabits a wide altitudinal range in the Western Himalayas, and is particularly associated with areas having steep slopes and scattered trees, especially where rocky cliffs and ravines are present. They usually prefer terrain with steep gradients that are characterised by a combination of low shrubs (below 1 m height, subject to regular browsing and cutting) and tall, dense grass during spring (Ali and Ripley, 1998; Kalsi, 1998; Roberts, 1991; Roberts, 1992; Gaston *et al.*, 1981; Garson *et al.*, 1992; Baral *et al.*, 1996).

The altitudinal range for the species varies from the subtropical pine forests to sub-alpine meadow zone at about 1200 m to 3000 m in Himachal Pradesh, (Gaston *et al.*, 1981) to as low as 600 m in Pakistan (Roberts, 1991). The species is relatively sedentary (Whistler, 1926; Roberts, 1991, Ali and Ripley, 1998), and shows little seasonal altitudinal movement (Johnsgard, 1986).

The species' preference for early successional habitats, created by traditional grass cutting and burning regimes, has led to its persistence in areas with human disturbance (Kaul, 1989; Garson *et al.*, 1992; Ramesh *et al.*, 1999). Although cheer pheasant can survive high levels of human disturbance, a recent study indicates that decreased levels of disturbance at a site increase its chances of occupancy (Jolli *et al.*, 2012). The specialised habitat preference and an increase in threats throughout its range have resulted in its patchy distribution (Hume and Marshall, 1878-1881; Kalsi, 1999).

#### Food and feeding ecology

Different authors present different accounts on their general diets and feeding habits. Beebe, (1918-22) noted the abundance of small leaves in their diet, along with grubs, larvae and tubers obtained from digging. The possession of a strong down-curved upper mandible is indicative of their strong digging abilities. Ali and Ripley, (1998) suggested that roots and tubers dug out of the ground, seeds, berries and grain, formed the main food of this pheasant. Wayre, (1969) regarded roots as an important food item of Cheer in addition to insects and grubs while Delacour, (1977) opined grubs as an important food source for the species. Lelliott, (1981) from diet analysis regarded mosses as important part of the diet while Kaul, (1989) observed a completely herbivorous diet for the species, with *Rumex* bulbs and *Poa annua* grass forming the majority of the diet. These studies account for the diversity of food consumed that varies seasonally and location-wise. The principal components of their diet thus include vegetative matter, along with tubers and grubs.

The main feeding activity comprises of digging and pecking on the ground, while browsing from taller ground vegetation and scrub is done infrequently. Cheer pheasants forage in open grassy habitats, frequently digging for roots and tubers (Madge and McGowan, 2002). They generally feed during mornings and evenings (Hume and Marshall, 1878-81; Beebe, 1918-22) with most of the feeding recorded during early morning hours between 0500 to 1000 hours (Kaul, 1989). The feeding activity during both these times takes place in sparsely vegetated areas with grass cover. Faecal analysis results also indicate the presence of food items found in areas with grass cover or low density scrub (Kaul, 1989).

#### **Behaviour and Social Organization**

Information pertaining to the behaviour of Cheer pheasant is limited due to its extremely shy and skulking behaviour, typical activity peaks during early morning and evening hours (Johnsgard, 1986, Kaul, 1989, Madge and McGowan, 2002). The birds are known to forage primarily either in pairs or in family groups and rarely alone. Foraging is similar to that observed for Himalyan Monal with birds digging up pits of upto 30 cm while maintaining a continuous vigil (Beebe, 1918 – 1922).

The preferred roosting sites are banches of trees, except during the time of incubation when the females roost on nest. On being disturbed, they prefer to crouch or run upslope rather than fly away. On being flushed, they rapidly 'rocket' downhill, with a noisy, agile flight that can involve near-closed wings with rapid twisting between trees (Madge and McGowan, 2002).

The species is monogamous and live in pairs or family groups and parties of 5 -15 birds (Beebe, 1918-22; Ali and Ripley, 1998). The social organization of Cheer pheasants varies seasonsonally. During the breeding season (late April – early June), the birds remain in pairs (Gaston and Singh, 1980), forming family groups that include the adult pair and chicks. With the onset of winter these family units combine with others to form larger flocks to counter the difficulties caused by lack of vegetal cover and the birds being more conspicuous on snow making them more prone to predation. Individual birds thus get more

time to feed to meet the increased food intake demands by lower food availability and increased BMR during winter (Kaul, 1989).

Vocalizations (chorus calls) are pronounced at the end of peak activity periods. The Cheer pheasant exhibit a very complex but distinctive set of far-carrying calls (Jerdon, 1864) that function to announce an individual's presence in a particular area (Kaul, 1989). These include five types of distinct calls: the principal call, *chir-a-pir chir, chir chirwa*, *chirwa*; contact and chorus calls (dusk and pre-dawn), which include high piercing whistles, *chewewoo*, interspersed with short cut calls and short staccato harsh notes (Kaul, 1989; Sathyakumar and Kaul, 2007). Most of the calling occurs in the pre-breeding season (March - May). Males are usually more vocal than the females, performing the primary territory defence function with the females playing secondary roles with calling declining with the end of post-reproductive season, post- monsoon (Kaul, 1989).

#### Reproduction

They have a monogamous mating system and are usually found in pairs during the pre-breeding and breeding seasons. They breed at altitudes between 1,200 m and 2,450 m and the breeding season extends from late April to early June (Hume and Marshall, 1878-81; Blanford 1898; Delacour, 1977; Ali and Ripley, 1998). Males of the species court females by courtship feeding and tidbitting and unlike other pheasants do not perform elaborate courtship displays. Male birds perform this display by holding or digging out a food item and give out a special call to attract female nearby to approach and take the food (Stokes and Williams, 1972).

Territories are defended by breeding units (pairs or trios consisting of the adult pair and a related sub-adult male from the previous breeding season) with adult males playing a dominant role in territory defence. Territory defence behaviours include vocal retaliation, displays, flights and fights. During the pre-breeding season, the males are more vigilant than the females, allowing the females more time to feed in order to build up the necessary reserves for egg laying and also guarding the females from other unmated males or predators (Kaul, 1989).

Nests are located as shallow depressions in the ground, usually under large boulders and sheltered either by thick shrubs or tall grass. Average clutch size is 9-10 eggs (although clutches of 15-25 eggs have also been reported) and the incubation period is about 26 days (Ali and Ripley, 1998). The eggs are incubated by the female alone and during this period, with the male rejoining the covey after hatcing of eggs. The parents protect the new brood through the harsh winter with the young dispersing at the onset of the next breeding season.

**Table 3**: Reproductive attributes of Cheer Pheasant

Call	chir-a-pir, chir-a-pir, chir, chir, chirwa
Age at sexual maturity	3 year (Ramesh, K. Personal communication)
Mating System	Monogamous
Breeding Season	Late April- June
Nest Site/ Type	Nest, a hollow or pit in the ground in undergrowth; below the shelter of a rock or cliff,

Clutch Size	9-10
Eggs	Pale yellowish-grey with reddish-brown speckles (Madge and McGowan 2002)
Incubation Period	26 days
Parental care	Incubation is done by female alone, males remain close by and attend to chicks after hatching (Ali and Ripley 1998)

Source: Johnsgard, (1986); Madge and McGowan, (2002); Ali and Ripley, (1998)

#### **Threats and Conservation Status**

The major threats identified for this species include its distribution in small isolated populations, hunting and egg collection, habitat degradation, and disturbance from the collection of non-timber forest products (BirdLife International, 2014). The species is included in Schedule I of the Wildlife (Protection) Act of India, 1972, categorized as Vulnerable on the IUCN Red List and is listed on Appendix I of CITES.

# **Status in Captivity**

The global captive population recorded in ZIMS consists of 67 individuals (22.21.24) distributed among 3 institutions in Asia and 17 institutions of Europe (data current as on 21 May 2016). The ZIMS database does not include specimens' froms several holding institutions in India with approximately 78 additional individuals. Himachal Pradesh recognizing the need for its *ex-situ* conservation has initiated an *ex-situ* conservation programme aimed at maintaining an insurance population in captivity. The captive population in Indian institutions includes 101 individuals housed at four facilities.

 Table 4: Status of Cheer pheasant in Indian zoos

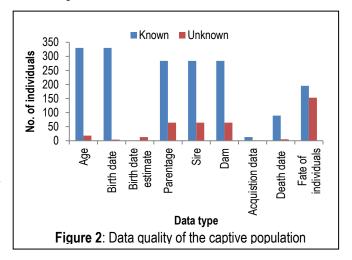
Location	Total no. of individuals (M.F.U)	Living Individuals (M.F.U)	Time span in captivity (years)	Hatches (M.F.U)	Deaths (M.F.U)
Blossom P	2.2.0	0.0.0	2007-10 4	1.1.0	0.0.0
Darjeeling	3.3.0	2.2.0	2011-16 6	0.0.0	1.1.0
Hyderabad	1.1.0	0.0.0	1990-97 8	0.0.0	1.1.0
Khadiyun	54.65.175	28.30.5	2001-16 16	46.57.175	5.5.69
Kufri	15.29.2	7.20.2	2000-16 17	15.29.2	4.4.0
Nainital	4.4.0	3.2.0	2009-16 8	2.2.0	0.1.0
Sarahan	1.1.0	0.0.0	2010-13 4	1.1.0	1.1.0
Tutikandi	1.1.0	0.0.0	1990 1	1.1.0	0.0.0

## **Re-introduction Efforts**

A re-introduction project was initiated by World Pheasant Association in 1978 to re-establish the species in the Margalla Hills National Park in Pakistan. Eggs of captive-bred cheer pheasants from Europe were incubated and hatched in Pakistan and released in the Margalla Hills National Park. The project had limited success due to the poor survival and reproductive success; indicating that the behavioural quality of the released birds was not appropriate (Garson *et al.*, 1992). The mass rearing of chicks in the absence of adult birds produced poults that roosted on the ground at night making them prone to predation (Severinghaus *et al.*, 1979; Garson *et al.*, 1992).

# Scope of the Studbook and Data Quality

A historical population of 348 individuals with the first bird recorded in the year 1990 is documented in the Studbook. The studbook is current through March 2016, based on data made available by the holding zoos. The quality of data available with reference to the analysis carried out is summarized in Figure 2. The studbook records 332 hatches in captivity; of these 61% could be traced back to founder birds. The remaining 39% were of uncertain



lineages. Birth dates were known for 330 captive-born individuals while estimated birth date was known for 1 wild-born bird. Dates of acquisition were available for 13 wild-born individuals, while death dates were available for 89 out of the 94 mortalities. In addition to these, fate of the individual pheasants was not known for 153 out of the 348 recorded entries rendering them as specimens of unknown age.

# **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 Cheer pheasants 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.

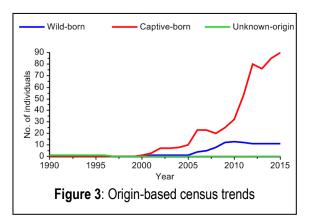
# **Analysis**

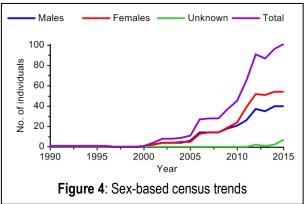
# **Demographic Analysis**

# **Historical population**

## **Census trends**

The first recorded entry of the species in captivity was of a female in 1990. The historical population since 1990 consists of 348 birds (73.98.177) that includes two (1.1.0) unknown-origin, 14 (7.7.0) wild-born and 332 (65.90.177) captive-born individuals. Figure 3 represents the origin-based census trend over the years, showing a gradual increase in captive-born individuals after 2000 with the population comprising mainly of captive origin birds after 2010. The sex-based census trend for the population (Figure 4) indicates a female skew after 2010. The historical population is summarized in table 5 and detailed information pertaining to events for each specimen is presented in Appendix I. The pedigree records of the individuals in captivity are presented as Appendix III.





**Table 5:** Summary of the historical population

	Males	Females	Unknown	Total
Total studbook size	73	98	177	348
Total number of acquisitions from wild	7	7	0	14
Total number of hatches	65	90	177	332
Total number of unknown-origin individuals	1	1	0	2
Total number of deaths	12	13	69	94
Total number of lost to follow up (Ltf)	21	31	101	153
Total number of breeding individuals	12	11		23
Wild-born that have bred	6	7		13
Captive-born that have bred	6	4		10

#### Living population

As on May 2016, the captive population consists of 101 individuals (40.54.7) housed at four institutions. It comprises of 11 (5.6.0) wild-born and 90 captive-born individuals (35.48.7). The details of the living population are summarized in table 6 and the details of living individuals are listed in Appendix II.

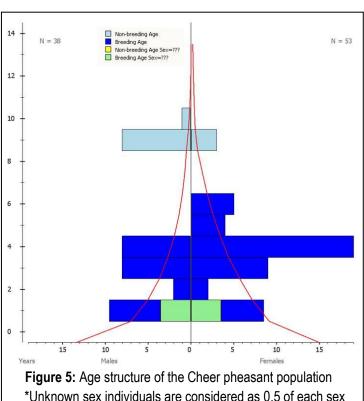
**Table 6:** Summary of the living population

	Males	Females	Unknown	Total
Total no. of living individuals	40	54	7	101*
Total number of wild-born individuals	5	6	0	11
Total number of captive-born individuals	35	48	7	90
Total number of breeding individuals	10	9	0	19
Wild-born that have bred	5	6	0	11
Captive-born that have bred	5	3	0	8

<sup>\*</sup> Three known age individuals excluded from analysis are also included here

#### Age structure

The age structure of the current population is indicated in Figure 5. The age structure is representative of the 98 captive-born known age (38.53.7) individuals. Overall, the age-structure depicts a relatively young population with a bias towards females. The population includes 73 individuals in the reproductively active age-classes and 17 individuals in the post reproductive age classes. Although the age structure reflects a young, increasing population (r = 0.247; Table 7) most of the individuals in the reproductive age are yet to breed (n=68). A total of 19 individuals that have bred in the past, include 11 wild-



\*Unknown sex individuals are considered as 0.5 of each sex

born specimens of unknown age while; of the known age individuals three are senescent and only five are in the reproductive age-class. The steps towards future management should involve establishment of new pairs through pairing recommendations indicated in the Studbook.

## Population growth rates

An analysis of vital rates of the population was carried out after exclusion of all unknown age specimens in the population; thus, limiting its accuracy due to the much reduced sample size. The values of

Table 7: Life-table summary \*

	Male	Female	Total
Population growth rate (λ)	1.342	1.246	1.293
Mean generation time (T)	2.4	2.4	2.4

population growth rate, mean generation time (table 7) are only indicative in nature. Population projections based on life table analyses are also excluded from the analyses reported here for the same reason.

# **Genetic Analysis**

living captive population includes Table 8: Genetic summary contributions by 12 wild founders (11 living). Table 8 summarizes the current genetic status of the population. The population retains approximately 92% of the source population's genetic diversity and does not record inbreeding (F=0). It has an average mean

	Current	Potential
Founders	12	0
Gene Diversity	0.9176	0.9575
% Known	61%	
Founder Genome Equivalents	6.07	11.75
Population Mean Kinship	0.0824	
Mean Inbreeding	0.000	

kinship of 0.0824 with individual mean kinships ranging from 0.0 (unrelated) to 0.1202 (related at the level of first cousins). An analysis of the founder statistics of the population shows that founder contribution to the current population is not equal. Three founder pairs (00016 x 00033; 00017 x 00038; 00015 x 00036) have contributed to majority of the descendants in the living population (26, 24 and 11 respectively), in contrast to the remaining founders that contributed 1 to 3 descendants in the extant population. The founder genome equivalents equal 6.07, indicating that the population resembles one with only six fully represented founders, even though 14 were originally present. An equalization of founder representations among the underrepresented founders can further increase the gene diversity to approximately 96%, and founder genome equivalents could potentially reach 11.75. With appropriate management interventions, including pairing among genetically valuable individuals and recruitment of additional founders, the population could form a reasonable basis for a long-term managed population.

# **Breeding Recommendations**

Propagation of species included in conservation breeding programs are managed to maintain at least 90% of the genetic diversity found in the corresponding wild populations. Genetic management strategies used in conservation breeding programs, therefore, include prioritizing breeding of unrelated individuals. The selection of breeding pairs for the retention of optimal genetic diversity is based on "Mate Suitability Indices" the detailed account of which are presented in Box 1. Based on the mate suitability index (MSI) scores for each individual pair, breeding recommendations for maintaining genetic diversity in the Cheer pheasant population have been provided in Table 9. Selective breeding of individuals based on these recommendations and periodical introduction of new founders will ensure the maintenance of desired level of genetic diversity.

**Table 9:** Pairing options for the captive Cheer pheasant population

Dams	Possible Sire	MSI
00004	00035, 00037, 00152, 00219, 00223	1
	00036, 00217, 00276, 00312, 00315, 00316	2
	00138	3
00015	00036	1
	00035, 00219	2
	00033, 00037, 00038, 00123, 00128, 00130, 00152, 00212, 00214, 00216, 00222, 00223,	3
	00272, 00318	
00016	00036, 00138, 00217, 00276, 00312, 00315, 00316	3
	00036, 00138, 00217, 00276, 00312, 00315, 00316	3
00032	00035, 00037, 00152, 00223	1
	00036, 00138, 00217, 00276, 00312, 00315, 00316	3
00034	00035, 00037, 00219	1
	00036	2
	00138, 00217, 00276, 00312, 00315, 00316	3
00125	, , , , , , ,	3
00131	00036, 00138, 00217, 00276, 00312, 00315, 00316	3
	00036, 00138, 00217, 00276, 00312, 00315, 00316	3
	00036, 00138, 00217, 00276, 00312, 00315, 00316	3
00147	00038, 00138, 00217, 00276, 00312, 00315, 00316	2
	00036, 00128, 00130, 00216, 00222, 00318	3
00148	00038, 00138, 00217, 00276, 00312, 00315, 00316	2
	00036, 00128, 00130, 00216, 00222, 00318	3
00210		3
	00036, 00138, 00217, 00276, 00312, 00315, 00316	3
	00036, 00138, 00217, 00276, 00312, 00315, 00316	3
00218		1
	00036	2
	00138, 00217, 00276, 00312, 00315, 00316	3
	00036, 00138, 00217, 00276, 00312, 00315, 00316	3
00221	00033, 00035, 00037, 00038, 00123, 00124, 00128, 00130, 00152, 00212, 00214, 00216,	3
	00219, 00222, 00223, 00272, 00318	
00224	00035, 00037, 00152, 00219, 00223	1
	00038	3
00273	00035, 00152, 00223	1
<u>.                                    </u>	00036	2

Dams	Possible Sire	MSI
	00138, 00217, 00276, 00312, 00315, 00316	3
00275	00033, 00035, 00037, 00038, 00123, 00124, 00128, 00130, 00152, 00212, 00214, 00216,	3
	00219, 00222, 00223, 00272, 00318	
00313	00033, 00035, 00037, 00038, 00123, 00124, 00128, 00130, 00152, 00212, 00214, 00216,	3
	00219, 00222, 00223, 00272, 00318	
00314	00033, 00035, 00037, 00038, 00123, 00124, 00128, 00130, 00152, 00212, 00214, 00216,	3
	00219, 00222, 00223, 00272, 00318	

#### Mate Suitability Index (MSI)

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

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

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

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

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

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

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

#### **Using Pairwise Info**

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

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

# **Targets for population management**

The establishment of goals for the management of the captive population to ensure its demographic stability and genetic viability were limited by the presence of a large number of unknown age (157) and sex (161) specimens in the population with unknown ancestry for 39% of the birds.

# **Conclusions and Recommendations**

The species due to the various threats that affect its long-term survival is listed in Schedule I of the Wildlife Protection (1972) Act and as categorized as Vulnerable in the IUCN Red list of threatened species. The captive population exhibits a growth rate of approximately 28%; however, the presence of a large number of unknown age and origin specimens limits detailed analyses.

A review of population trends suggests that the techniques needed for management of the species have been successfully developed to enable the maintenance of a viable captive population.

The following actions are suggested for effective management of the captive population for maintaining a long-term genetically viable and demographically stable population capable of providing surpluses for reintroduction.

Marking of all birds with inconspicuous marking techniques such as banding, patagial tags for easy identification of individual birds to facilitate maintenance of accurate records and implement correct pairing choices.

Record-keeping that maintains a database on all events for each specimen with details lineages at all holding facilities.

Use of appropriate molecular genetics tools is suggested for establishing lineages of specimens that cannot be traced to founder birds. The lineages thus established can be used for arriving at informed decisions regarding pairing choices thereby ensuring a more effective management of the genetic viability of the population.

Periodic inclusion of additional founder birds is suggested to augment the genetic diversity of the population that includes biased genetic representation of 12 effective founders.

Pairings of these birds may be determined based on the genetic lineages established from molecular genetic analysis of the population.

The implementation of the above actions can further ensure the maintenance of long-term viable population of the species in captivity.

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# Appendix I

# Historical Population of Cheer Pheasant (Catreus wallichii)

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
1	00001		Unnamed	F	????	Unk	Unk	Tutikandi Hyderabad	???? 04-Apr-90 26-Jun-97	Hatch Transfer Death
2	00002		Unnamed	М	????	Unk	Unk	Tutikandi Hyderabad	???? 16-Jun-90 16-Jun-90	Hatch Transfer Death
3	00003		Unnamed	М	03-Aug-00	Unk	Unk	Kufri	03-Aug-00 15-Sep-12	Hatch Death
4	00004	587P213	Sheela	F	????	Wild	Wild	India Khadiyun	~ 2001 ~ 2001	Capture Transfer
5	00005	585P213	Pratap	М	????	Wild	Wild	India Khadiyun	~ 2001 ~ 2001	Capture Ltf
6	00006		Unnamed	М	09-Jul-01	Unk	Unk	Kufri	09-Jul-01 23-Aug-08	Hatch Death
7	00007		Unnamed	F	09-Jul-01	Unk	Unk	Kufri	09-Jul-01 14-May-08	Hatch Death
8	80000		Unnamed	М	03-Aug-02		Unk	Kufri	03-Aug-02 10-Apr-13	Hatch Death
9	00009		Unnamed	М	03-Aug-02		Unk	Kufri	03-Aug-02 20-May-13	Hatch Death
10	00010		Unnamed	F	03-Aug-02		Unk	Kufri	03-Aug-02 16-Apr-11	Hatch Death
11	00011		Unnamed	F	03-Aug-02		Unk	Kufri	03-Aug-02 ~ Jan 2012	Hatch Death
12	00012		Unnamed	F	01-Aug-04	Unk	Unk	Kufri	01-Aug-04 23-Aug-08	Hatch Death
13	00013		Unnamed	M	09-Jul-05	Unk	Unk	Kufri Darjeeling	09-Jul-05 10-Apr-11 10-Apr-11	Hatch Transfer Death
14	00014		Unnamed 00083	М	09-Jul-05	Unk	Unk	Kufri Nainital	09-Jul-05 03-Nov-09	Hatch Transfer
15	00015	590P213	Neelu	F	????	Wild	Wild	India Khadiyun	~ 2006 ~ 2006	Capture Transfer
16	00016	589P213	Rani	F	????	Wild	Wild	India Khadiyun	~ 2006 ~ 2006	Capture Transfer
17	00017	588P213	Rekha	F	????	Wild	Wild	India Khadiyun	~ 2006 ~ 2006	Capture Transfer
18	00018		Unnamed	М	08-Jul-06	Unk	Unk	Kufri	08-Jul-06	Hatch
19	00019		Unnamed 6	М	08-Jul-06	Unk	Unk	Kufri Darjeeling	08-Jul-06 10-Apr-11	Hatch Transfer
20	00020		Unnamed	F	08-Jul-06	Unk	Unk	Kufri Darjeeling	08-Jul-06 10-Apr-11 12-Apr-11	Hatch Transfer Death

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
21	00021		Unnamed 5	F	08-Jul-06	Unk	Unk	Kufri Darjeeling	08-Jul-06 10-Apr-11	Hatch Transfer
22	00022		Unnamed 00084	F	08-Jul-06	Unk	Unk	Kufri Nainital	08-Jul-06 03-Nov-09 08-May-14	Hatch Transfer Death
23	00023		Unnamed	М	08-Jul-06	Unk	Unk	Kufri	08-Jul-06	Hatch
24	00024		Unnamed	М	08-Jul-06	Unk	Unk	Kufri	08-Jul-06	Hatch
25	00025		Unnamed	М	08-Jul-06	Unk	Unk	Kufri	08-Jul-06	Hatch
26	00026		Unnamed	F	08-Jul-06	Unk	Unk	Kufri	08-Jul-06	Hatch
27	00027		00086 Unnamed 00085	M	09-Jul-06	Unk	Unk	Nainital Kufri Nainital	03-Nov-09 09-Jul-06 03-Nov-09	Transfer Hatch Transfer
28	00028		Unnamed	М	09-Jul-06	Unk	Unk	Kufri	09-Jul-06	Hatch
29	00029		Unnamed	F	09-Jul-06	Unk	Unk	Kufri	09-Jul-06	Hatch
30	00030		Unnamed	М	09-Jul-06	Unk	Unk	Kufri	09-Jul-06	Hatch
31	00031	591P213	Lata	F	????	Wild	Wild	India Blossom P Khadiyun	~ 2007 ~ 2007 03-Aug-10 13-Mar-12	Capture Transfer Transfer Death
32	00032	592P213	Shanti 10HPWLW	F	????	Wild	Wild	India Khadiyun	~ 2008 ~ 2008	Capture Transfer
33	00033	593P213	Raja	М	????	Wild	Wild	India Khadiyun	~ 2008 ~ 2008	Capture Transfer
34	00034	594P213	Sita	F	????	Wild	Wild	India Khadiyun	~ 2008 ~ 2008	Capture Transfer
35	00035	595P213	Ram	М	????	Wild	Wild	India Khadiyun	~ 2009 ~ 2009	Capture Transfer
36	00036	596P213	Ravi	M	????	Wild	Wild	India Khadiyun	~ 2009 ~ 2009	Capture Transfer
37	00037	597P213	Rakesh	M	????	Wild	Wild	India Khadiyun	~ 2009 ~ 2009	Capture Transfer
38	00038	598P213	Sonu	М	????	Wild	Wild	India Khadiyun	30-Jun-09 30-Jun-09	Capture Transfer
39	00039		Mohan	M	~ 2008	Wild	Wild	India Blossom P Khadiyun	???? ???? 03-Aug-10 16-Feb-11	Capture Transfer Transfer Death
40	00040		Unnamed	F	05-Jul-09	Unk	Unk	Kufri	05-Jul-09	Hatch Ltf
41	00041		Unnamed	F	03-Aug-09	Unk	Unk	Kufri	03-Aug-09	Hatch
42	00042		Unnamed	F	03-Aug-09	Unk	Unk	Kufri	03-Aug-09	Hatch
43	00043		Unnamed	F	03-Aug-09	Unk	Unk	Kufri	03-Aug-09	Hatch
44	00044		Unnamed	F	03-Aug-09	Unk	Unk	Kufri	03-Aug-09	Hatch
45	00045		Unnamed	F	03-Aug-09	Unk	Unk	Kufri	03-Aug-09	Hatch
46	00046		Unnamed	М	????	Unk	Unk	Sarahan	???? ~ Sep 2011	Hatch Death
47	00047		Unnamed	?	17-Apr-10	00033	00016	Khadiyun	17-Apr-10	Hatch

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
									19-Aug-10	Death
48	00048		Unnamed	?	18-Apr-10	00038	00017	Khadiyun	18-Apr-10	Hatch Ltf
49	00049		Unnamed	?	19-Apr-10	00033	00016	Khadiyun	19-Apr-10 02-Sep-10	Hatch Death
50	00050		Unnamed	?	20-Apr-10	00038	00017	Khadiyun	20-Apr-10	Hatch Ltf
51	00051		Unnamed	?	21-Apr-10	00033	00016	Khadiyun	21-Apr-10	Hatch Ltf
52	00052		Unnamed	?	23-Apr-10	00033	00016	Khadiyun	23-Apr-10	Hatch
53	00053		Unnamed	?	23-Apr-10	00038	00017	Khadiyun	23-Apr-10	Hatch
54	00054		Unnamed	?	25-Apr-10	00038	00017	Khadiyun	25-Apr-10	Hatch
55	00055		Unnamed	?	28-Apr-10	00033	00016	Khadiyun	28-Apr-10	Hatch Ltf
56	00056		Unnamed	?	28-Apr-10	00038	00017	Khadiyun	28-Apr-10	Hatch Ltf
57	00057		Unnamed	?	03-May-10	00033	00016	Khadiyun	03-May-10	Hatch Ltf
58	00058		Unnamed	?	03-May-10	00038	00017	Khadiyun	03-May-10	Hatch Ltf
59	00059		Unnamed	?	05-May-10	00033	00016	Khadiyun	05-May-10	Hatch Ltf
60	00060		Unnamed	?	05-May-10	00038	00017	Khadiyun	05-May-10	Hatch Ltf
61	00061	13163P2	Ramesh	М	02-Jun-10	00033	00016	Khadiyun	02-Jun-10	Hatch Ltf
62	00062	13165P2	Kavita	F	02-Jun-10	00033	00016	Khadiyun	02-Jun-10	Hatch Ltf
63	00063	13164P2	Moti C23	М	02-Jun-10	00033	00016	Khadiyun	02-Jun-10	Hatch
64	00064	897P213	Gagan	М	03-Jun-10	00038	00017	Khadiyun	03-Jun-10	Hatch Ltf
65	00065	896P213	Krishan C20	М	03-Jun-10	00038	00017	Khadiyun	03-Jun-10 20-May-14	Hatch Death
66	00066	893P213	Reena C21	F	03-Jun-10	00038	00017	Khadiyun	03-Jun-10	Hatch Ltf
67	00067	895P213	Jyoti C22	F	03-Jun-10	00038	00017	Khadiyun	03-Jun-10 16-Apr-14	Hatch Death
68	00068	14242P2	Geeta	F	22-Jun-10	00039	00031	Blossom P Khadiyun	22-Jun-10 03-Aug-10	Hatch Ltf
69	00069	14241P2	Abbu C19	М	22-Jun-10	00039	00031	Blossom P Khadiyun	22-Jun-10 03-Aug-10	Hatch Ltf
70	00070	894P213	Deenu	М	30-Jun-10	00038	00017	Khadiyun	30-Jun-10	Hatch Ltf

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
71	00071		Unnamed	F	05-Jul-10	Unk	Unk	Kufri	05-Jul-10	Hatch
72	00072		Unnamed	F	05-Jul-10	Unk	Unk	Kufri	05-Jul-10	Hatch
73	00073		Unnamed	F	05-Jul-10	Unk	Unk	Kufri	05-Jul-10	Hatch
74	00074		Unnamed	F	05-Jul-10	Unk	Unk	Kufri	05-Jul-10	Hatch
75	00075		Unnamed	F	????	Unk	Unk	Sarahan	???? ~ Nov 2013	Hatch Death
76	00076		Unnamed	?	24-Apr-11	00033	00016	Khadiyun	24-Apr-11 14-Oct-11	Hatch Death
77	00077		Unnamed 10 1186HPW D-010	F	24-Apr-11	00038	00017	Khadiyun	24-Apr-11	Hatch Ltf
78	00078		Unnamed 2 1186HPW D-02	F	26-Apr-11	00033	00016	Khadiyun	26-Apr-11	Hatch Ltf
79	00079		Unnamed 11 1186HPW D-011	M	26-Apr-11	00038	00017	Khadiyun	26-Apr-11	Hatch Ltf
80	08000		Unnamed	?	26-Apr-11	00036	00015	Khadiyun	26-Apr-11 15-Jun-11	Hatch Death
81	00081		Unnamed	?	26-Apr-11	00069	00004	Khadiyun	26-Apr-11	Hatch Ltf
82	00082		Unnamed 3 1186HPW D-03	М	28-Apr-11	00033	00016	Khadiyun	28-Apr-11	Hatch Ltf
83	00083		Unnamed	?	28-Apr-11	00069	00004	Khadiyun	28-Apr-11	Hatch Ltf
84	00084		Unnamed 12 1186- HPWD-01	М	29-Apr-11	00038	00017	Khadiyun	29-Apr-11	Hatch Ltf
85	00085		Unnamed	?	29-Apr-11	00036	00015	Khadiyun	29-Apr-11 15-Jun-11	Hatch Death
86	00086		Unnamed	?	30-Apr-11	00069	00004	Khadiyun	30-Apr-11	Hatch Ltf
87	00087		Unnamed 13 1186HPW D-013	F	01-May-11		00017	Khadiyun	01-May-11	Hatch Ltf
88	00088		Unnamed	?	01-May-11	00036	00015	Khadiyun	01-May-11 15-Jun-11	Hatch Death

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
89	00089		Unnamed	?	02-May-11	00037	00032	Khadiyun	02-May-11	Hatch Ltf
90	00090		Unnamed 4 1186HPW D-04	?	03-May-11	00033 [Death B	00016 Y: Unkn	Khadiyun Own Means]	03-May-11 14-Oct-11	Hatch Death
91	00091		Unnamed	?	03-May-11	00069	00004	Khadiyun	03-May-11	Hatch Ltf
92	00092		Unnamed 14 1186HPW D-014	М	04-May-11	00038	00017	Khadiyun	04-May-11	Hatch Ltf
93	00093		Unnamed	?	04-May-11	00035	00034	Khadiyun	04-May-11	Hatch Ltf
94	00094		Unnamed	?	04-May-11	00036	00015	Khadiyun	04-May-11 15-Jun-11	Hatch Death
95	00095		Unnamed 5 1186HPW D-05	F	05-May-11	00033	00016	Khadiyun	05-May-11	Hatch Ltf
96	00096		Unnamed 15 1186HPW D-015	F	06-May-11	00038	00017	Khadiyun	06-May-11	Hatch Ltf
97	00097		Unnamed	?	06-May-11	00069	00004	Khadiyun	06-May-11	Hatch Ltf
98	00098		Unnamed 6 1186HPW D-06	М	07-May-11	00033	00016	Khadiyun	07-May-11	Hatch Ltf
99	00099		Unnamed	?	07-May-11	00035	00034	Khadiyun	07-May-11	Hatch Ltf
100	00100		Unnamed	?	07-May-11	00036	00015	Khadiyun	07-May-11 15-Jun-11	Hatch Death
101	00101		Unnamed 16 1186HPW D-016	F	08-May-11	00038	00017	Khadiyun	08-May-11	Hatch Ltf
102	00102		Unnamed 7	F	09-May-11	00033	00016	Khadiyun	09-May-11	Hatch Ltf
103	00103		Unnamed	?	09-May-11	00036	00015	Khadiyun	09-May-11 15-Jun-11	Hatch Death
104	00104		Unnamed 8	F	11-May-11	00033	00016	Khadiyun	11-May-11	Hatch Ltf
105	00105		Unnamed 17 1186HPW D017	F	11-May-11	00038	00017	Khadiyun	11-May-11	Hatch Ltf

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
106	00106		Unnamed	?	11-May-11	00036	00015	Khadiyun	11-May-11 15-Jun-11	Hatch Death
107	00107		Unnamed	?	12-May-11	00069	00004	Khadiyun	12-May-11	Hatch Ltf
108	00108		Unnamed 0191186H PWD	?	12-May-11	00063	00031	Khadiyun	12-May-11	Hatch Ltf
109	00109		Unnamed	?	13-May-11	00035	00034	Khadiyun	13-May-11	Hatch Ltf
110	00110		Unnamed	М	14-May-11	00036	00015	Khadiyun	14-May-11	Hatch Ltf
111	00111		Unnamed 0201186H PWD	?	15-May-11	00063	00031	Khadiyun	15-May-11	Hatch Ltf
112	00112		Unnamed	?	17-May-11	00035	00034	Khadiyun	17-May-11	Hatch
113	00113		Unnamed 0211186H PWD	?	17-May-11	00063	00031	Khadiyun	17-May-11	Hatch Ltf
114	00114		Unnamed	?	18-May-11	00035	00034	Khadiyun	18-May-11	Hatch Ltf
115	00115		Unnamed 0221186H PWD	?	19-May-11	00063	00031	Khadiyun	19-May-11	Hatch Ltf
116	00116		Unnamed	?	21-May-11	00035	00034	Khadiyun	21-May-11	Hatch Ltf
117	00117		Unnamed 0231186H PWD	?	21-May-11	00063	00031	Khadiyun	21-May-11	Hatch Ltf
118	00118		Unnamed	?	23-May-11	00035	00034	Khadiyun	23-May-11	Hatch Ltf
119	00119		Unnamed 0241186H PWD	?	23-May-11	00063	00031	Khadiyun	23-May-11 20-Aug-11	Hatch Death
120	00120		Unnamed	?	25-May-11	00035	00034	Khadiyun	25-May-11	Hatch Ltf
121	00121		Unnamed 0251186H PWD	?	25-May-11	00063	00031	Khadiyun	25-May-11 20-Aug-11	Hatch Death
122	00122		Unnamed	?	29-May-11	00037	00032	Khadiyun	29-May-11	Hatch Ltf
123	00123	031185H	Hardev C24	М	08-Jun-11	00033	00016	Khadiyun	08-Jun-11	Hatch
124	00124	061185H	Shubham C25	М	08-Jun-11	00033	00016	Khadiyun	08-Jun-11	Hatch
125	00125	051186H	Ritu C27	F	08-Jun-11	00033	00016	Khadiyun	08-Jun-11	Hatch
126	00126	081186H	Seema C30	F	08-Jun-11	00033	00016	Khadiyun	08-Jun-11	Hatch Ltf

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
127	00127	091186H	Neelam C30	F	08-Jun-11	00033	00016	Khadiyun	08-Jun-11	Hatch Ltf
128	00128	0141186	Dev C31	М	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
129	00129	0121186	Saju C32	М	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch Ltf
130	00130	0111186	Raju C33	М	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
131	00131	0101186	Kajol C34	F	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
132	132	0131186	Mamta C35	F	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
133	00133	0151186	Kanta C36	F	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
134	00134	0161186	Ruchi C37	F	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
135	00135	021186H	Meena C26	F	09-Jun-11	00033	00016	Khadiyun	09-Jun-11	Hatch Ltf
136	00136	071186H	Nitu C28	F	09-Jun-11	00033	00016	Khadiyun	09-Jun-11	Hatch Ltf
137	00137	0171186	Shalu C38	F	09-Jun-11	00038	00017	Khadiyun	09-Jun-11	Hatch Ltf
138	00138	011186H	Golu C40	М	11-Jun-11	00036	00015	Khadiyun	11-Jun-11	Hatch
139	00139		Unnamed	?	12-Jun-11	00037	00032	Khadiyun	12-Jun-11	Hatch Ltf
140	00140		Unnamed	?	14-Jun-11	00037	00032	Khadiyun	14-Jun-11	Hatch Ltf
141	00141		Unnamed	М	18-Jun-11	Unk	Unk	Kufri	18-Jun-11	Hatch
142	00142		Unnamed	F	18-Jun-11	Unk	Unk	Kufri	18-Jun-11	Hatch
143	00143		Unnamed	F	18-Jun-11	Unk	Unk	Kufri	18-Jun-11	Hatch
144	00144		Unnamed	F	18-Jun-11	Unk	Unk	Kufri	18-Jun-11	Hatch
145	00145		Unnamed	F	18-Jun-11	Unk	Unk	Kufri	18-Jun-11	Hatch
146	00146		Unnamed	F	18-Jun-11	Unk	Unk	Kufri	18-Jun-11	Hatch
147	00147	0191186	Anu C41	F	21-Jun-11	00063	00031	Khadiyun	21-Jun-11	Hatch
148	00148	0221186	Neha C44	F	21-Jun-11	00063	00031	Khadiyun	21-Jun-11	Hatch
149	00149	0201186	Heena C42	F	22-Jun-11	00063	00031	Khadiyun	22-Jun-11	Hatch Ltf
150	00150	0211186	Deepa C43	F	22-Jun-11	00063	00031	Khadiyun	22-Jun-11	Hatch Ltf

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
151	00151	0231186	Usha C45	F	22-Jun-11	00063	00031	Khadiyun	22-Jun-11	Hatch Ltf
152	00152	0181186	Shiv C39	М	27-Jun-11	00035	00034	Khadiyun	27-Jun-11	Hatch
153	00153		Unnamed	F	09-Jul-11	Unk	Unk	Kufri	09-Jul-11	Hatch
154	00154		Unnamed	F	09-Jul-11	Unk	Unk	Kufri	09-Jul-11	Hatch
155	00155		Unnamed	F	09-Jul-11	Unk	Unk	Kufri	09-Jul-11	Hatch
156	00156		Unnamed	F	09-Jul-11	Unk	Unk	Kufri	09-Jul-11	Hatch
157	00157		Unnamed	F	09-Jul-11	Unk	Unk	Kufri	09-Jul-11	Hatch
158	00158		Unnamed 30 0301186H PWD	?	14-Apr-12	00033	00016	Khadiyun	14-Apr-12 19-Sep-12	Hatch Death
159	00159		Unnamed	?	16-Apr-12	00033	00016	Khadiyun	16-Apr-12 06-Aug-12	Hatch Death
160	00160		Unnamed	?	18-Apr-12	00033	00016	Khadiyun	18-Apr-12 06-Aug-12	Hatch Death
161	00161		Unnamed 5206N1166 AV1	М	18-Apr-12	00036	00015	Khadiyun	18-Apr-12 03-Jun-13	Hatch Death
162	00162		Unnamed 31 0311186H PWD	F	20-Apr-12	00033	00016	Khadiyun	20-Apr-12	Hatch Ltf
163	00163		Unnamed	?	20-Apr-12	00038	00017	Khadiyun	20-Apr-12 19-Jun-12	Hatch Death
164	00164		Unnamed 32 0321186H PWD	F	22-Apr-12	00033	00016	Khadiyun	22-Apr-12	Hatch Ltf
165	00165		Unnamed	?	22-Apr-12	00038	00017	Khadiyun	22-Apr-12 28-Jun-12	Hatch Death
166	00166		Unnamed 33 0331186H PWD	F	24-Apr-12	00033	00016	Khadiyun	24-Apr-12	Hatch Ltf
167	00167		Unnamed	?	24-Apr-12	00038	00017	Khadiyun	24-Apr-12 27-Aug-12	Hatch Death
168	00168		Unnamed 5207N1166 AV1	F	24-Apr-12	00036	00015	Khadiyun	24-Apr-12	Hatch Ltf
169	00169		Unnamed 34 0341186H PWD	М	26-Apr-12	00033	00016	Khadiyun	26-Apr-12	Hatch Ltf
170	00170		Unnamed	М	26-Apr-12	00038	00017	Khadiyun	26-Apr-12	Hatch Ltf

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
171	00171		Unnamed 5208N1166 AV1	F	27-Apr-12	00036	00015	Khadiyun	27-Apr-12 29-May-13	Hatch Death
172	00172		Unnamed 35 0351186H PWD	?	28-Apr-12	00033	00016	Khadiyun	28-Apr-12 25-Oct-12	Hatch Death
173	00173		Unnamed	F	28-Apr-12	00038	00017	Khadiyun	28-Apr-12	Hatch Ltf
174	00174		Unnamed	?	29-Apr-12	00035	00034	Khadiyun	29-Apr-12	Hatch Ltf
175	00175		Unnamed 5209N1166 AV1	М	29-Apr-12	00036	00015	Khadiyun	29-Apr-12 29-May-13	Hatch Death
176	00176		Unnamed 36 0361186H PWD	М	30-Apr-12	00033	00016	Khadiyun	30-Apr-12	Hatch Ltf
177	00177		Unnamed	М	30-Apr-12	00038	00017	Khadiyun	30-Apr-12	Hatch Ltf
178	00178		Unnamed 5201N1166 AV1	М	30-Apr-12	00037	00032	Khadiyun	30-Apr-12	Hatch Ltf
179	00179		Unnamed 5210N1166 AV1	М	01-May-12	00036	00015	Khadiyun	01-May-12 29-May-13	Hatch Death
180	00180		Unnamed	?	02-May-12	00038	00017	Khadiyun	02-May-12	Hatch Ltf
181	00181		Unnamed 0421186H PWD	?	03-May-12	00035	00034	Khadiyun	03-May-12 31-Jan-13	Hatch Death
182	00182		Unnamed 5202N1166 AV1	F	03-May-12	00037	00032	Khadiyun	03-May-12 15-Jun-13	Hatch Death
183	00183		Unnamed	?	03-May-12	00013 8	00004	Khadiyun	03-May-12	Hatch Ltf
184	00184		Unnamed	?	03-May-12	00063	00133	Khadiyun	03-May-12 17-Jul-12	Hatch Death
185	00185		Unnamed 5293Q1166 AV1	М	04-May-12	00036	00015	Khadiyun	04-May-12	Hatch Ltf
186	00186		Unnamed 0431186H PWD	М	05-May-12	00035	00034	Khadiyun	05-May-12	Hatch Ltf
187	00187		Unnamed	?	05-May-12	000138	00004	Khadiyun	05-May-12	Hatch Ltf
188	00188		Unnamed	?	05-May-12	00063	00133	Khadiyun	05-May-12 19-Sep-12	Hatch Death

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
189	00189		Unnamed 5203N1186 AV1	F	06-May-12		00032	Khadiyun	06-May-12	Hatch Ltf
190	00190		Unnamed 2294Q1166 AV1	F	06-May-12		00015	Khadiyun	06-May-12 29-May-13	Hatch Death
191	00191		Unnamed	?	07-May-12	00038	00017	Khadiyun	07-May-12	Hatch Ltf
192	00192		Unnamed 0441186H PWD	?	07-May-12	00035	00034	Khadiyun	07-May-12 17-Dec-12	Hatch Death
193	00193		Unnamed	?	07-May-12	00138	00004	Khadiyun	07-May-12	Hatch Ltf
194	00194		Unnamed	?	08-May-12	00063	00133	Khadiyun	08-May-12 11-Dec-12	Hatch Death
195	00195		Unnamed 5204N1186 AV1	?	09-May-12	00037	00032	Khadiyun	09-May-12 17-Dec-12	Hatch Death
196	00196		Unnamed	?	09-May-12	00036	00015	Khadiyun	09-May-12 19-Sep-12	Hatch Death
197	00197		Unnamed	?	09-May-12	00138	00004	Khadiyun	09-May-12	Hatch Ltf
198	00198		Unnamed 0451186H PWD	?	10-May-12	00035	00034	Khadiyun	10-May-12 07-Jan-13	Hatch Death
199	00199		Unnamed 2296Q1166 AV1	F	10-May-12	00063	00133	Khadiyun	10-May-12	Hatch Ltf
200	00200		Unnamed 5205N1186 AV1	?	11-May-12	37	32	Khadiyun	11-May-12 25-Dec-12	Hatch Death
201	00201		Unnamed	?	11-May-12	00138	00004	Khadiyun	11-May-12	Hatch Ltf
202	00202		Unnamed 0461186H PWD	?	12-May-12	00035	00034	Khadiyun	12-May-12 06-Sep-12	Hatch Death
203	00203		Unnamed 2297Q1166 AV1	М	12-May-12	00063	00133	Khadiyun	12-May-12	Hatch Ltf
204	00204		Unnamed	?	13-May-12	00037	00032	Khadiyun	13-May-12 22-Nov-12	Hatch Death
205	00205		Unnamed 2295Q1166 AV1	F	13-May-12	00138	00004	Khadiyun	13-May-12	Hatch Ltf
206	00206		Unnamed 2298Q1166 AV1	F	14-May-12	00063	00133	Khadiyun	14-May-12	Hatch Ltf
207	00207		Unnamed	?	15-May-12	00037	00032	Khadiyun	15-May-12 22-Nov-12	Hatch Death

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
208	00208		Unnamed 2299Q1166 AV1	F	16-May-12	00063	00133	Khadiyun	16-May-12	Hatch Ltf
209	00209		Unnamed	?	17-May-12	00037	00032	Khadiyun	17-May-12 22-Nov-12	Hatch Death
210	00210		Gayatri 0321186H PWD	F	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
211	00211		Laxmi 0311186H PWD	F	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
212	00212		Praveen 08HPWLW	М	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
213	00213		Poonam 0331186H PWD	F	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
214	00214		Mohit 0341186H PWD	М	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
215	00215		Unnamed	М	06-Jun-12	00038	00017	Khadiyun	06-Jun-12	Hatch Ltf
216	00216		Kuldeev 13166P213 7AV	М	06-Jun-12	00038	00017	Khadiyun	06-Jun-12	Hatch
217	00217		Neeraj 2293Q1166 AV1	М	06-Jun-12	00036	00015	Khadiyun	06-Jun-12	Hatch
218	00218		Pooja 5203N1166 AV1	F	06-Jun-12	00037	00032	Khadiyun	06-Jun-12	Hatch
219	00219		Kunal 5201N1166 AV1	М	06-Jun-12	00037	00032	Khadiyun	06-Jun-12	Hatch
220	00220		Aruna 0381186H PWD	F	06-Jun-12	00038	00017	Khadiyun	06-Jun-12	Hatch
221	00221		Vandna 5207N1166 AV1	F	06-Jun-12	00036	00015	Khadiyun	06-Jun-12	Hatch
222	00222		Vishal 0371186H PWD	М	06-Jun-12	00038	00017	Khadiyun	06-Jun-12	Hatch
223	00223		Shyam 0431186H PWD	М	09-Jun-12	00035	00034	Khadiyun	09-Jun-12	Hatch
224	00224		Babita 2295Q1166 AV1	F	13-Jun-12	00138	00004	Khadiyun	13-Jun-12	Hatch

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring	Sex	Hatch Date	Sire	Dam	Location	Date	Event
005	00005		No.		1 . 0040	00007	00000	N1 - 2 - 20 - 1	1 . 0040	11.6.6
225	00225		Unnamed DARJ90	М	~ Jun 2012	00027	00022	Nainital	~ Jun 2012 28-Nov-14	Hatch Transfer
226	00226		Unnamed	F	~ Jun 2012	00027	00022	Darjeeling Nainital	~ Jun 2012	Hatch
227	00227		Preeti	F	15-Jun-12	00027	00022	Khadiyun	15-Jun-12	Hatch
221	00221		2298Q1166 AV1		13-3u11-12	00003	00133	Kilaulyuli	13-3411-12	Tiatori
228	00228		Bhawna 2295Q1166 AV1	F	15-Jun-12	00063	00133	Khadiyun	15-Jun-12	Hatch
229	00229		Kusum 2299Q1166 AV1	F	15-Jun-12	00063	00133	Khadiyun	15-Jun-12	Hatch
230	00230		Unnamed	М	~ Jul 2012	00014	00026	Nainital	~ Jul 2012	Hatch
231	00231		Unnamed	F	~ Jul 2012	00014	00026	Nainital	~ Jul 2012	Hatch
			DARJ89					Darjeeling	28-Nov-14	Transfer
232	00232		Unnamed	?	15-Apr-13	00033	00016	Khadiyun	15-Apr-13	Hatch
									03-Jul-13	Death
233	00233		Unnamed	?	18-Apr-13	00033	00016	Khadiyun	18-Apr-13	Hatch
									03-Jul-13	Death
234	00234		Unnamed	?	19-Apr-13	00035	00034	Khadiyun	19-Apr-13	Hatch
225	00235		l lanaman d	?	20 Amr 12	00033	00016	I/h a discusa	20 4 12	Ltf
235	00235		Unnamed	?	20-Apr-13	00033	00016	Khadiyun	20-Apr-13 24-Jul-13	Hatch Death
236	00236		Unnamed	?	23-Apr-13	00033	00016	Khadiyun	23-Apr-13	Hatch
230	00230		Officialitied		20-Api-10	00033	00010	Miladiyuli	05-Aug-13	Death
237	00237		Unnamed	?	23-Apr-13	00038	00017	Khadiyun	23-Apr-13	Hatch
				·					27-Apr-13	Death
238	00238		Unnamed	?	24-Apr-13	00063	00133	Khadiyun	24-Apr-13	Hatch
					·				25-Jul-13	Death
239	00239		Unnamed	?	25-Apr-13	00033	00016	Khadiyun	25-Apr-13	Hatch
									08-Aug-13	Death
240	00240		Unnamed	?	26-Apr-13	00038	00017	Khadiyun	26-Apr-13	Hatch
									24-Aug-13	Death
241	00241		Unnamed	?	26-Apr-13	00063	00133	Khadiyun	26-Apr-13	Hatch
									25-Jul-13	Death
242	00242		Unnamed	?	27-Apr-13	00033	00016	Khadiyun	27-Apr-13	Hatch
0.40	00040		I lama I	2	07 4 40	00007	00000	I/h e -l!:	12-Aug-13	Death
243	00243		Unnamed	?	27-Apr-13	00037	00032	Khadiyun	27-Apr-13	Hatch
244	00244		Unnamed	?	27-Apr-13	00036	00015	Khadiyun	23-Aug-13 27-Apr-13	Death Hatch
244	JU244		omiameu	·	21-741-19	00000	00013	mauiyun	03-Jul-13	Death
245	00245		Unnamed	?	28-Apr-13	00063	00133	Khadiyun	28-Apr-13	Hatch
240	30270		Simuliou		25 / tpi=10	55000	55155	Taladiyuli	05-Aug-13	Death
246	00246		Unnamed	?	29-Apr-13	00033	00016	Khadiyun	29-Apr-13	Hatch
										Ltf
247	00247		Unnamed	?	29-Apr-13	00037	00032	Khadiyun	29-Apr-13	Hatch
									23-Aug-13	Death

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
248	00248		Unnamed	?	30-Apr-13	00036	00015	Khadiyun	30-Apr-13 15-Jul-13	Hatch Death
249	00249		Unnamed	?	01-May-13	00033	00016	Khadiyun	01-May-13	Hatch Ltf
250	00250		Unnamed	?	01-May-13	00063	00133	Khadiyun	01-May-13 08-Aug-13	Hatch Death
251	00251		Unnamed	?	03-May-13	00033	00016	Khadiyun	03-May-13	Hatch Ltf
252	00252		Unnamed	?	03-May-13	00036	00015	Khadiyun	03-May-13 24-Jul-13	Hatch Death
253	00253		Unnamed	?	03-May-13	00063	00133	Khadiyun	03-May-13 14-Aug-13	Hatch Death
254	00254		Unnamed	?	05-May-13	00038	00017	Khadiyun	05-May-13	Hatch Ltf
255	00255		Unnamed	?	06-May-13	00036	00015	Khadiyun	06-May-13 27-Aug-13	Hatch Death
256	00256		Unnamed	?	06-May-13	00063	00133	Khadiyun	06-May-13 20-Aug-13	Hatch Death
257	00257		Unnamed	?	08-May-13	00038	00017	Khadiyun	08-May-13	Hatch Ltf
258	00258		Unnamed	?	08-May-13	00037	00032	Khadiyun	08-May-13 27-Sep-13	Hatch Death
259	00259		Unnamed	?	08-May-13	00063	00133	Khadiyun	08-May-13	Hatch Ltf
260	00260		Unnamed	?	09-May-13	00036	00015	Khadiyun	09-May-13	Hatch Ltf
261	00261		Unnamed	?	09-May-13	00138	00004	Khadiyun	09-May-13	Hatch Ltf
262	00262		Unnamed	?	10-May-13	00038	00017	Khadiyun	10-May-13	Hatch Ltf
263	00263		Unnamed	?	11-May-13	00036	00015	Khadiyun	11-May-13	Hatch
264	00264		Unnamed	?	11-May-13	00138	00004	Khadiyun	11-May-13	Hatch Ltf
265	00265		Unnamed	?	11-May-13	00063	00133	Khadiyun	11-May-13	Hatch Ltf
266	00266		Unnamed	?	12-May-13	00038	00017	Khadiyun	12-May-13	Hatch Ltf
267	00267		Unnamed	?	14-May-13	00037	00032	Khadiyun	14-May-13	Hatch Ltf
268	00268		Unnamed	?	16-May-13	00037	00032	Khadiyun	16-May-13	Hatch Ltf
269	00269		Unnamed	?	18-May-13	00037	00032	Khadiyun	18-May-13	Hatch Ltf
270	00270		Unnamed	?	20-May-13	00035	00034	Khadiyun	20-May-13	Hatch Ltf
271	00271		Unnamed	?	28-May-13	00038	00017	Khadiyun	28-May-13	Hatch
									03-Jan-14	Death

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
272	00272		Vikram 13170P213 7AV	M	31-May-13	00033	00016	Khadiyun	31-May-13	Hatch
273	00273		Kritika 0471186H PWD	F	08-Jun-13	00037	00032	Khadiyun	08-Jun-13	Hatch
274	00274		Rahul 0501186H PWD	M	09-Jun-13	00063	00133	Khadiyun	09-Jun-13	Hatch
275	00275		Rukmani 13167P213 7AV	F	11-Jun-13	00036	00015	Khadiyun	11-Jun-13	Hatch
276	00276		Rohan 481186HP WD	M	11-Jun-13	00036	00015	Khadiyun	11-Jun-13	Hatch
277	00277		Unnamed	?	13-Apr-14	00033	00016	Khadiyun	13-Apr-14 31-Jul-14	Hatch Death
278	00278		Unnamed	?	15-Apr-14	00033	00016	Khadiyun	15-Apr-14 31-Jul-14	Hatch Death
279	00279		Unnamed	?	18-Apr-14	00033	00016	Khadiyun	18-Apr-14 04-Aug-14	Hatch Death
280	00280		Unnamed	?	20-Apr-14	00033	00016	Khadiyun	20-Apr-14 21-Aug-14	Hatch Death
281	00281		Unnamed	?	20-Apr-14	00036	00015	Khadiyun	20-Apr-14 06-Oct-14	Hatch Death
282	00282		Unnamed	?	21-Apr-14	00038	00017	Khadiyun	21-Apr-14	Hatch Ltf
283	00283		Unnamed	?	22-Apr-14	00033	00016	Khadiyun	22-Apr-14 28-Aug-14	Hatch Death
	00284				22-Apr-14			•	22-Apr-14	Hatch Ltf
285	00285		Unnamed	?	22-Apr-14	00063	00133	Khadiyun	22-Apr-14 24-Aug-14	Hatch Death
286	00286		Unnamed	?	24-Apr-14	00033	00016	Khadiyun	24-Apr-14	Hatch Ltf Hatch
287	00287		Unnamed	?	24-Apr-14	00037	00032	Khadiyun	24-Apr-14	Ltf
288	00288		Unnamed Unnamed	?	24-Apr-14 24-Apr-14	00036	00015	Khadiyun Khadiyun	24-Apr-14 24-Apr-14	Hatch Ltf Hatch
289	00289		Unnamed	?	24-Apr-14	00063	00133	Khadiyun	24-Apr-14 11-Sep-14 26-Apr-14	Death Hatch
290	00290		Unnamed	?	26-Apr-14	00033	00016	Khadiyun	26-Apr-14	Ltf Hatch
291	00291		Unnamed	?	28-Apr-14	00037	00032	Khadiyun	28-Apr-14	Ltf Hatch
232	00222		Ulliailleu	ſ	20-Αμι-14	00030	00017	ranaulyuli	20-ΑΡΙ-14	Ltf

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
293	00293		Unnamed	?	28-Apr-14	00036	00015	Khadiyun	28-Apr-14	Hatch Ltf
294	00294		Unnamed	?	28-Apr-14	00063	00133	Khadiyun	28-Apr-14 08-Dec-14	Hatch Death
295	00295		Unnamed	?	29-Apr-14	00033	00016	Khadiyun	29-Apr-14	Hatch Ltf
296	00296		Unnamed	?	30-Apr-14	00038	00017	Khadiyun	30-Apr-14	Hatch Ltf
297	00297		Unnamed	?	30-Apr-14	00037	00032	Khadiyun	30-Apr-14	Hatch Ltf
298	00298		Unnamed	?	30-Apr-14	00036	00015	Khadiyun	30-Apr-14	Hatch Ltf
299	00299		Unnamed	?	01-May-14	00063	00133	Khadiyun	01-May-14	Hatch Ltf
300	00300		Unnamed	?	02-May-14	00038	00017	Khadiyun	02-May-14	Hatch Ltf
301	00301		Unnamed	?	02-May-14	00037	00032	Khadiyun	02-May-14	Hatch Ltf
302	00302		Unnamed	?	02-May-14	00036	0015	Khadiyun	02-May-14	Hatch Ltf
303	00303		Unnamed	?	03-May-14	00063	00133	Khadiyun	03-May-14	Hatch Ltf
304	00304		Unnamed	?	04-May-14		00032	Khadiyun	04-May-14	Hatch Ltf
305	00305		Unnamed	?	05-May-14	00038	00017	Khadiyun	05-May-14	Hatch Ltf
306	00306		Unnamed	?	05-May-14		00015	Khadiyun	05-May-14	Hatch Ltf
307	00307		Unnamed	?	05-May-14	00063	00133	Khadiyun	05-May-14	Hatch Ltf
308	00308		Unnamed	?	06-May-14		00032	Khadiyun	06-May-14	Hatch Ltf
309	00309		Unnamed	?	08-May-14	00038	00017	Khadiyun	08-May-14	Hatch Ltf
310	00310		Unnamed	?	08-May-14	00063	00133	Khadiyun	08-May-14	Hatch Ltf
311	00311		Unnamed	?	10-May-14	00038	00017	Khadiyun	10-May-14	Hatch Ltf
312	00312		Gobind 5HPWLW	М	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch
313	00313		Shafali 01HPWLW	F	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch
314	00314		Alka 4HPWLW	F	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch
315	00315		Sarjeet 3HPWLW	М	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
316	00316		Neelkamal 2HPWLW	М	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch
317	00317		Pritam 599P2137A V06	М	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
318	00318		Sachdev 600P2137A V06	M	08-Jun-14	00038	00017	Khadiyun	08-Jun-14	Hatch
319	00319		Seetal 900P2137A V07	F	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
320	00320		Anita 1415PHPW LAV1	F	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
321	00321		Sudhir 2297Q1166 AV1	М	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
322	00322		Kiran 898P2137A V07	F	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
323	00323		Unnamed	?	02-Sep-14	Unk	Unk	Kufri	02-Sep-14	Hatch
324	00324		Unnamed	?	02-Sep-14	Unk	Unk	Kufri	02-Sep-14	Hatch
325	00325		Unnamed	?	19-Apr-15	00033	00016	Khadiyun	19-Apr-15	Hatch Ltf
326	00326		Unnamed	?	21-Apr-15	00033	00016	Khadiyun	21-Apr-15	Hatch Ltf
327	00327		Unnamed	?	21-Apr-15	00038	00017	Khadiyun	21-Apr-15	Hatch Ltf
328	00328		Unnamed	?	21-Apr-15	00036	00015	Khadiyun	21-Apr-15	Hatch Ltf
329	00329		Unnamed	?	24-Apr-15	00033	00016	Khadiyun	24-Apr-15	Hatch Ltf
330	00330		Unnamed	?	25-Apr-15	00038	00017	Khadiyun	25-Apr-15	Hatch Ltf
331	00331		Unnamed	?	25-Apr-15	00063	00133	Khadiyun	25-Apr-15 20-Jun-15	Hatch Death
332	00332		Unnamed	?	27-Apr-15	00124	00132	Khadiyun	27-Apr-15 13-Jul-15	Hatch Death
333	00333		Unnamed	?	27-Apr-15	00063	00133	Khadiyun	27-Apr-15 20-Jun-15	Hatch Death
334	00334		Unnamed	?	29-Apr-15	00124	00132	Khadiyun	29-Apr-15	Hatch
335	00335		Unnamed	?	30-Apr-15	00036	00015	Khadiyun	30-Apr-15	Hatch Ltf
336	00336		Unnamed	?	30-Apr-15	00063	00133	Khadiyun	30-Apr-15 06-Aug-15	Hatch Death

SI. No.	National Studbook No.	International Studbook No.	Local ID/ House name/ Ring No.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
337	00337		Unnamed	?	01-May-15	00124	00132	Khadiyun	01-May-15	Hatch
338	00338		Unnamed	?	02-May-15	00033	00016	Khadiyun	02-May-15	Hatch Ltf
339	00339		Unnamed	?	03-May-15	00063	00133	Khadiyun	03-May-15 09-Aug-15	Hatch Death
340	00340		Unnamed	?	05-May-15	00036	00015	Khadiyun	05-May-15	Hatch Ltf
341	00341		Unnamed	?	05-May-15	00124	00132	Khadiyun	05-May-15	Hatch
342	00342		Unnamed	?	05-May-15	00063	00133	Khadiyun	05-May-15	Hatch
343	00343		Unnamed	?	06-May-15	00038	00017	Khadiyun	06-May-15	Hatch Ltf
344	00344		Unnamed	?	07-May-15	00063	00133	Khadiyun	07-May-15	Hatch Ltf
345	00345		Unnamed	?	08-May-15	00038	00017	Khadiyun	08-May-15	Hatch Ltf
346	00346		Unnamed	?	08-May-15	00124	00132	Khadiyun	08-May-15	Hatch
347	00347		Unnamed	?	09-May-15	0063	00133	Khadiyun	09-May-15	Hatch Ltf
348	00348		Unnamed	?	14-May-15	00038	00017	Khadiyun	14-May-15	Hatch Ltf
TOT	ALS: 73.98.17	77 (348)								

## Appendix II

## Living Population of Cheer Pheasant (Catreus wallichii)

SI. No	National Studbook No.	International	Local ID/House name/Ring no.	Sex	1	Sire	Dam	Location	Date	Event
Dario			l alayan Zoologicall	 Park						
1.	00019		Unnamed	М	08-Jul-06	UNK	UNK	Kufri	08-Jul-06	Hatch
			6					Darjeeling	10-Apr-11	Transfer
2.	00021		Unnamed	F	08-Jul-06	UNK	UNK	Kufri	08-Jul-06	Hatch
			5					Darjeeling	10-Apr-11	Transfer
3.	00225		Unnamed	М	~ Jun 2012	00027	00022	Nainital	~ Jun 2012	Hatch
			DARJ90					Darjeeling	28-Nov-14	Transfer
4.	00231		Unnamed	F	~ Jul 2012	00014	00026	Nainital	~ Jul 2012	Hatch
			DARJ89					Darjeeling	28-Nov-14	Transfer
Tota	ls: 2.2.0 (4)		1							
Kha	diyun Cheer	Pheasant Bree	ding Centre							
5.	00004	587P213	Sheela	F	????	WILD	WILD	India	~ 2001	Capture
								Khadiyun	~ 2001	Transfer
6.	00015	590P213	Neelu	F	????	WILD	WILD	India	~ 2006	Capture
								Khadiyun	~ 2006	Transfer
7.	00016	589P213	Rani	F	????	WILD	WILD	India	~ 2006	Capture
								Khadiyun	~ 2006	Transfer
8.	00017	588P213	Rekha	F	????	WILD	WILD	India	~ 2006	Capture
								Khadiyun	~ 2006	Transfer
9.	00032	592P213	Shanti	F	????	WILD	WILD	India	~ 2008	Capture
			10HPWLW					Khadiyun	~ 2008	Transfer
10.	00033	593P213	Raja	М	????	WILD	WILD	India	~ 2008	Capture
								Khadiyun	~ 2008	Transfer
11.	00034	594P213	Sita	F	????	WILD	WILD	India	~ 2008	Capture
								Khadiyun	~ 2008	Transfer
12.	00035	595P213	Ram	М	????	WILD	WILD	India	~ 2009	Capture
								Khadiyun	~ 2009	Transfer
13.	00036	596P213	Ravi	М	????	WILD	WILD	India	~ 2009	Capture
								Khadiyun	~ 2009	Transfer
14.	00037	597P213	Rakesh	М	????	WILD	WILD	India	~ 2009	Capture
								Khadiyun	~ 2009	Transfer
15.	00038	598P213	Sonu	М	????	WILD	WILD	India	30-Jun-09	Capture
								Khadiyun	30-Jun-09	Transfer
16.	00063	13164P2	Moti	М	02-Jun-10	00033	00016	Khadiyun	02-Jun-10	Hatch
			C23							
17.	00123	031185H	Hardev	М	08-Jun-11	00033	00016	Khadiyun	08-Jun-11	Hatch
			C24							
18.	00124	061185H	Shubham	М	08-Jun-11	00033	00016	Khadiyun	08-Jun-11	Hatch
			C25							
19.	00125	051186H	Ritu	F	08-Jun-11	00033	00016	Khadiyun	08-Jun-11	Hatch
			C27							
20.	00128	0141186	Dev	М	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
			C31							
21.	00130	0111186	Raju	М	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
			C33							

SI. No	National Studbook No.	International Studbook No.	Local ID/House name/Ring no.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
22.	00131	0101186	Kajol C34	F	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
23.	00132	0131186	Mamta C35	F	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
24.	00133	0151186	Kanta C36	F	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
25.	00134	0161186	Ruchi C37	F	08-Jun-11	00038	00017	Khadiyun	08-Jun-11	Hatch
26.	00138	011186H	Golu C40	M	11-Jun-11	00036	00015	Khadiyun	11-Jun-11	Hatch
27.	00147	0191186	Anu C41	F	21-Jun-11	00063	00031	Khadiyun	21-Jun-11	Hatch
28.	00148	0221186	Neha C44	F	21-Jun-11	00063	00031	Khadiyun	21-Jun-11	Hatch
29.	00152	0181186	Shiv C39	М	27-Jun-11	00035	00034	Khadiyun	27-Jun-11	Hatch
30.	00210		Gayatri 0321186HPWD	F	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
31.	00211		Laxmi 0311186HPWD	F	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
32.	00212		Praveen 08HPWLW	М	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
33.	00213		Poonam 0331186HPWD	F	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
34.	00214		Mohit 0341186HPWD	М	30-May-12	00033	00016	Khadiyun	30-May-12	Hatch
35.	00216		Kuldeev 13166P2137AV	М	06-Jun-12	00038	00017	Khadiyun	06-Jun-12	Hatch
36.	00217		Neeraj 2293Q1166AV1	М	06-Jun-12	00036	00015	Khadiyun	06-Jun-12	Hatch
37.	00218		Pooja 5203N1166AV1	F	06-Jun-12	00037	00032	Khadiyun	06-Jun-12	Hatch
38.	00219		Kunal 5201N1166AV1	M	06-Jun-12	00037	00032	Khadiyun	06-Jun-12	Hatch
39.	00220		Aruna 0381186HPWD	F	06-Jun-12	00038	00017	Khadiyun	06-Jun-12	Hatch
40.	00221		Vandna 5207N1166AV1	F	06-Jun-12	00036	00015	Khadiyun	06-Jun-12	Hatch
41.	00222		Vishal 0371186HPWD	M	06-Jun-12	00038	00017	Khadiyun	06-Jun-12	Hatch
42.	00223		Shyam 0431186HPWD	М	09-Jun-12	00035	00034	Khadiyun	09-Jun-12	Hatch
43.	00224		Babita 2295Q1166AV1	F	13-Jun-12	00138	00004	Khadiyun	13-Jun-12	Hatch
44.	00227		Preeti 2298Q1166AV1	F	15-Jun-12	00063	00133	Khadiyun	15-Jun-12	Hatch
45.	00228		Bhawna 2295Q1166AV1	F	15-Jun-12	00063	00133	Khadiyun	15-Jun-12	Hatch

SI. No	National Studbook No.	International Studbook No.	Local ID/House name/Ring no.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
46.	00229		Kusum 2299Q1166AV1	F	15-Jun-12	00063	00133	Khadiyun	15-Jun-12	Hatch
47.	00272		Vikram 13170P2137AV	М	31-May-13	00033	00016	Khadiyun	31-May-13	Hatch
48.	00273		Kritika 0471186HPWD	F	08-Jun-13	00037	00032	Khadiyun	08-Jun-13	Hatch
49.	00274		Rahul 0501186HPWD	М	09-Jun-13	00063	00133	Khadiyun	09-Jun-13	Hatch
50.	00275		Rukmani 13167P2137AV	F	11-Jun-13	00036	00015	Khadiyun	11-Jun-13	Hatch
51.	00276		Rohan 481186HPWD	М	11-Jun-13	00036	00015	Khadiyun	11-Jun-13	Hatch
52.	00312		Gobind 5HPWLW	М	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch
53.	00313		Shafali 01HPWLW	F	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch
54.	00314		Alka 4HPWLW	F	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch
55.	00315		Sarjeet 3HPWLW	М	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch
56.	00316		Neelkamal 2HPWLW	М	05-Jun-14	00036	00015	Khadiyun	05-Jun-14	Hatch
57.	00317		Pritam 599P2137AV06	М	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
58.	00318		Sachdev 600P2137AV06	М	08-Jun-14	00038	00017	Khadiyun	08-Jun-14	Hatch
59.	00319		Seetal 900P2137AV07	F	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
60.	00320		Anita 1415PHPWLAV1	F	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
61.	00321		Sudhir 2297Q1166AV1	М	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
62.	00322		Kiran 898P2137AV07	F	08-Jun-14	00063	00133	Khadiyun	08-Jun-14	Hatch
63.	00334		Unnamed	?	29-Apr-15	00124	00132	Khadiyun	29-Apr-15	Hatch
64.	00337		Unnamed	?	01-May-15	00124	00132	Khadiyun	01-May-15	Hatch
65.	00341		Unnamed	?	05-May-15	00124	00132	Khadiyun	05-May-15	Hatch
66.	00342		Unnamed	?	05-May-15	00063	00133	Khadiyun	05-May-15	Hatch
67.	00346		Unnamed	?	08-May-15	00124	00132	Khadiyun	08-May-15	Hatch
	ls: 28.3.5 (6	•								
		Nature Park		1				1	T	
68.	00018		Unnamed	М	08-Jul-06	UNK	UNK	Kufri	08-Jul-06	Hatch
69.	00023		Unnamed	М	08-Jul-06	UNK	UNK	Kufri	08-Jul-06	Hatch
70.	00024		Unnamed	М	08-Jul-06	UNK	UNK	Kufri	08-Jul-06	Hatch
71.	00025		Unnamed	М	08-Jul-06	UNK	UNK	Kufri	08-Jul-06	Hatch
72.	00028		Unnamed	M	09-Jul-06	UNK	UNK	Kufri	09-Jul-06	Hatch
73.	00029		Unnamed	F	09-Jul-06	UNK	UNK	Kufri	09-Jul-06	Hatch

SI. No	National Studbook No.	International Studbook No.	Local ID/House name/Ring no.	Sex	Hatch Date	Sire	Dam	Location	Date	Event
74.	00030		Unnamed	М	09-Jul-06	UNK	UNK	Kufri	09-Jul-06	Hatch
75.	00041		Unnamed	F	03-Aug-09	UNK	UNK	Kufri	03-Aug-09	Hatch
76.	00042		Unnamed	F	03-Aug-09	UNK	UNK	Kufri	03-Aug-09	Hatch
77.	00043		Unnamed	F	03-Aug-09	UNK	UNK	Kufri	03-Aug-09	Hatch
78.	00044		Unnamed	F	03-Aug-09	UNK	UNK	Kufri	03-Aug-09	Hatch
79.	00045		Unnamed	F	03-Aug-09	UNK	UNK	Kufri	03-Aug-09	Hatch
80.	00071		Unnamed	F	05-Jul-10	UNK	UNK	Kufri	05-Jul-10	Hatch
81.	00072		Unnamed	F	05-Jul-10	UNK	UNK	Kufri	05-Jul-10	Hatch
82.	00073		Unnamed	F	05-Jul-10	UNK	UNK	Kufri	05-Jul-10	Hatch
83.	00074		Unnamed	F	05-Jul-10	UNK	UNK	Kufri	05-Jul-10	Hatch
84.	00141		Unnamed	М	18-Jun-11	UNK	UNK	Kufri	18-Jun-11	Hatch
85.	00142		Unnamed	F	18-Jun-11	UNK	UNK	Kufri	18-Jun-11	Hatch
86.	00143		Unnamed	F	18-Jun-11	UNK	UNK	Kufri	18-Jun-11	Hatch
87.	00144		Unnamed	F	18-Jun-11	UNK	UNK	Kufri	18-Jun-11	Hatch
88.	00145		Unnamed	F	18-Jun-11	UNK	UNK	Kufri	18-Jun-11	Hatch
89.	00146		Unnamed	F	18-Jun-11	UNK	UNK	Kufri	18-Jun-11	Hatch
90.	00153		Unnamed	F	09-Jul-11	UNK	UNK	Kufri	09-Jul-11	Hatch
91.	00154		Unnamed	F	09-Jul-11	UNK	UNK	Kufri	09-Jul-11	Hatch
92.	00155		Unnamed	F	09-Jul-11	UNK	UNK	Kufri	09-Jul-11	Hatch
93.	00156		Unnamed	F	09-Jul-11	UNK	UNK	Kufri	09-Jul-11	Hatch
94.	00157		Unnamed	F	09-Jul-11	UNK	UNK	Kufri	09-Jul-11	Hatch
95.	00323		Unnamed	?	02-Sep-14	UNK	UNK	Kufri	02-Sep-14	Hatch
96.	00324		Unnamed	?	02-Sep-14	UNK	UNK	Kufri	02-Sep-14	Hatch
Total	s: 7.20. 2 (2	9)								
Nain	ital- Pandit (	Govind Ballabh	Pant High Altitude	Zoo						
97.	00014		Unnamed	М	09-Jul-05	UNK	UNK	Kufri	09-Jul-05	Hatch
			00083					Nainital	03-Nov-09	Transfer
98.	00026		Unnamed	F	08-Jul-06	UNK	UNK	Kufri	08-Jul-06	Hatch
			00086					Nainital	03-Nov-09	Transfer
99.	00027		Unnamed	М	09-Jul-06	UNK	UNK	Kufri	09-Jul-06	Hatch
			00085					Nainital	03-Nov-09	Transfer
100.	00226		Unnamed	F	~ Jun 2012	00027	00022	Nainital	~ Jun 2012	Hatch
101.	00230		Unnamed	М	~ Jul 2012	00014	00026	Nainital	~ Jul 2012	Hatch
Total	s: 3.2.0.5									
TOT	ALS: 40.54.7	' (101)								
4 Ins	titutions									

## **Appendix III**

## Pedigree Chart Report of Cheer Pheasant

```
______
Taxon Name: CATREUS WALLICHII
                                Studbook Number: 00001
_____
        UNK
                                Sex: Female
                        / Hatch Date: ????
                       /Last Location: HYDERABAD (dead)
                      /sire House Name:
                  dam\
                              Tattoo:
                             Tag/Band:
                    00001
______
Taxon Name: CATREUS WALLICHII
                                Studbook Number: 00002
        UNK
                                Sex: Male
                           Hatch Date: ????
                       / Last Location: HYDERABAD (dead)
                          House Name:
                             Tattoo:
                             Tag/Band:
                    00002
Taxon Name: CATREUS WALLICHII
                                Studbook Number: 00003
______
        UNK
                                Sex: Male
                       / Hatch Date: 3 Aug 2000
/ Last Location: KUFRI (dead)
                          House Name:
                  dam\
                             Tattoo:
                    00003
______
                               Studbook Number: 00004
Taxon Name: CATREUS WALLICHII
       WILD
                                WILD
                                Sex: Female
                         Hatch Date: ????
Last Location: KHADIYUN
                       /sire House Name: SHEELA
                             Tattoo:
                             Tag/Band:
                    00004
______
Taxon Name: CATREUS WALLICHII
                                Studbook Number: 00005
_____
                                WILD
        WILD
                                Sex: Male
                           Hatch Date: ????
                         Last Location: KHADIYUN
                       /sire House Name: PRATAP
                             Tattoo:
                             Tag/Band:
                    00005
```

```
______
Taxon Name: CATREUS WALLICHII
                                Studbook Number: 00006
______
        UNK
                                UNK
                                Sex: Male
                          Hatch Date: 9 Jul 2001
                       / Last Location: KUFRI (dead)
                       /sire House Name:
                             Tattoo:
                             Tag/Band:
                    00006
______
Taxon Name: CATREUS WALLICHII
                                Studbook Number: 00007
_____
        UNK
                                UNK
                                Sex: Female
                       / Hatch Date: 9 Jul 2001
/ Last Location: KUFRI (dead)
                      /sire House Name:
                  dam\
                             Tattoo:
                             Tag/Band:
                    00007
______
Taxon Name: CATREUS WALLICHII
                                Studbook Number: 00008
______
        UNK
                                Sex: Male
                           Hatch Date: 3 Aug 2002
                       / Last Location: KUFRI (dead)
                       /sire House Name:
                             Tattoo:
                             Tag/Band:
                    00008
Taxon Name: CATREUS WALLICHII
______
                                Sex: Male
                       / Hatch Date: 3 Aug 2002
/ Last Location: KUFRI (dead)
                       /sire House Name:
                             Tattoo:
                             Tag/Band:
                    00009
______
Taxon Name: CATREUS WALLICHII
                                Studbook Number: 00010
______
        UNK
                               UNK
                           Sex: Female
Hatch Date: 3 Aug 2002
                        / Hatch Date: 5 fing - 1
/ Last Location: KUFRI (dead)
                       /sire House Name:
                              Tattoo:
                             Tag/Band:
                    00010
______
Taxon Name: CATREUS WALLICHII
                                Studbook Number: 00011
______
        UNK
                                UNK
                                Sex: Female
                       / Hatch Date: 3 Aug 2002
/ Last Location: KUFRI (dead)
                       /sire House Name:
                            Tattoo:
                             Tag/Band:
                    00011
```

```
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00012
______
        UNK
                               UNK
                               Sex: Female
                          Hatch Date: 1 Aug 2004
                      / Last Location: KUFRI (dead)
                      /sire House Name:
                             Tattoo:
                            Tag/Band:
                   00012
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00013
______
       UNK
                               UNK
                               Sex: Male
                      / Hatch Date: 9 Jul 2005
/ Last Location: DARJEELIN (dead)
                      /sire House Name:
                 dam\
                             Tattoo:
                            Tag/Band:
                   00013
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00014
______
       UNK
                               IINK
                               Sex: Male
                          Hatch Date: 9 Jul 2005
                      / Last Location: NAINITAL
                      /sire House Name:
                             Tattoo:
                            Tag/Band:
                   00014
Taxon Name: CATREUS WALLICHII
______
                               Sex: Female
                      / Hatch Date: ????
/ Last Location: KHADIYUN
                      /sire House Name: NEELU
                            Tattoo:
                            Tag/Band:
                   00015
______
                               Studbook Number: 00016
Taxon Name: CATREUS WALLICHII
______
                              WILD
        WILD
                               Sex: Female
                       / Hatch Date. ...
/ Last Location: KHADIYUN
                      /sire House Name: RANI
                 dam\
                             Tattoo:
                            Tag/Band:
                   00016
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00017
______
                               WILD
        WILD
                               Sex: Female
                      / Hatch Date: ????
/ Last Location: KHADIYUN
                      /sire House Name: REKHA
                 dam\
                           Tattoo:
                            Tag/Band:
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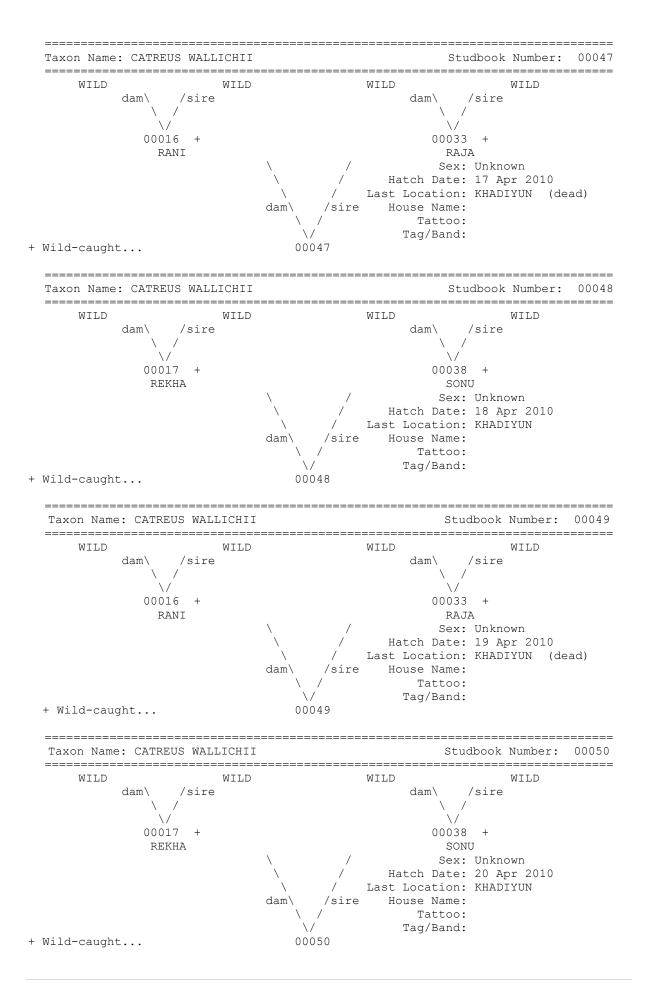
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______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00018
______
        UNK
                               UNK
                               Sex: Male
                          Hatch Date: 8 Jul 2006
                        Last Location: KUFRI
                          House Name:
                             Tattoo:
                            Tag/Band:
                   00018
______
Taxon Name: CATREUS WALLICHII
                              Studbook Number: 00019
______
       UNK
                               Sex: Male
                      / Hatch Date: 8 Jul 200
/ Last Location: DARJEELIN
                          Hatch Date: 8 Jul 2006
                 dam\
                      /sire House Name:
                             Tattoo:
                            Tag/Band:
                   00019
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00020
______
       UNK
                               Sex: Female
                          Hatch Date: 8 Jul 2006
                       Last Location: DARJEELIN (dead)
                         House Name:
                             Tattoo:
                            Tag/Band:
                   00020
Taxon Name: CATREUS WALLICHII
______
        UNK
                               Sex: Female
                      / Hatch Date: 8 Jul 2006
/ Last Location: DARJEELIN
                      /sire House Name:
                            Tattoo:
                            Tag/Band:
                   00021
______
                               Studbook Number: 00022
Taxon Name: CATREUS WALLICHII
______
        UNK
                              UNK
                               Sex: Female
                          Hatch Date: 8 Jul 2006
                         Last Location: NAINITAL (dead)
                      /sire House Name:
                 dam\
                             Tattoo:
                            Tag/Band:
                   00022
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00023
______
        UNK
                               UNK
                               Sex: Male
                      / Hatch Date: 8 Jul
/ Last Location: KUFRI
                         Hatch Date: 8 Jul 2006
                      /sire House Name:
                           Tattoo:
                            Tag/Band:
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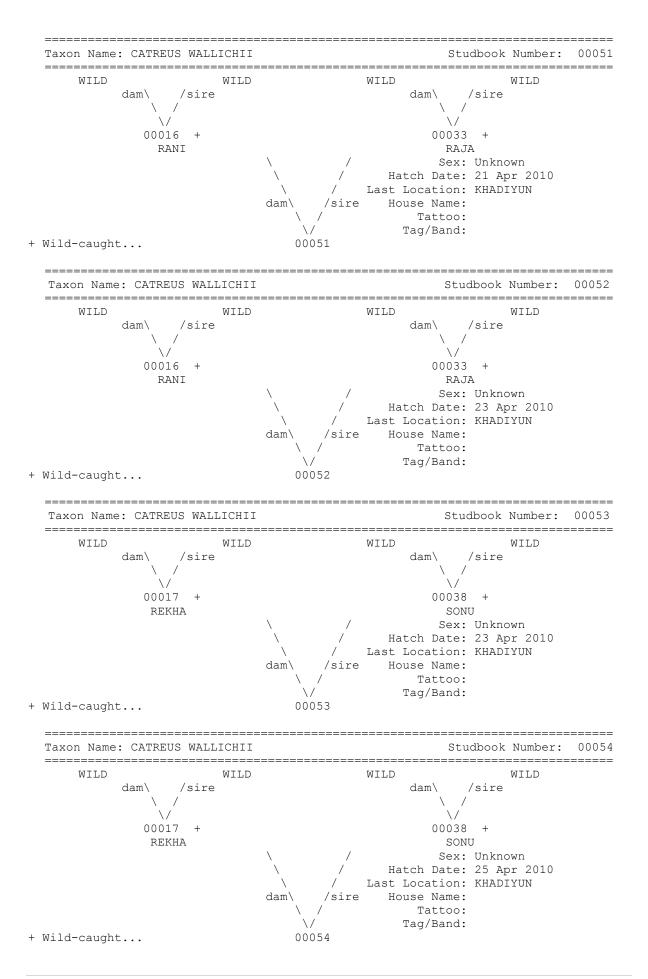
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Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00024
______
        UNK
                               UNK
                               Sex: Male
                         Hatch Date: 8 Jul 2006
                      / Last Location: KUFRI
                      /sire House Name:
                            Tattoo:
                            Tag/Band:
                   00024
______
Taxon Name: CATREUS WALLICHII
                              Studbook Number: 00025
______
       UNK
                              UNK
                              Sex: Male
                      / Hatch Date: 8 Jul
/ Last Location: KUFRI
                          Hatch Date: 8 Jul 2006
                 dam\
                     /sire House Name:
                            Tattoo:
                           Tag/Band:
                   00025
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00026
______
       UNK
                               IINK
                               Sex: Female
                          Hatch Date: 8 Jul 2006
                       Last Location: NAINITAL
                         House Name:
                            Tattoo:
                            Tag/Band:
                   00026
Taxon Name: CATREUS WALLICHII
______
        UNK
                               Sex: Male
                      / Hatch Date: 9 Jul 2006
/ Last Location: NAINITAL
                      /sire House Name:
                            Tattoo:
                           Tag/Band:
                   00027
______
                               Studbook Number: 00028
Taxon Name: CATREUS WALLICHII
______
        UNK
                              UNK
                              Sex: Male
                          Hatch Date: 9 Jul 2006
                        Last Location: KUFRI
                      /sire House Name:
                 dam\
                            Tattoo:
                            Tag/Band:
                   00028
______
Taxon Name: CATREUS WALLICHII
                              Studbook Number: 00029
______
        UNK
                              UNK
                               Sex: Female
                         Hatch Date: 9 Jul 2006
                      / Hatch Date: 9 Jul
/ Last Location: KUFRI
                      /sire House Name:
                 dam\
                           Tattoo:
                           Tag/Band:
                   00029
```

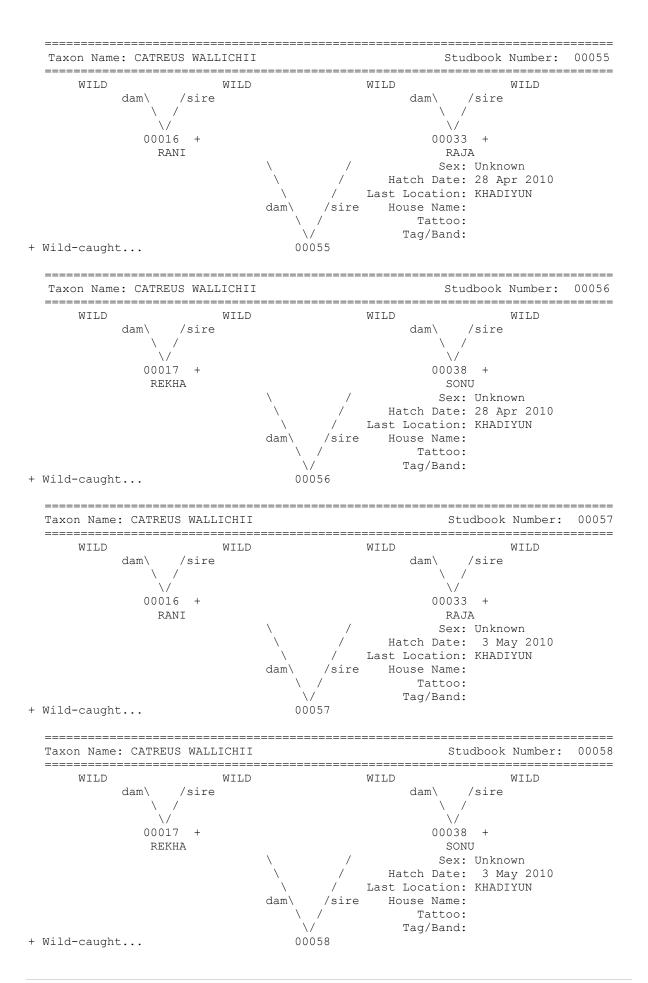
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______
Taxon Name: CATREUS ALLICHII
                               Studbook Number: 00030
______
        UNK
                              UNK
                               Sex: Male
                         Hatch Date: 9 Jul 2006
                      / Last Location: KUFRI
                      /sire House Name:
                            Tattoo:
                            Tag/Band:
                   00030
______
Taxon Name: CATREUS WALLICHII
                              Studbook Number: 00031
_____
       WILD
                              WILD
                              Sex: Female
                      / Hatch Date: ????
/ Last Location: KHADIYUN (dead)
                     /sire House Name: LATA
                 dam\
                            Tattoo:
                            Tag/Band:
                   00031
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00032
______
                              WILD
       WILD
                              Sex: Female
                          Hatch Date: ????
                      / Last Location: KHADIYUN
                         House Name: SHANTI
                            Tattoo:
                            Tag/Band: 10hpwlw
                   00032
Taxon Name: CATREUS WALLICHII
______
                              Sex: Male
                      / Hatch Date: ????
/ Last Location: KHADIYUN
                      /sire House Name: RAJA
                           Tattoo:
                           Tag/Band:
                   00033
______
                              Studbook Number: 00034
Taxon Name: CATREUS WALLICHII
______
                              WILD
        WILD
                              Sex: Female
                          Hatch Date: ????
                        Last Location: KHADIYUN
                      /sire House Name: SITA
                 dam\
                            Tattoo:
                           Tag/Band:
                   00034
______
Taxon Name: CATREUS WALLICHII
                              Studbook Number: 00035
______
                              WILD
        WILD
                              Sex: Male
                      / Hatch Date: ????
/ Last Location: KHADIYUN
                      /sire House Name: RAM
                 dam\
                           Tattoo:
                           Tag/Band:
                   00035
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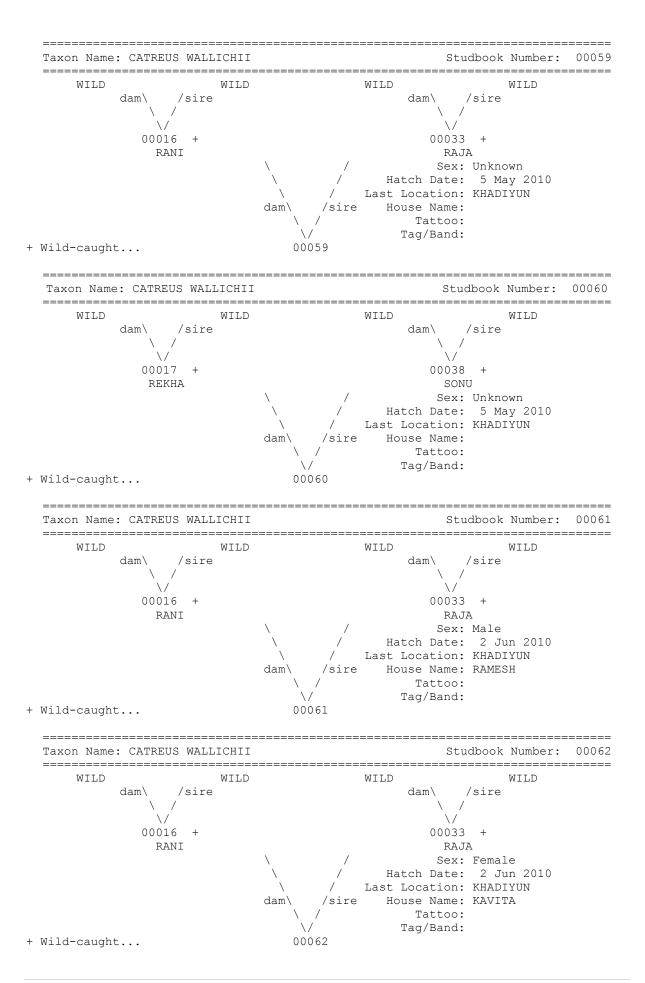
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.______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00036
______
        WITID
                               WITID
                               Sex: Male
                         Hatch Date: ????
                      / Last Location: KHADIYUN
                      /sire House Name: RAVI
                            Tattoo:
                            Tag/Band:
                   00036
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00037
_____
       WILD
                               Sex: Male
                      / Hatch Date: ????
/ Last Location: KHADIYUN
                      /sire House Name: RAKESH
                 dam\
                            Tattoo:
                            Tag/Band:
                   00037
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00038
______
       WILD
                               WILD
                               Sex: Male
                          Hatch Date: ????
                      / Last Location: KHADIYUN
                      /sire House Name: SONU
                            Tattoo:
                            Tag/Band:
                   00038
Taxon Name: CATREUS WALLICHII
______
                               Sex: Male
                      / Hatch Date: ~ 2008
/ Last Location: KHADIYUN (dead)
                      /sire House Name: mohan
                            Tattoo:
                            Tag/Band:
                   00039
______
                               Studbook Number: 00040
Taxon Name: CATREUS WALLICHII
______
        UNK
                              UNK
                          Sex: Female
Hatch Date: 5 Jul 2009
                        Last Location: KUFRI
                      /sire House Name:
                 dam\
                             Tattoo:
                            Tag/Band:
                   00040
______
Taxon Name: CATREUS WALLICHII
                               Studbook Number: 00041
______
        UNK
                               UNK
                               Sex: Female
                      / Hatch Date: 3 Aug
/ Last Location: KUFRI
                         Hatch Date: 3 Aug 2009
                      /sire House Name:
                           Tattoo:
                           Tag/Band:
                   00041
```

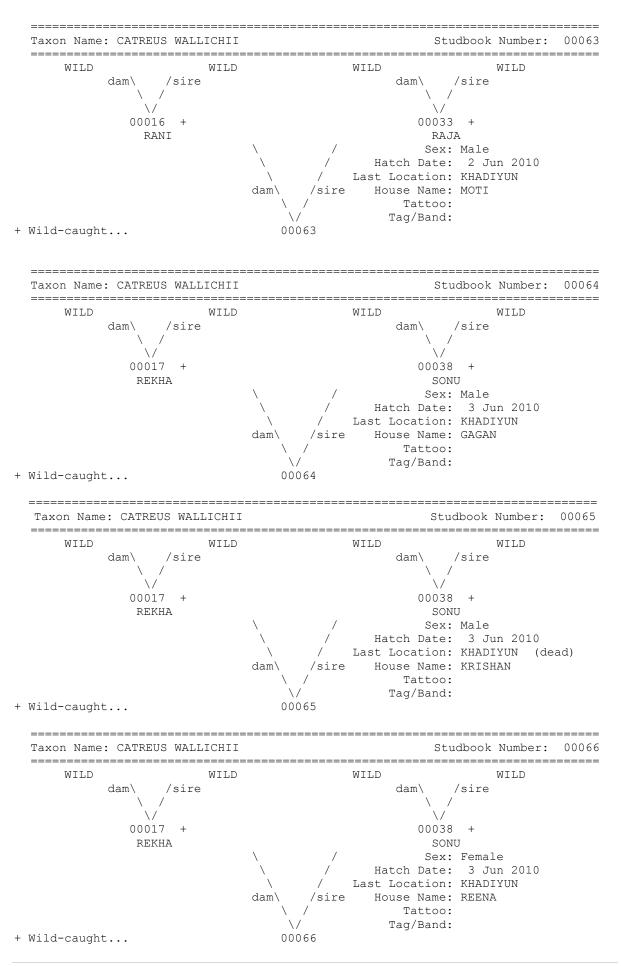
.\_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00042 \_\_\_\_\_\_ UNK UNK Sex: Female Hatch Date: 3 Aug 2009 Last Location: KUFRI House Name: Tattoo: Tag/Band: 00042 \_\_\_\_\_\_ Studbook Number: 00043 Taxon Name: CATREUS WALLICHII \_\_\_\_\_\_ UNK Sex: Female Hatch Date: 3 Aug 2009 Last Location: KUFRI /sire House Name: Tattoo: Tag/Band: 00043 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00044 \_\_\_\_\_\_ UNK Sex: Female Hatch Date: 3 Aug 2009 / Last Location: KUFRI /sire House Name: dam\ Tattoo: Tag/Band: 00044 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00045 \_\_\_\_\_\_ Sex: Female Hatch Date: 3 Aug 2009 Last Location: KUFRI House Name: Tattoo: Tag/Band: 00045 \_\_\_\_\_ Studbook Number: 00046 Taxon Name: CATREUS WALLICHII \_\_\_\_\_\_ UNK Sex: Male Hatch Date: ???? Last Location: SARAHAN (dead) House Name: Tattoo: Tag/Band: 00046

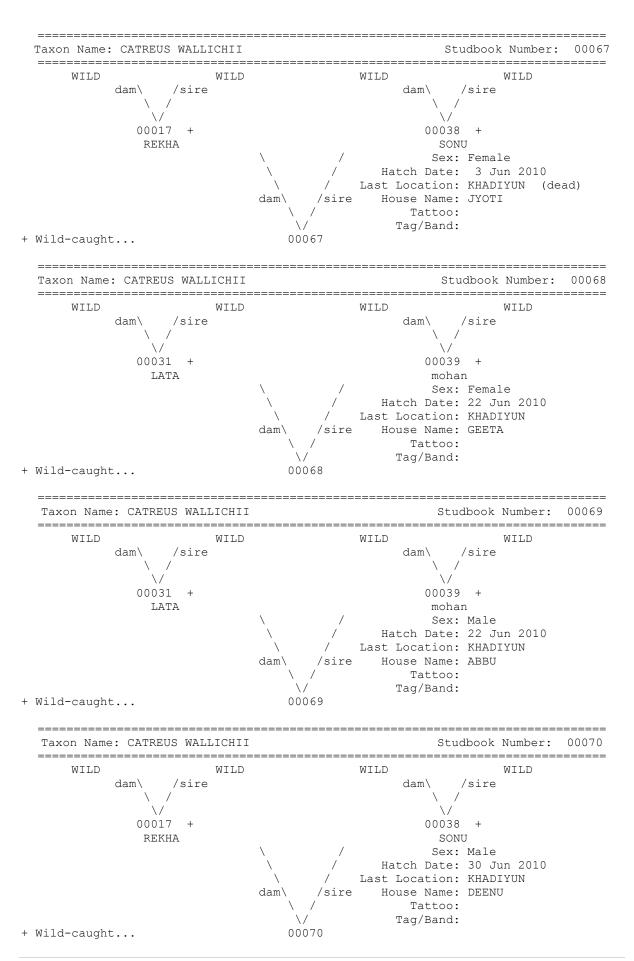




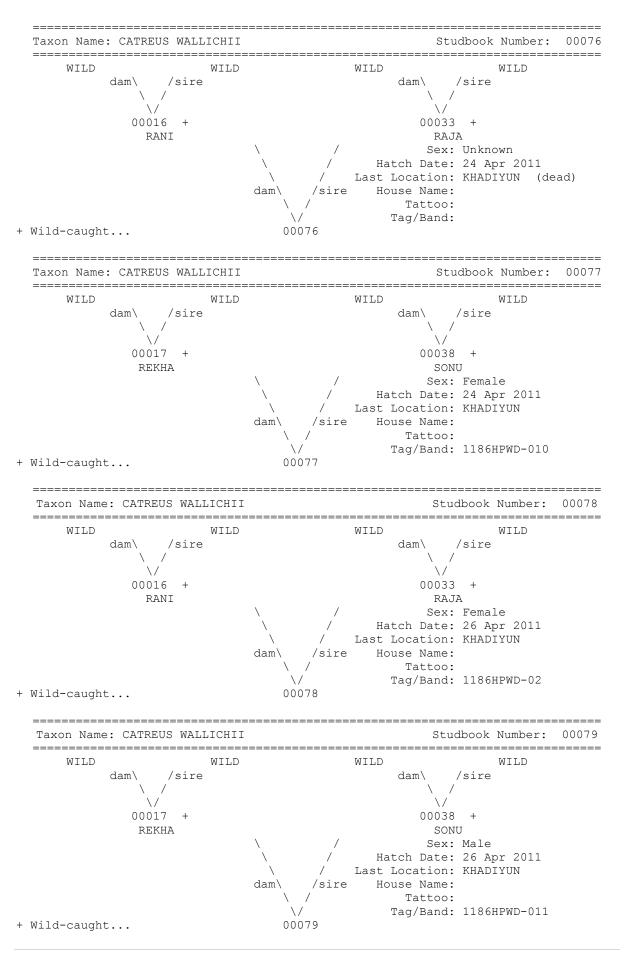


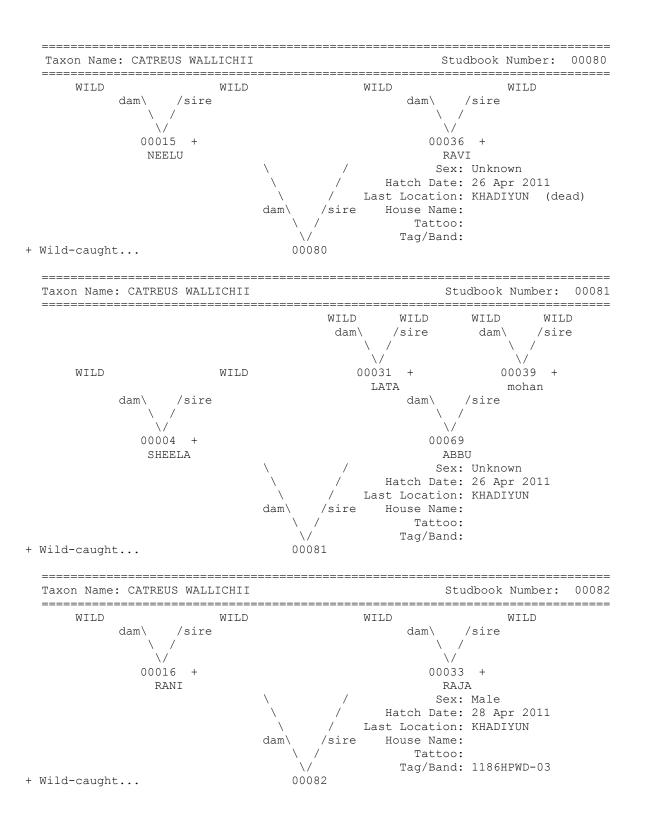


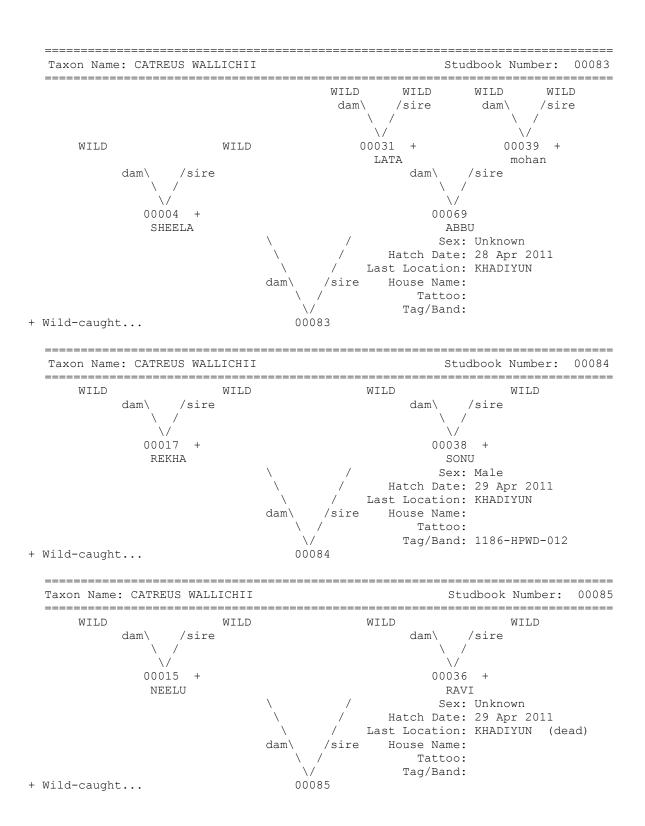


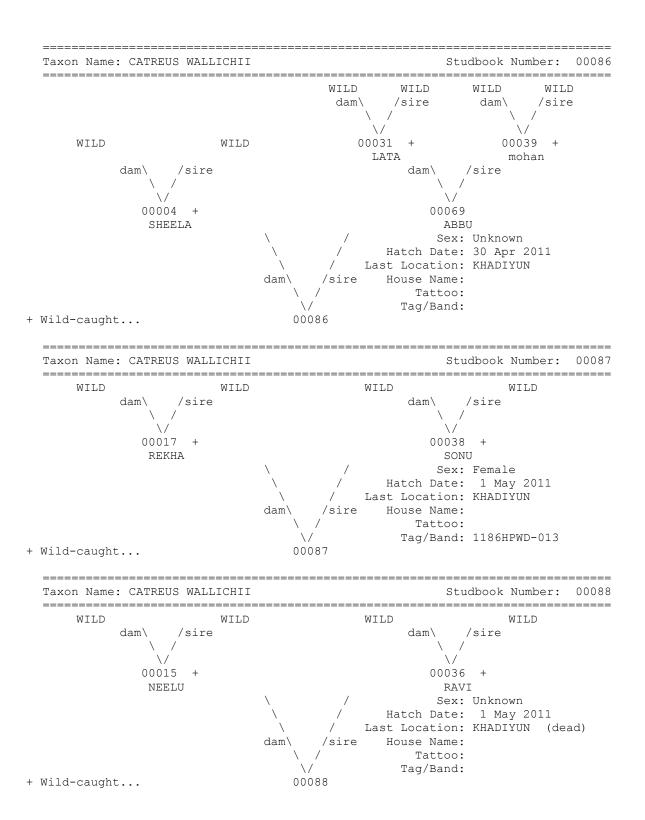


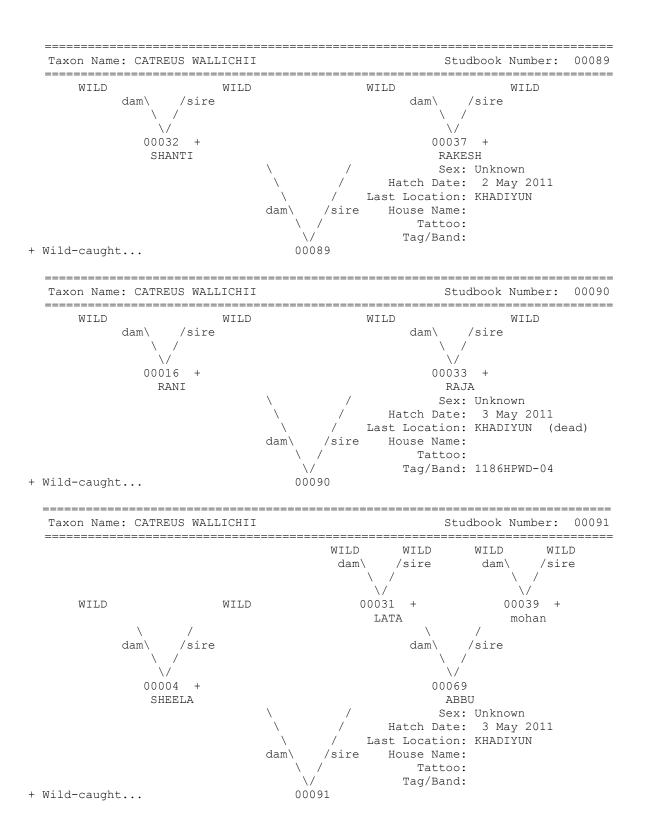
.\_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00071 \_\_\_\_\_\_ UNK UNK Sex: Female Hatch Date: 5 Jul 2010 / Last Location: KUFRI /sire House Name: Tattoo: Tag/Band: 00071 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00072 \_\_\_\_\_\_ UNK Sex: Female Hatch Date: 5 Jul 2010 / Last Location: KUFRI /sire House Name: Tattoo: Tag/Band: 00072 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00073 \_\_\_\_\_\_ UNK Sex: Female Hatch Date: 5 Jul 2010 / Last Location: KUFRI /sire House Name: dam\ Tattoo: Tag/Band: 00073 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00074 \_\_\_\_\_\_ Sex: Female Hatch Date: 5 Jul 2010 Last Location: KUFRI House Name: Tattoo: Tag/Band: 00074 \_\_\_\_\_ Studbook Number: 00075 Taxon Name: CATREUS WALLICHII \_\_\_\_\_\_ UNK UNK Sex: Female Hatch Date: ???? Last Location: SARAHAN (dead) /sire House Name: dam\ Tattoo: Tag/Band: 00075

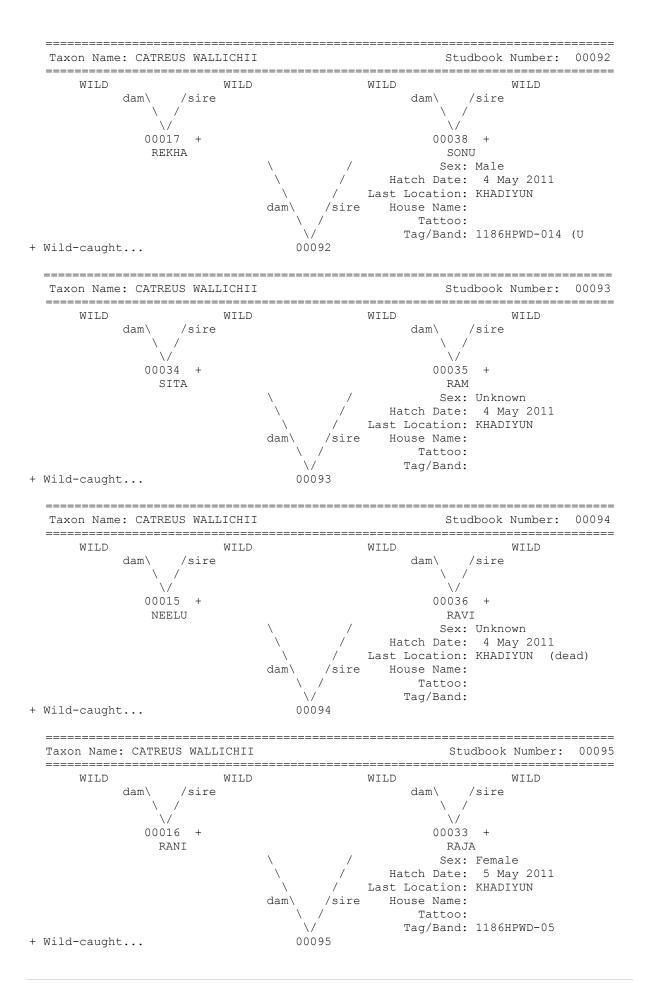


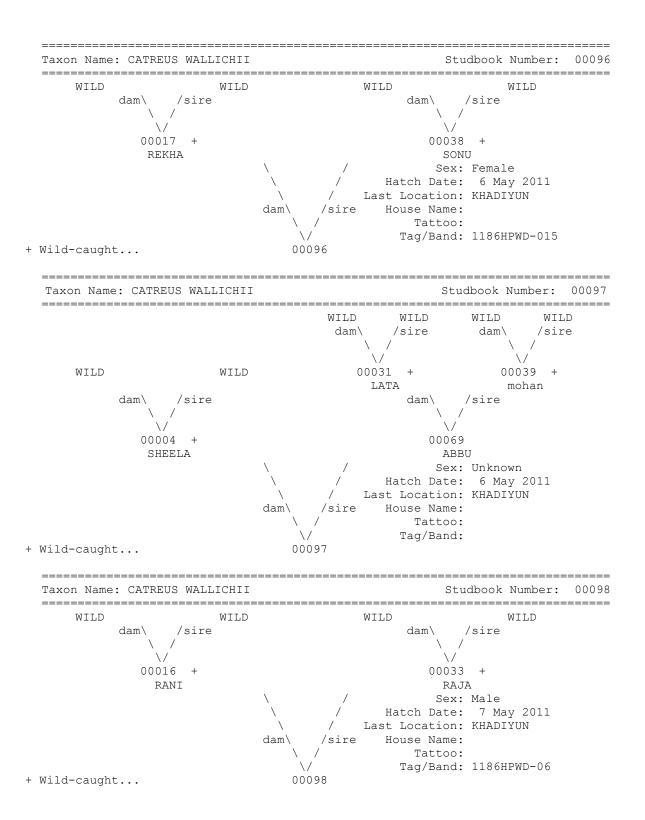


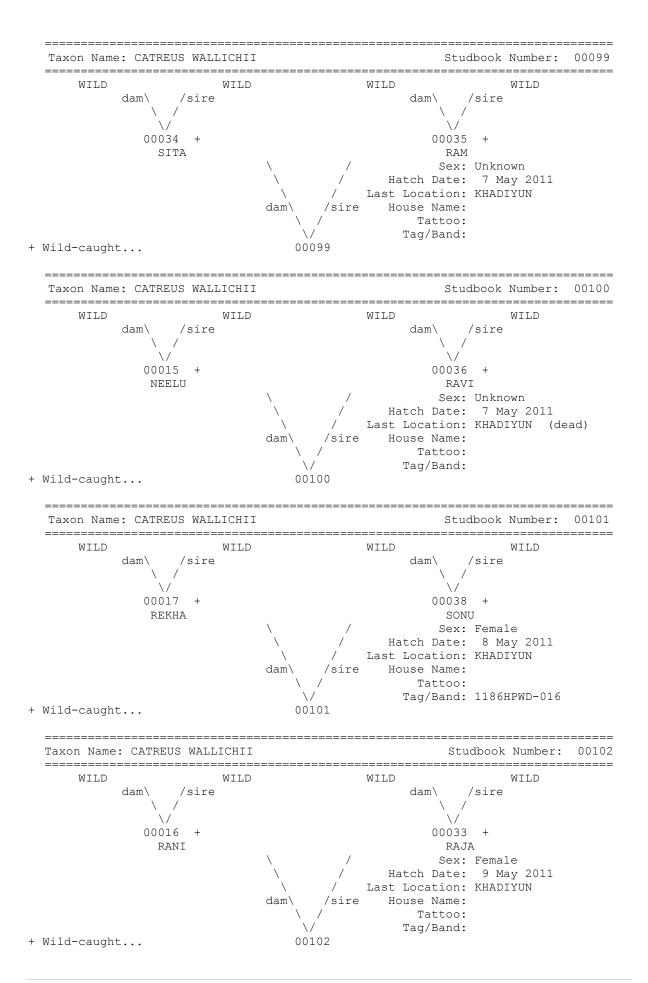


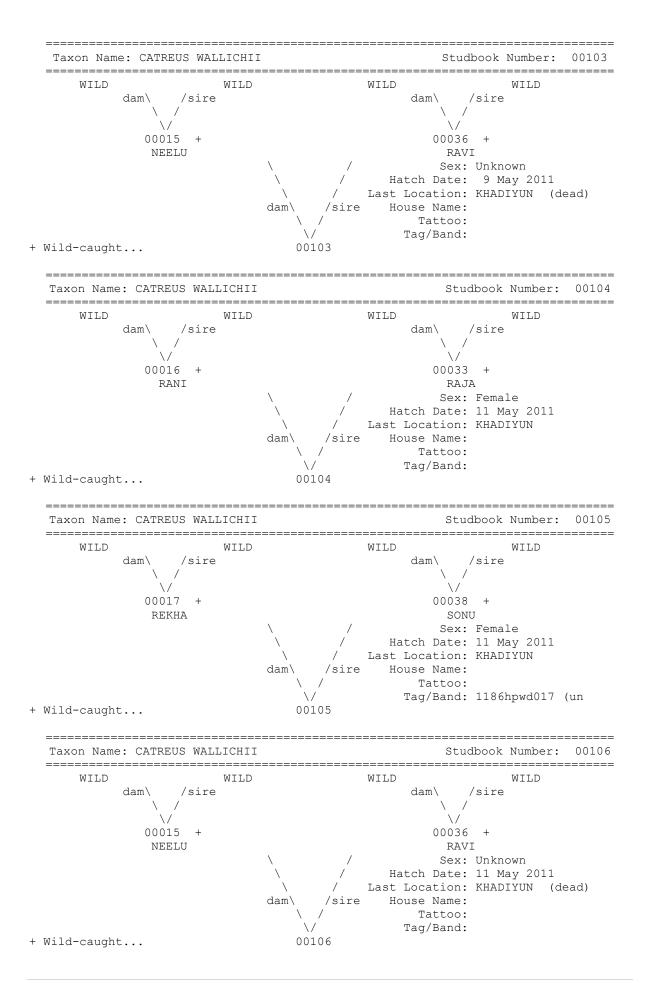


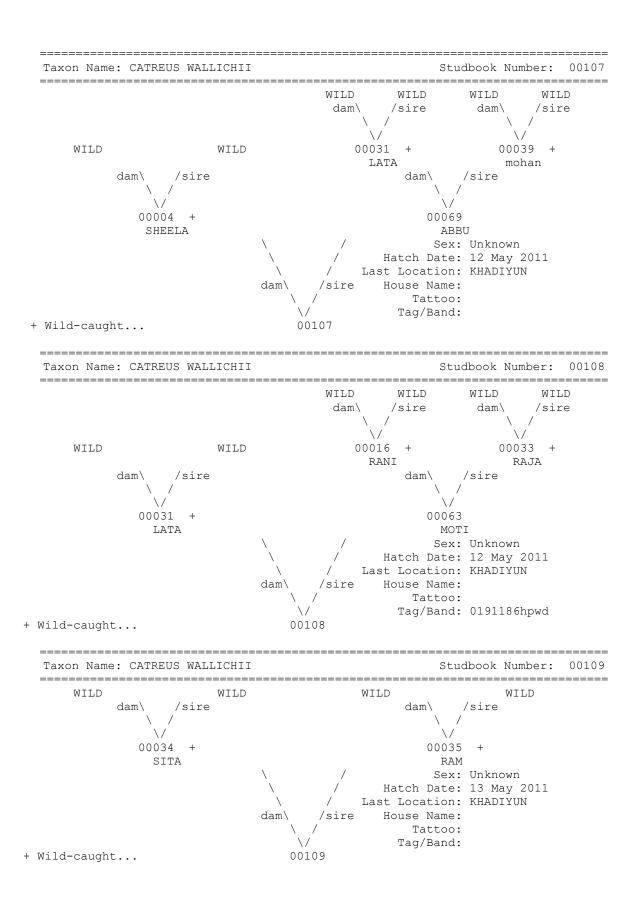


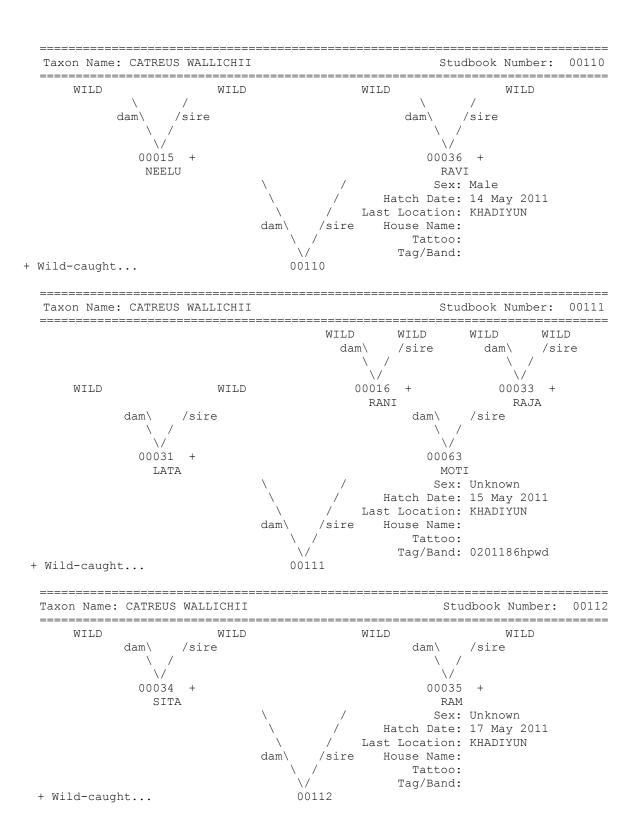


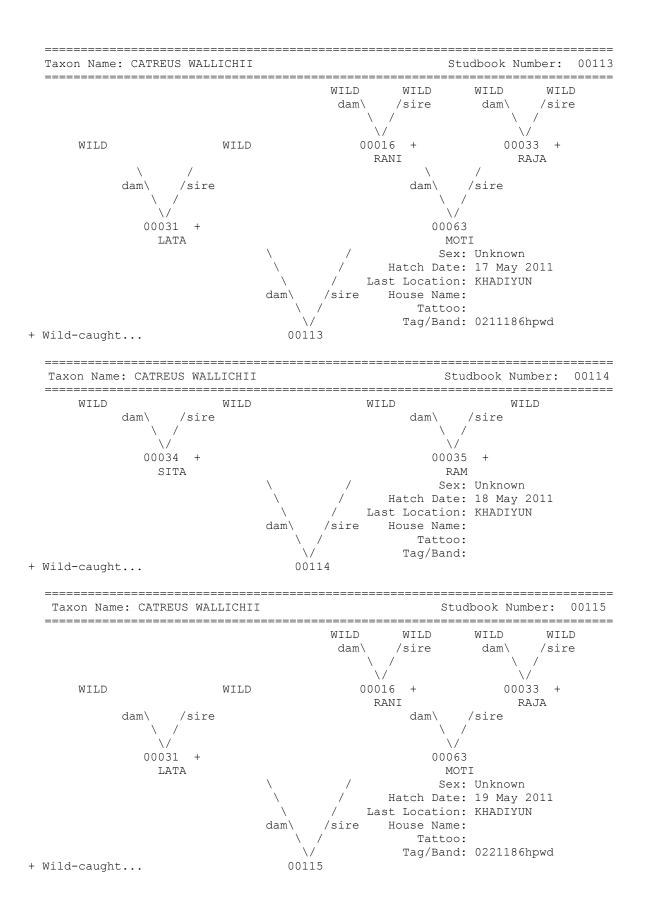


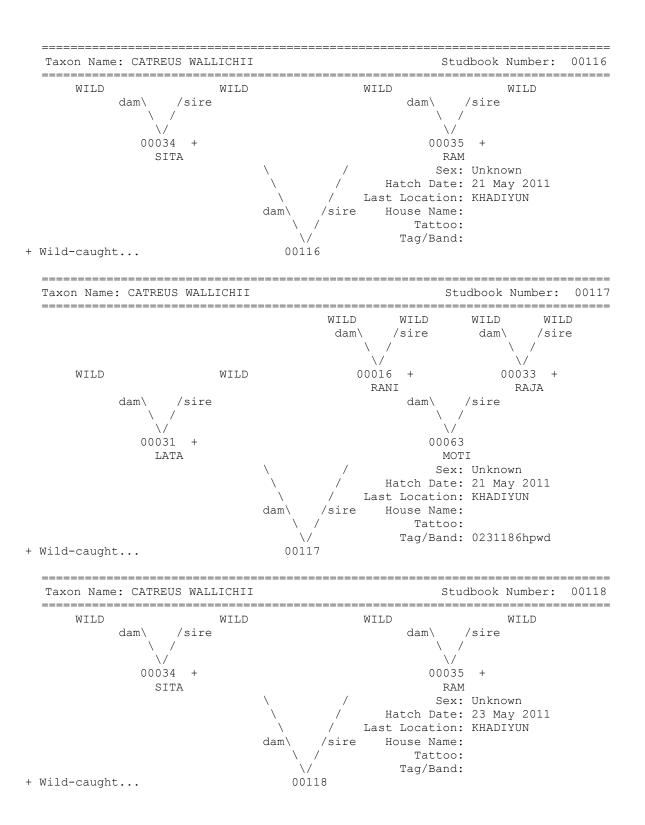


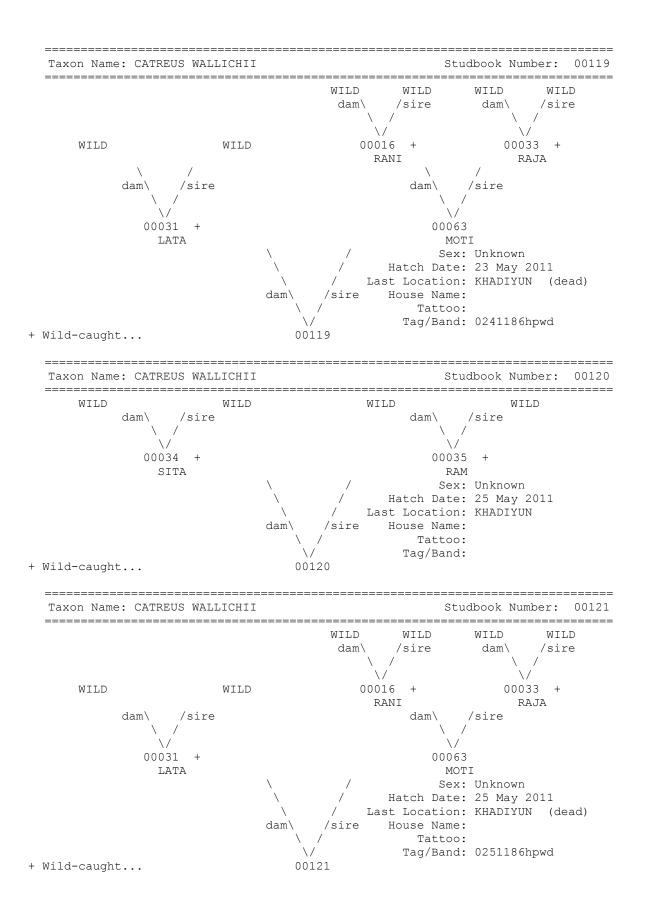


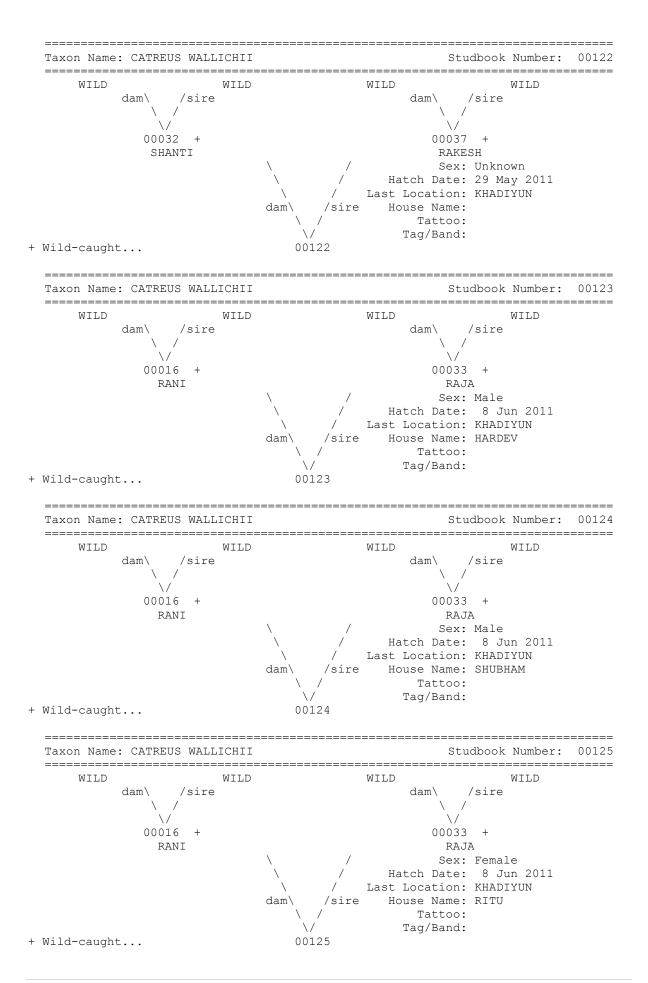


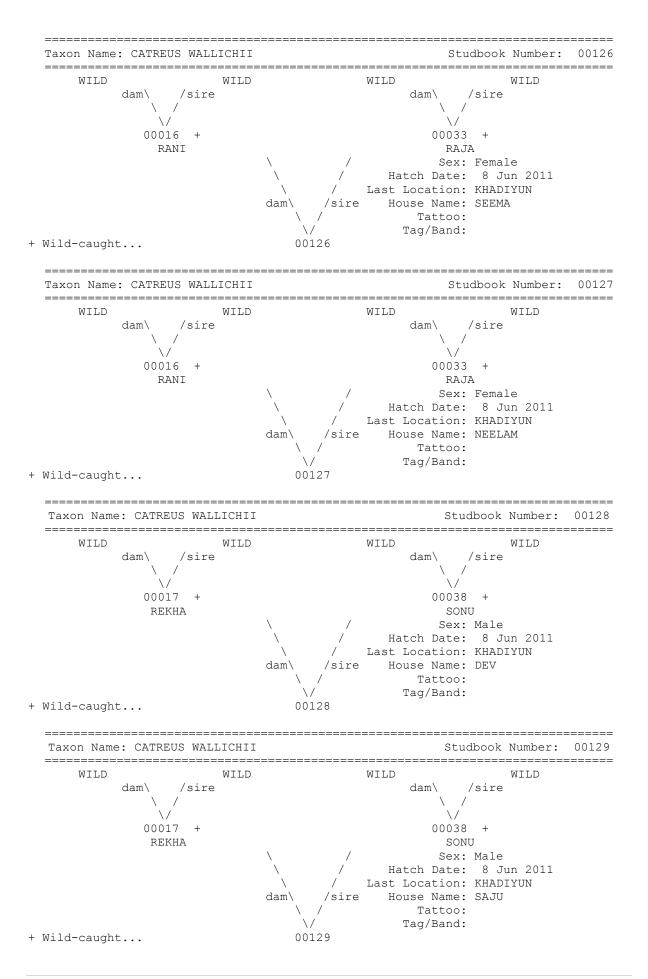


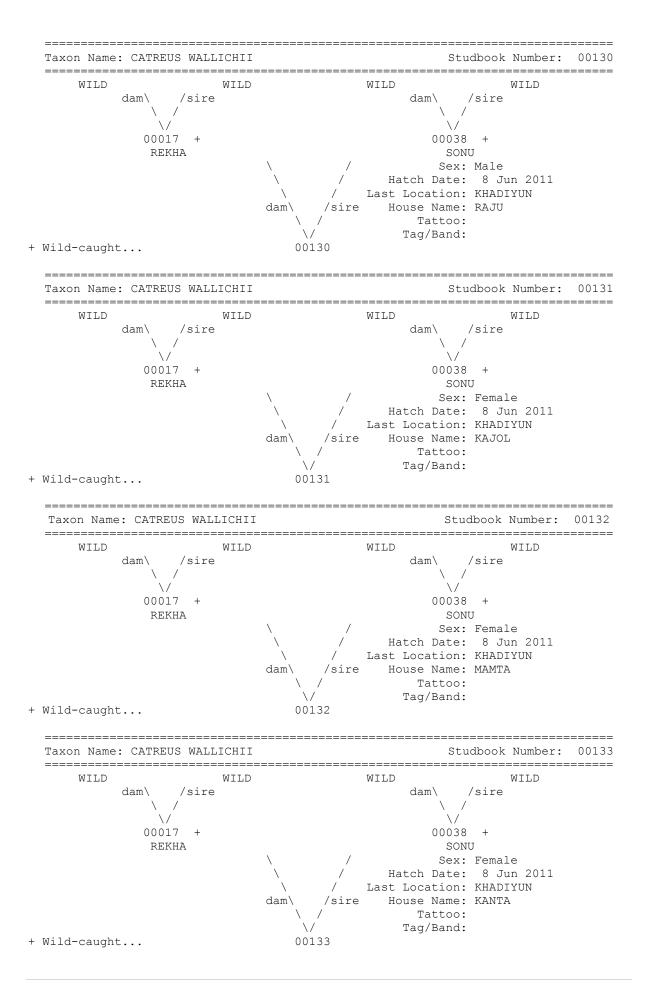


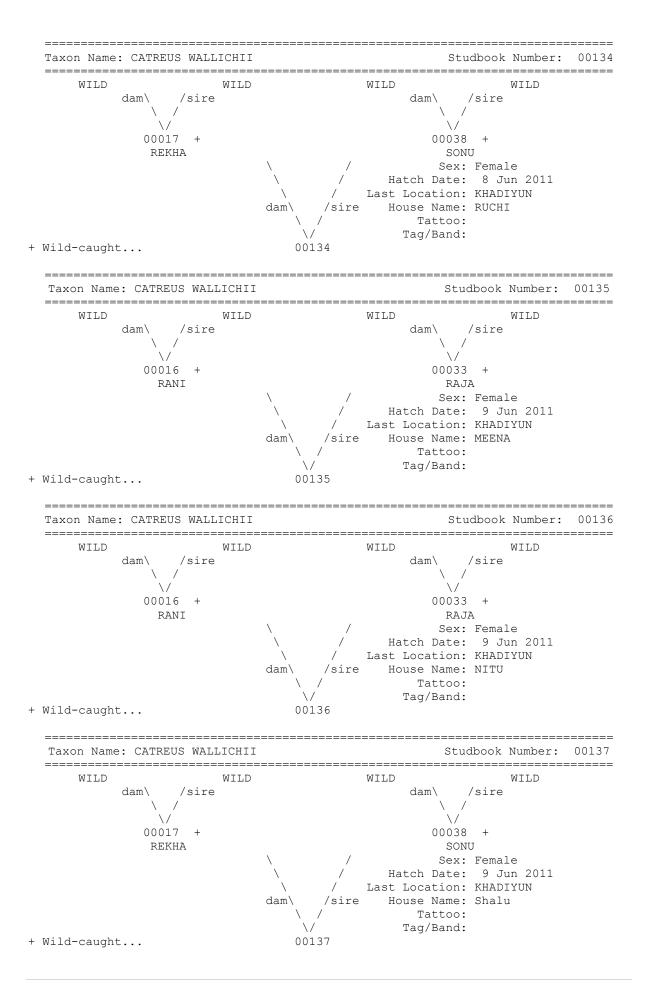


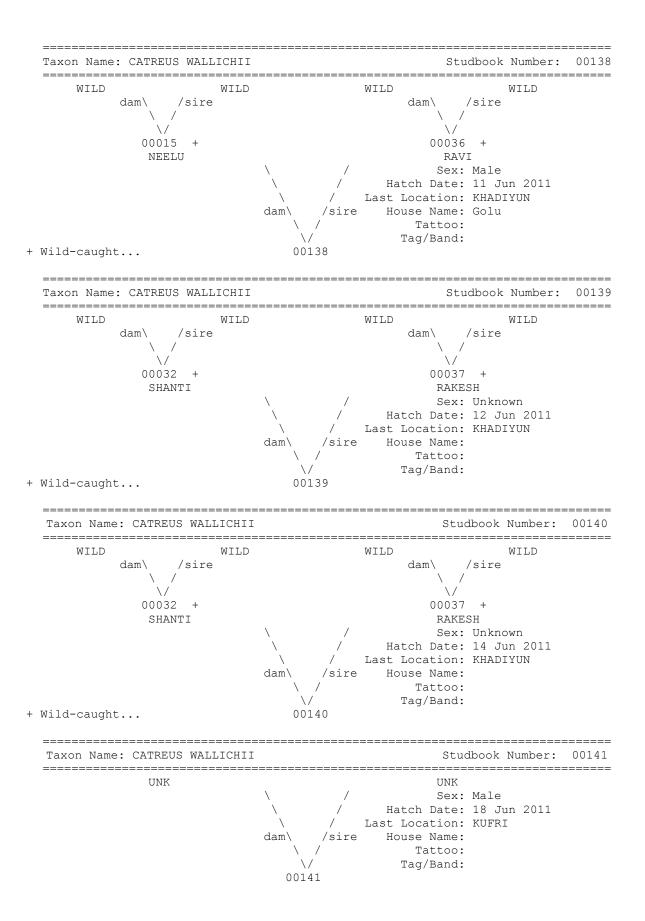




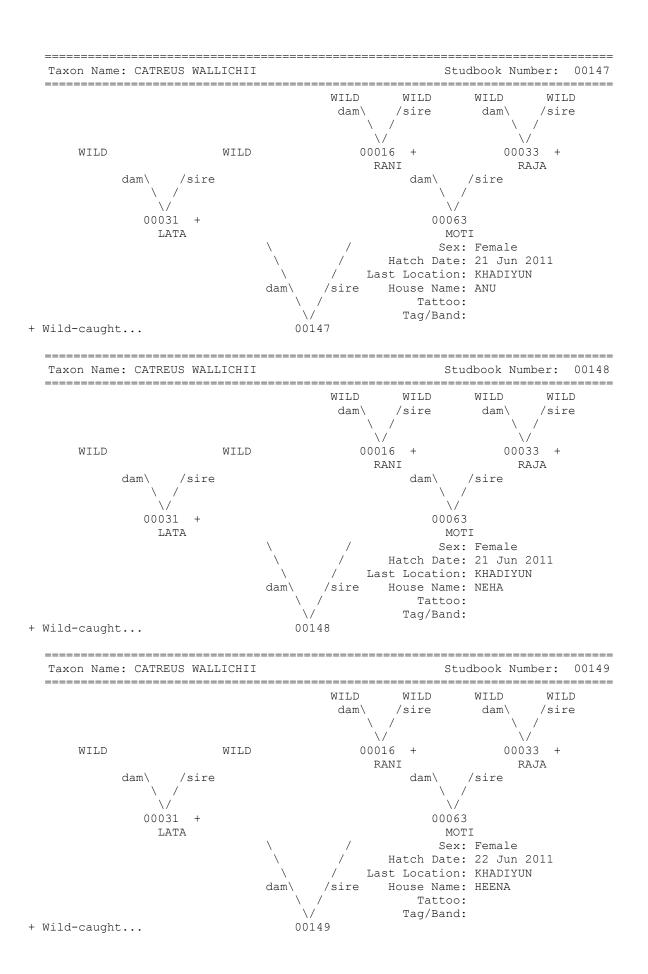


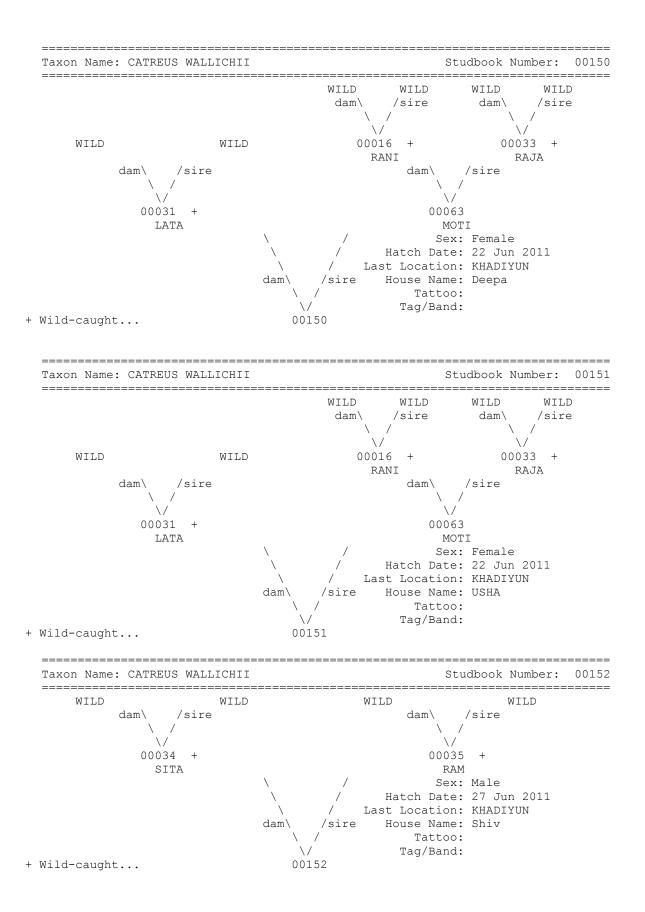






\_\_\_\_\_\_ Studbook Number: 00142 Taxon Name: CATREUS WALLICHII \_\_\_\_\_\_ UNK UNK Sex: Female Hatch Date: 18 Jun 2011 / Last Location: KUFRI House Name: Tattoo: Tag/Band: 00142 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00143 \_\_\_\_\_\_ UNK Sex: Female Hatch Date: 18 Jun 2011 Last Location: KUFRI /sire House Name: Tattoo: Tag/Band: 00143 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00144 \_\_\_\_\_\_ UNK Sex: Female Hatch Date: 18 Jun 2011 / Last Location: KUFRI /sire House Name: dam\ Tattoo: Tag/Band: 00144 \_\_\_\_\_\_ Studbook Number: 00145 Taxon Name: CATREUS WALLICHII \_\_\_\_\_\_ Sex: Female Hatch Date: 18 Jun 2011 Last Location: KUFRI /sire House Name: Tattoo: Tag/Band: 00145 \_\_\_\_\_ Studbook Number: 00146 Taxon Name: CATREUS WALLICHII \_\_\_\_\_\_ UNK UNK Sex: Female Hatch Date: 18 Jun 2011 Last Location: KUFRI /sire House Name: dam\ Tattoo: Tag/Band: 00146





\_\_\_\_\_\_ Studbook Number: 00153 Taxon Name: CATREUS WALLICHII \_\_\_\_\_\_ UNK UNK Sex: Female Hatch Date: 9 Jul 2011 / Last Location: KUFRI House Name: Tattoo: Tag/Band: 00153 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00154 \_\_\_\_\_\_ UNK Sex: Female Hatch Date: 9 Jul 2011 Last Location: KUFRI /sire House Name: Tattoo: Tag/Band: 00154 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00155 \_\_\_\_\_\_ UNK Sex: Female Hatch Date: 9 Jul 2011 / Last Location: KUFRI /sire House Name: dam\ Tattoo: Tag/Band: 00155 \_\_\_\_\_\_ Taxon Name: CATREUS WALLICHII Studbook Number: 00156 \_\_\_\_\_\_ Sex: Female Hatch Date: 9 Jul 2011 Last Location: KUFRI /sire House Name: Tattoo: Tag/Band: 00156 \_\_\_\_\_ Studbook Number: 00157 Taxon Name: CATREUS WALLICHII \_\_\_\_\_\_ UNK UNK Sex: Female Hatch Date: 9 Jul 2011 Last Location: KUFRI /sire House Name: dam\ Tattoo: Tag/Band: 00157

