



SRI CHAMARAJENDRA ZOOLOGICAL GARDENS

ANNUAL REPORT 2019-20





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1 Report of the Officer-In-Charge

Dear Readers,

The advancement in understanding about the needs of wild animals and their habitat has definitely contributed towards transforming the zoo's from place of confinement of wild animals to a place where their living has better meaning and greater purpose. There has been lot of improvement in terms of housing, provision of naturalistic setup, health care and the purpose of housing of animals at Zoo. These words apply to Mysore Zoo as well.

During this year also there has been lot of progress in terms of improving animal welfare, promoting conservation education, *ex-situ* conservation breeding of rare and endangered species, addition of new species to Mysore Zoo animals collection and in getting animals from other zoos through animals exchange, improvement of visitor facilities apart from contributing towards *in-situ* conservation by capacity building of field staff of Forest Department in rescue and rehabilitation of conflict animals, providing housing to rescued wild animals in rescue centre.

This year also we could contribute significantly towards the development of other 8 zoo's of Karnataka by contributing in terms of technical know-how, veterinary medicines and tools, funding developmental activities and also donation of zoo animals.

This year also we could contribute towards conservation education through Youth Club, Summer Camp, Conservation Speeches, Workshops, Celebration of various events of international importance.

This years' additional work of greater importance and relevance was scientific desiltation of Karanji Lake and Celebration of Karanji Lake Festival. Through this activity, the importance of urban lakes and need of their conservation was highlighted.

This year we could add a pair of White Rhino, a female Chimpanzee, pair of Hoolock Gibbon, a female Indian Rhino and a panther to our collection and could successfully transport a male Giraffe Calf to Guwahati from Mysore by road covering over 3200 km by road. This is the longest ever transportation of Giraffe by road in India.

We could complete construction of Conservation Breeding Centre for Grey Wolf, replace old stone pillars of historic Thandi Sadak to ensure visitors safety, start construction of enclosure for Jaguar and construction of under pass to connect zoo with vehicle parking area to ease traffic congestion and to promote visitors safety and comfort.

This year we received less number of visitors to Zoo and Karanji Lake compared to last year due to flood situation in Kerala and Coorg District during rainy season and due to COVID -19 global pandemic during last quarter of the financial year. Looking to present situation pandemic, next year it is going to be tougher for the zoo and we may have to seriously consider ways of resource mobilization and its use so as to improve the resilience of the zoo's to such untoward incidents in future.

Whatever good work we could do this year is mainly because of unconditional and continuous support and guidance of our Member Secretary, Zoo Authority of Karnataka, Sri Ravi B P IFS, APCCF. We express our sincere gratitude to Sir. The kind cooperation of the Ministry of Environment, Forests and Climate Change, the Central Zoo Authority, the Director General of Foreign Trade, Department of Animals Husbandry, New Delhi, Regional Office of Wildlife Crime Control Bureau, Chennai, District Administration and Police of Mysore is acknowledged and deeply appreciated.

I express my sincere gratitude to all staff colleagues of Mysore Zoo for their dedicated work in improving the zoo.

I express my sincere gratitude on behalf of Mysore Zoo family to all the esteemed donors, visitors and well wishers for their continued support.

Ajit M Kulkarni IFS

Deputy Conservator of Forests & Executive Director
Sri Chamarajendra Zoological Gardens,
Mysuru.

2 History of the Zoo



Sri Chamarajendra Wodeyar Bahadur

Sri Chamarajendra Zoological Gardens, popularly known as 'Mysuru Zoo', is one of the oldest zoos of the country. His Highness, the erstwhile Ruler of Mysuru, Sri Chamarajendra Wodeyar Bahadur, established it in the year 1892. In 1909, the Palace Zoo was named as Sri Chamarajendra Zoological Gardens to commemorate the illustrious founder. It was started with an area of 10.9 Acres; another 6.22 acres were added to the zoo in 1907. Subsequently the zoo had extended to 45 acres. As on today Mysuru Zoo is spread over 157.02 acre including 77.02 acres of Karanji Lake.

Our Maharajas took keen interest in zoo management, Mr. A.C. Hughes, from South Wales, was the zoo's first superintendent. He served as the superintendent from 1892 to 1924, along with Sir Mirza Ismail and G.H. Krumbiegel who worked towards updating the zoo with modern and natural enclosures.

Post-Independence, the administrative control of the zoo was transferred from Palace to Horticulture during 1948. In the year 1972, administrative control was transferred to Forest Department from the parks and gardens department. During 1979, the Government decided to create an autonomous body to run the zoo, i.e. Zoo Authority of Karnataka (ZAK). During 2001, ZAK was expanded to manage 8 zoos, which were under the control of Forest Department.

Sri Chamarajendra Zoological Gardens

Initially, it was a menagerie for animals received by Maharaja's of Mysore as a gift from various parts of the country. It also served as an "Orphanage" for rearing abandoned wild animals such as the calves of elephant and gaur, cubs of tiger and leopard and other wild animals rescued from nearby forest areas. It is renowned for housing exotic animals along with native species. It housed exotic animals like Gorilla, Chimpanzee, Orangutan, Black Rhino, White Rhino, African Elephant, Penguin, Red Kangaroo, Lemur, Giraffe, Zebra, Sun Bear, Polar Bear, Baboons, Binturong, Secretary Bird, California Sea Lion, Wild Beast, Eland Antelope, Barberrry Sheep, Emu, Rhea, Ostrich, Macaws, Pheasants apart from majority of animals from Indian subcontinent. For the first time in Indian History, all three species of large apes i.e. Gorilla, Orangutan and Chimpanzee were acquired and housed at Mysore Zoo. Many of these exotics even bred well at zoo. To name few species that bred successfully here are Zebra, Chimpanzee, Hippopotamus, African Black Rhino, Wild beast, Eland Antelope, Barberrry Sheep, Emus, Ostrich, Giraffe, Kangaroos and other animals and several birds. This trend continues even today. In native species also the housing and breeding of animals has been very good. It also has breeding of Elephants in zoo for the first time in the country. First Asiatic elephant was born in zoo in the year 1967, first Giraffe calf was born in late 60's.

Since beginning efforts were made to ensure animal welfare. The tiger house built during Maharajas time is relevant even today and is larger and superior compared to exiting norms. With improvement in understanding about animal's requirements and exposure to better practices there has been continuous improvement in housing and other practices.

Along with zoo animals, the welfare of zoo staff and zoo visitors has also evolved with time. All staff are paid as per Government norms along with additional benefits like free uniform, subsidized working lunch, gratuity, health insurance, accident insurance, improved bio-security measures, training and exposure visits to other zoo's etc. Visitors have facilities like online booking system, battery operated vehicles on payment basis, improved signages, free potable water, toll free toilets, rain shelters, accident insurance, first aid unit at zoo premises, education officer and volunteer zoo educators to guide and assist visitors, restaurant, souvenir shops, library, child-care unit exclusively for mothers with young babies, benches, place to have home food, luggage room, battery operated vehicles and wheel chair facility. People also have an opportunity to express their concern towards Mysore Zoo and its animals by adopting animals of their choice by donating fixed amount. This Adoption Program has been quite popular and every year, the number of people adopting animals is also increasing.

Zoo has moved from initial day purpose of display of animals to promotion of conservation education, conservation breeding, rescue and rehabilitation wild animals in distress and research which benefits wild animals and also of use to field officers. There are very informative signages, education programs like Zoo Youth Club, Summer Camps, Conservation Speeches, Celebration of Days and events of national and international importance pertaining to wildlife, Awareness creation training programs for zoo personnel and field officers of forest department, attachment and internship programs for Veterinary and Forestry Graduates and Volunteers apart from other out-reach programs. Zoo is breeding many endangered species and has proposal for establishment exclusive conservation breeding center for Gaur, Grey Wolf, Dholes, Nilgiri Langur, Lion Tailed Macaque, Malabar Giant Squirrel and Grey Jungle Fowl. Zoo has also established Rescue and Rehabilitation Centre for wild animals in distress (conflict animals, injured, orphans etc.) at Kurgalli over 113 acre of land. It houses species like tigers, leopards, elephant and other species.

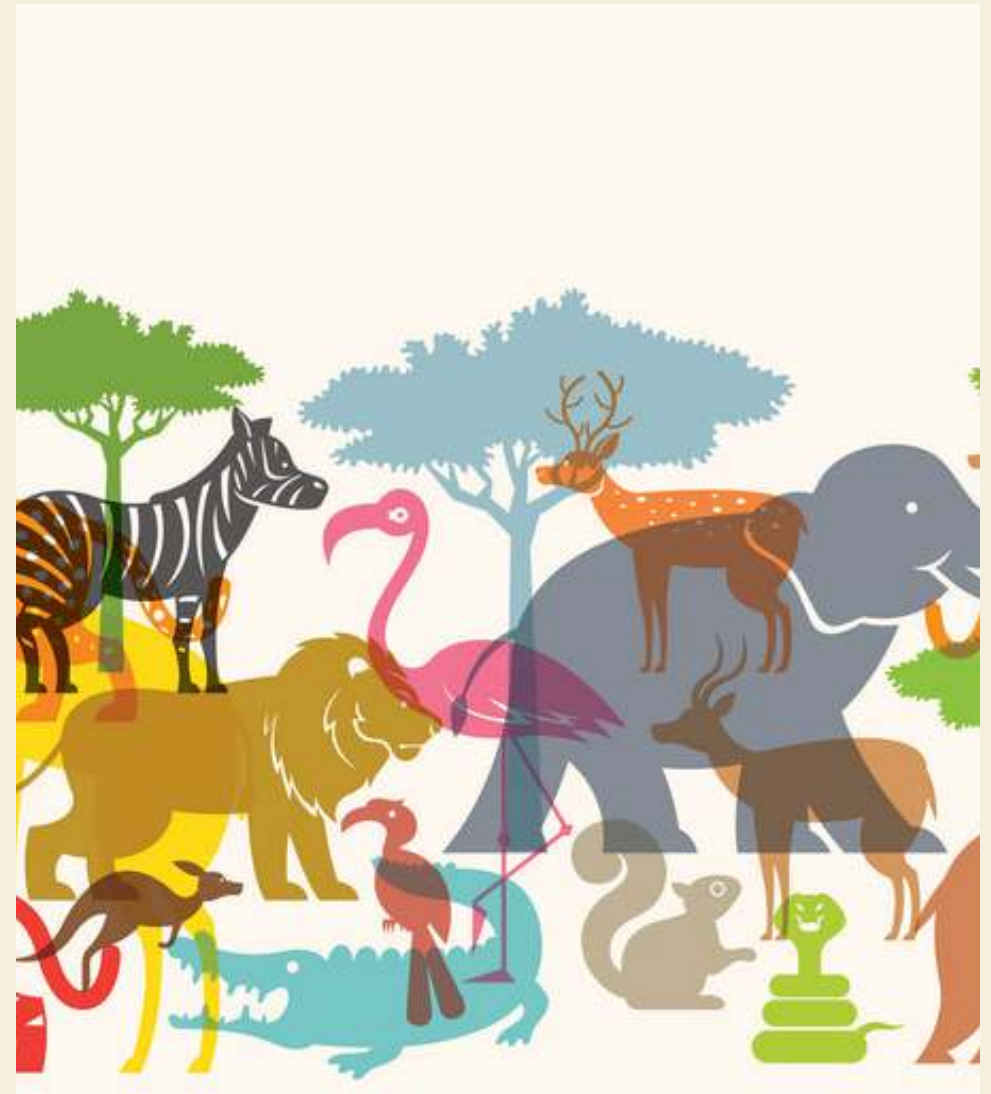
Zoo has also done a pioneering work in solid waste management, plastic control and rainwater harvesting. Animal dung is used for biogas production and fibrous dung and leftover fodder waste is converted into Vermicompost and is even sold to nearby farmers and nurseries. In order to reduce plastic usage, at the entrance of zoo, visitors are requested to transfer their eatables into paper covers which are provided free of cost. The annual consumption of water by zoo 24 Crore litres and rainwater harvesting is 79 Crore Litres. Karanji Lake, which is adjacent to Zoo has been transferred to Zoo Management from Minor Irrigation for better management. This lake is being managed scientifically by involving stakeholders and domain experts. There are three rainwater harvesting ponds inside zoo premises and surplus water from adjacent Karanji Lake reaches these ponds through stone pitched flood water drains and animal moats.

Another feather in the cap is restoration of Lalithadripura Lake. This lake had become a septic tank, but we could convert this into Mysuru City's major bird habitat. The lake was handed over to us by District administration during the year 2018. We by involving local wetland experts and using past experience gained in improving Karanji Lake could improve this lake as well. As on today more than 100 species of birds are recorded by local bird enthusiasts and naturalists.

Mysore Zoo could retain the interest of visitors over years and there has been considerable increase in the number of visitors every year. Last year we received 35 lakh visitors despite of flood situation in Kerala and COVID 19 and closure of zoo for visitors since 15.03.2020.

Over a time, the interaction and cooperation amongst Zoo's of Karnataka has increased a lot. Mysore Zoo is helping other upcoming zoo's of Karnataka in terms of knowledge and experience sharing, financial assistance, donation of animal and assistance in animals housing and treatment.

Another unique feature of the zoo is the financial self-sustenance. Mysore zoo is self-sustaining since the year 2002, thanks to our visitors and State Government, which allows retention of revenue in Zoo Authority of Karnataka and reuse of the same for zoo activities. However, closure of zoo to visitors and likely effect of COVID 19 may force us to seek financial assistance from the Karnataka State Government.





3

Vision

Inspire and create a shared sense of purpose towards conservation of wildlife.



4

Mission

Conveying the message of conservation education through demonstrative, replicable and learning experiences without compromising the expected standards of display of wild animals and flora under the existing policies and rules.

To connect visitors and animals through exemplary animal welfare and care, best educational and inspirational experiences, fostering public appreciation and support for wild animals and conservation.

To complement and strengthen the natural efforts in Conservation of the Rich Bio-diversity of the Country, particularly of the wild fauna, by housing healthy Wild Animals in suitable, large, enriched and naturalistic ex-situ captive habitat with good health care facility.



5

Objective

- Conservation education.
- Conservation breeding.
- Research, documentation and study.
- Rescue & Rehabilitation of the wild animals.
- Recreation of people.

6 About Us



SRI CHAMARAJENDRA ZOOLOGICAL GARDENS

Basic information about the Zoo

Name of the Zoo	Sri Chamarajendra Zoological Gardens
Year of Establishment	1892
Address of the Zoo	Sri Chamarajendra Zoological Gardens, Zoo Road, Indira Nagar, Ittige Gudu, Mysuru, Karnataka-570010
Country	India
State	Karnataka
Telephone Number	0821-2440752, 0821-2520302
Fax number	+91-821-2563494
E-mail address	zoomysore@gmail.com
Website	www.mysorezoo.org

Distance from Nearest	Airport: 10 km
	Railway station: 3.1 km
	Bus stop: 15 m

CZA Recognition Valid up to	28.08.2020
Category of Zoo	Large
Area (in Hectares)	63.58
Number of Visitors (Financial year 2019-20)	Adult : 27,09,231 Children : 4,13,421 Students : 3,83,186 Total Indian : 35,05,838 Total Foreigners : 3,348 Total Visitors : 35,09,186

Visitors' Facilities Available in Zoo	Online ticket booking, Battery Operated Vehicles, Wheelchair, Baby Care Centre, Free Potable Water, Toll Free Toilets, Rain Shelters, Benches, First Aid Unit, Food court, Canteen, Souvenir Shops and Signages
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Weekly closure of the Zoo for visitors	Tuesday
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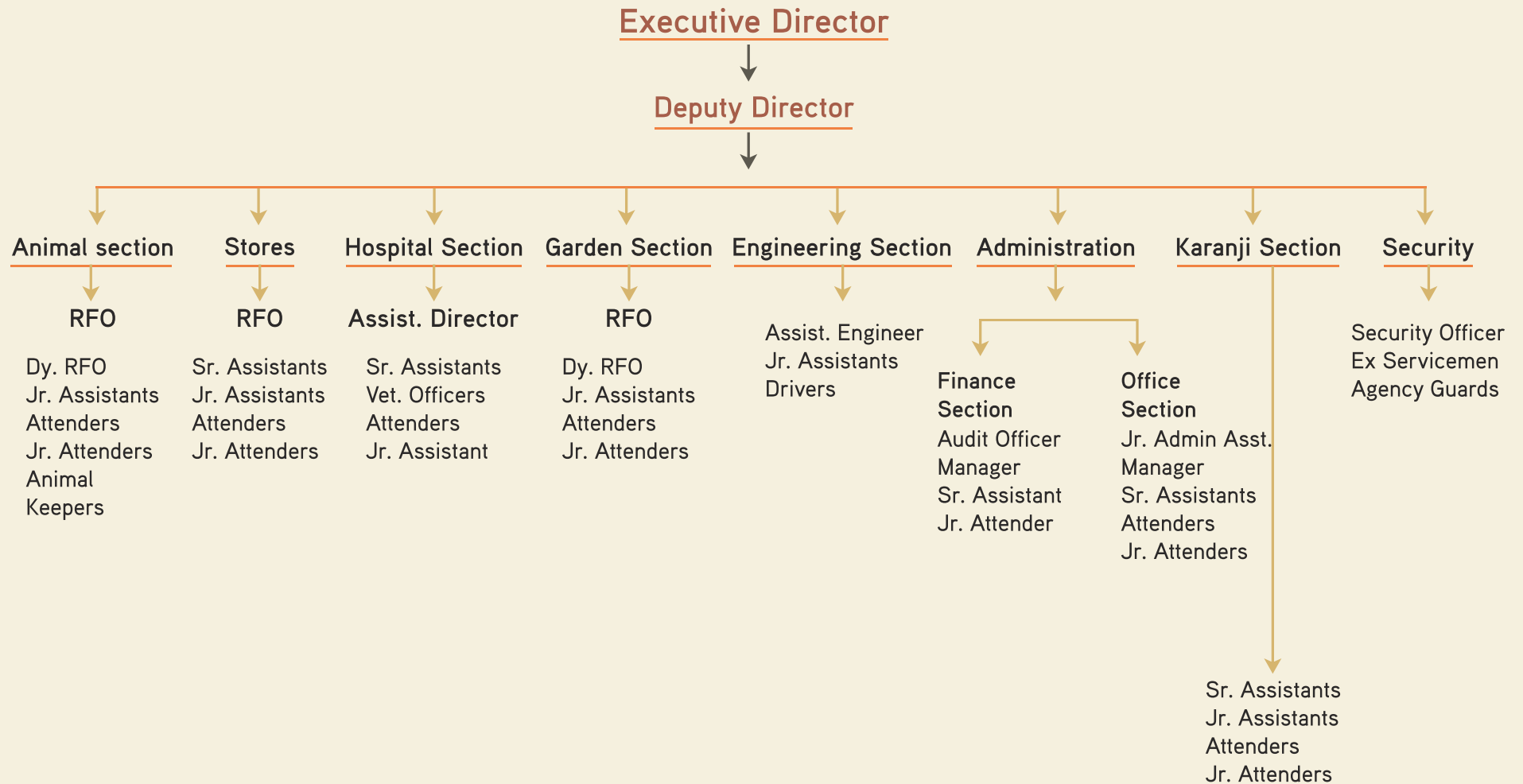
Management Personnel of the Zoo

Name with designation of the Officer in-charge	Ajit M Kulkarni IFS Deputy Conservator of Forests and Executive Director
Deputy Director	H B Manjunath SFS
Assistant Director	Dr. K. R. Ramesh

Owner/Operator of the Zoo

Name of the Operator	Ajit M Kulkarni IFS Deputy Conservator of Forests and Executive Director
Address of the Operator	Sri Chamarajendra Zoological Gardens, Zoo Road, Indira Nagar, Ittige Gudu, Mysuru, Karnataka-570010.
Contact details/Phone number of Operator	0821-2440752, +91 9686668866
E-mail address of Operator	zoomysore@gmail.com

7 Organizational Chart



8 Human Resource

8.1 Officers / Officials working in Sri Chamarajendra Zoological Gardens, Mysore, on Deputation from various Department

Sl.no.	Designation	Number of sanctioned posts	Names of the incumbent
1.	Deputy Conservator of Forests & Executive Director	1	Ajit M Kulkarni
2.	Deputy Conservator of Forests & Deputy Director	1	H.B.Manjunath
3.	Assistant Director, AH & VS	1	Dr. Ramesh K.R.
4.	Assistant Engineer	1	G. Aravind
5.	Veterinary Officers	2	Dr. B. Manjunatha, Dr.K.V. Madan
6.	Audit Officer	1	R.H.Ramesh
7.	Range Forest Officer	2	A.V. Satish, Rakshith R.
8.	Deputy Range Forest Officer	2	Kishore N, Manjunath P.O.

8.2 Permanent staff of Zoo Authority of Karnataka

Sl. no.	Designation	Number of sanctioned posts	Names of the incumbent
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Animal Section

1.	Senior Assistant	1	M.G. Udayakumar
2.	Junior Assistant	1	K.R. Uthappa
3.	Attender	4	Kalaiah, M. Chikkanna, , M. Krishna
4.	Junior Attender	4	Pandyan, Puttaswamy, Narasamma, Naganna, M. Sharadha

Finance Section

1.	Senior Assistant	2	S.Sathyarayanan, B.I. Kalpana
2.	Junior Attender	1	T.Srinivasa

General Section

1.	Senior Assistant	1	C.R. Rajegowda
2.	Junior Attender	2	S. Devkumar, P. Manjula

Sl. no.	Designation	Number of sanctioned posts	Names of the incumbent
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Hospital Section

1.	Junior Assistant	1	H. Shivananju
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Gardening Section

1.	Junior Assistant	1	Sharada
2.	Attender	2	C. Shankara, Venkatamma
3.	Junior Attender	6	Channaiah Ankaiah, Channaiah Mahalingaiah, Pattamma, K. Divya Subhachandra, Puttadevamma,

Karanji and Koorgahalli Section

1.	Junior Assistant	2	R.K.Krishne Gowda, C. S. Annegowda
2.	Junior Attender	2	H. Mahadeva, Manjunatha
3.	Drivers	1	Vishwanatha

8.3 In-source Employees

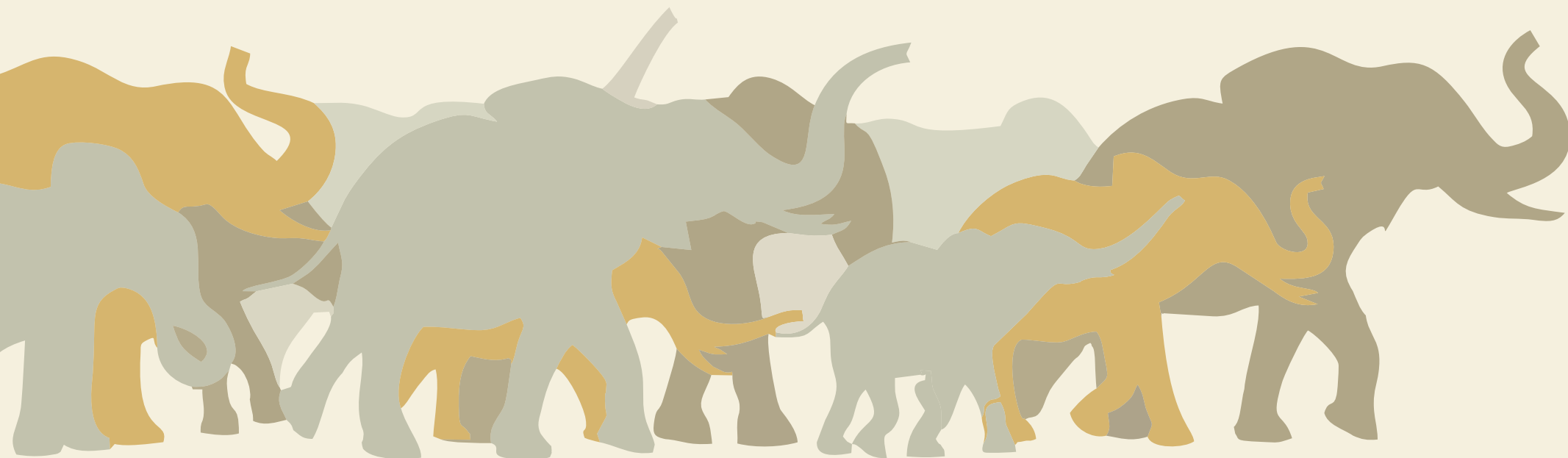
Sl. no.	Designation	Number of sanctioned posts	Names of the incumbent
1.	Animal Section	30	M.T. Ramesh, Siddiqui Shareef, S. Rajashekara, S.Girish, V.Swamy, T.S.Ravikumar, C. Madhusudhan, N. Srinivasa, K Manjunatha, Mukunda, S.Pradeep, Prema Kumari, Essak, N. Shambhulinga, S. Harisha, Lingaraju S, Cheluvvaraju, Anil Kumar, B. B. Chandra, S. Vinod Kumar, Sanjeevan, Ravi K, V S Shivaswamy, M N Vijay Kumar, M V Muralidhar, Chikkaboraiah, Srikantamurthy, Subbegowda H, Sannanaika, J.Shekar
2.	Garden Section	24	Santhosh, Tulasamma, Nagamma, Mahadevamma, Suresh H S, Parvathamma, Meenakshi, Shivashankara, M V Shakuthala, Yathish V, Yengamma, Rangamma, R. Siddaraju, Saraswathi, N Kumar, Shrinivas R, Nagesharadhya, K Swamy, J. Varaju, Andani, Vasantha, S Chethan, M. Lokesh, B Sathisha
3.	Administration Section	6	Raghu A.L, Keshava, Elizabeth Anitha, Syeda Amtul Aleem, Sneha C, Guruprasad N M
4.	Karnaji and Koorgahali Section	15	D Sathish, K R Shankara, Ananda, H.R. Lokesh, Rajesh S.M, Venkatesh, Prakashkumar M, C Rajeshwari, Radhamma,Vishalakshi, Devamma, S Vijay Kumar, K Krishna, Nagamma, T C Paramesha
5.	Hospital Section	5	M.V.Mahadeva Swamy, Somashekara, P.C. Bhaskara, Kumara A.K, Rajani M.N.

8.4 Out-source Employees

Sl. no.	Designation	Number of sanctioned posts	Names of the incumbent
1.	Animal Section	35	Mahesha M, Narayana Murthy, M Kaleem, Avinash M D, Krishna, Vijaya Kumar, Babu, K Madhusudhana, M Swamy, K Soyeb, Mansur Khan, Naveen N, N Raghu, Sunil, Suresha, J Ramya, S M Manjunath, V M Manjunath, Saiyad Muzabin, Raamegowda, Somanna, Chaman Singh, Prabhakar, Raja, C V Swamy, P Kumar, N Kiran, P Chamundi, S Chandrashekar, Srinivas Murthy, Siddarama, B C Abhishek, Sumanth, Fairoz M M, Ravi Kumar
2.	Garden Section	21	Madappa, Nandisha, Shivananda, Siddappa, Somanna M, Sundar Singh, Nanda Kumar, Ravi M K, Guruprasad R, Jayarama, Jai Kumar, Ningarajamma, Naagamani, Shanthamma, Meenakshi, Leelavathi, Venugopal, Padma, Yogeshvari, Kaushik
3.	Engineering Section	3	R Harikrishna, Rakesh M R, S Kiran
4.	Sanitation Section	7	Chamundi, Meena, Ganesh, Ramanaiah, Geetha, Palani, Murugesha
5.	Ticket Counter Section	8	A P Shurthi, Shruthi S, Hemavathi M, Kalpitha, B S Abhishek, Puttaswamy, Anusha J, Supreetha M S
6.	Karanji and Koorgahalli Section	26	Gowramma, Mangalesh, Pruthvi Raj, Jagadish, Manju, Murthy, Somanna, J Madhu, Karthik, Shivaraju, Mallamma, Kumar M, Mahadevi, Nagalambike S, Sandeep N B, Rajesh, Mahadeva, S Prakash, S Mahadeva, Darshan Nayak, Rajamma, Chandrakala, Fairoj

9 Capacity Building of Zoo Personnel During the Year

	Name and designation of the zoo personnel	Subject matter of Training	Period of Training	Name of the Institution where training attended
a.	Ahmed Shariff (Elephant Mahut)	One day workshop on "Emerging Diseases in Asian Elephants"	1 Day	Sri Chamarajendra Zoological Gardens, Mysuru
b.	Harisha (Animal Keeper)			
c.	Manjunath V M (Animal Keeper)			
d.	Manjunath S M (Animal Keeper)			
e.	Shambulinga N (Animal Keeper)			
f.	LingaRaju S (Animal Keeper)			
g.	Fairoz M M (Animal Keeper)			
h.	Chandra (Animal Keeper)			
i.	Mansoor Khan (Animal Keeper)			
j.	Soyeb K (Animal Keeper)			



10 Zoo Advisory Committee

Health Advisory Committee itself acts as Zoo Advisory Committee as well.

11 Health Advisory Committee

a) Constituted As per the Govt Order: Vide g. o. no. see203fwl2002: 12-02-2004

b) Members

In the year 2019-2020, Mysuru Zoo have conducted Health Advisory Committee Meeting of Sri Chamarajendra Zoological Gardens, Mysore twice i.e., on 18/11/2019 held at Mysuru Zoo and on 14/3/2020 at Bannerghatta Biological Park, Bengaluru.

1. Executive Director and Deputy Conservator of Forests, Sri Chamarajendra Zoological Gardens, Mysore	Convener
2. Director, Institute of Animal Health & Veterinary Biologicals, Hebbal, Bengaluru. diriahvb@gmail.com	Member
3. Professor and Head, Department of Veterinary Medicine, Veterinary College, Hebbal, Bengaluru	Member
4. Joint Director (Mysore Division), Department of Animal Husbandry, Veterinary Hospital Campus, Dhanvanthri Road, Mysuru. jdahvsmysore@gmail.com	Member
5. Dr.K.R. Ramesh, Assistant Director, Zoo Hospital, Mysuru	Member
6. Dr. B. Manjunath, Veterinary Officer, Zoo Hospital, Mysuru	Member
7. Dr.K.V. Madan, Veterinary Officer, Zoo Hospital, Mysuru	Member

EX-OFFICE MEMBERS

1. Dean, Veterinary College, Gokula Campus, Vidyanagar, Hassan. deanhvc@gmail.com
2. Dean, Veterinary College, Hebbal, Bengaluru. deanvch@gmail.com
3. Director, Institute of Wildlife Veterinary Research, Kodagu. diriwvr@gmail.com,
4. Prof.& Head, Dept. of Gynecology & Obstetrics, Veterinary College, Hebbal, Bengaluru.
5. Scientist, Regional Disease Diagnostic Centre, IAH&VB, Mysuru

The agenda discussed in the meeting is as below:

- Colic in South African White Rhino.
- Behavioural changes in Chimpanzee Rha.
- Breeding of Wild dogs
- Canine Distemper Vaccination in felines.
- Screening of zoo animal keepers and others staffs for zoonotic importance diseases.
- Covid-19 situation in India.
- Prevention of Avian Influenza.



12 Statement of Income

Income and Expenditure of Zoo for the year 2019-20

Expenditure

Heads	Amount in Lakhs
Administrative Expenses (Establishment charges/Office expenses/Advertisement charges/ STP's/General Charges/SWF/Zoo Education, etc.)	1,223.05
Animal Food & Fodder	638.56
Veterinary Care (Medicines, Lab expenses, animal exchange, etc.)	136.67
Maintenance expenses (Civil Work, Garden, Office equipments, vehicle, etc./Research & Documentation/Enrichment Works)	376.39
Development Works (Capital expenditure for works/Garden development/Other Assets)	190.13
Spillover Works for 2016-17 & 2018-19	290.18
Total	2,854.98

Income

Heads	Amount in Lakhs
Gate Revenue -zoo	2,691.51
Vehicle parking -zoo	91.49
Karanji	90.89
Sale proceeds	11.42
License fee	171.33
Bank interest and Others	213.41
Total	3,270.05



13 Daily Feed Schedule of Animals

Sl.No.	Species	Feed item	Season		Day of fasting
			Winter	Summer	
1.	Herbivores	Vegetables, concentrates, Roughages, Grains	—	—	Fed everyday
2.	Carnivores	Beef and Chicken	—	Quantity is reduced based on the feed intake	Fasting on every Tuesday
3.	Omnivores	Vegetables, Worms, Egg	Seasonal fruits	Seasonal fruits	Fed everyday
4.	Birds	Vegetables, concentrates, grains, worms, veg greens	Seasonal fruits	Seasonal fruits	Fed everyday
5.	Crocodiles	Fish and Beef	—	—	Fed once in 10 days
6.	Snakes	Lizard, rats, mice, chicken, rabbit, rat and snake	—	—	Fed once in 10 days
7.	Primates	Vegetables, fruits, egg and milk	Seasonal fruits	Seasonal fruits and Tender Coconut	Fed everyday

14 Vaccination Schedule of Animals

	Species	Disease vaccinated for	Name of the Vaccine & dosage/ quantity used	Periodicity	Remarks
1	Felines : Tigers, Lions, Leopards, Jaguars, Leopard cats, Jungle cats, Civet cats, Palm civets	Feline calicivirus, Feline rhinotracheitis virus Feline panleucopenia virus and Rabies	Feline vaccine (Feligen) 1 dose each animal	Annually	—
			Anti-rabies Vaccine 1 dose each animal	Annually	—
2	Canines ·Indian grey wolf ·Wild dogs ·Jackals	Canine Distemper, Adenovirus, Parvovirus, Parainfluenza, Leptospirosis and Rabies	DHPPI + L 1 dose each animal	Annually	—
			Anti-rabies Vaccine 1 dose each animal	Annually	—

	Species	Disease vaccinated for	Name of the Vaccine & dosage/ quantity used	Periodicity	Remarks
3	Hyenas	Canine Distemper, Adenovirus, Parvovirus, Parainfluenza, Leptospirosis and Rabies	DHPPI + L 1 dose each animal	Annually	—
			Anti-rabies Vaccine 1 dose each animal	Annually	—
4	Herbivorous ·Gaur ·Giraffes ·Rhinoceros ·Cape Buffalo ·African Elephants ·Asian Elephants	Foot and Mouth Disease, Haemorrhagic Septicaemia and Black Quarter Disease	Trivac ·Gaur Adult-3ml ·Gaur sub adult -2ml ·Giraffes adult - 5ml ·Giraffes sub adult - 3ml ·Rhinoceros - 5ml ·Cape Buffalo- 3ml ·African Elephants - 5ml Asian Elephants - 5ml	Biannually	—

NOTE: DOSAGE DEPENDS UPON THE BODY WEIGHT OF THE ANIMAL, SPECIES AND DRUGS TO BE GIVEN.

15 De-worming Schedule of Animals

S.n.	Species	Drug used	Periodicity
1	Felines: Tigers, Lions, Leopards Jaguars, Leopard cats Jungle cats, Civet cats, Palm civets.	Combination of Praziquantel, Pyrantal pamoate and Fenbendazole	Quarterly
2	Canines: Indian grey wolf, Wild dogs, Jackals.	Combination of Praziquantel, Pyrantal pamoate and Fenbendazole	Quarterly
3	Hyenas	Combination of Praziquantel, Pyrantal pamoate and Fenbendazole	Quarterly
4	Bears	1)Albendazole 2)Fenbendazole	Quarterly
5	Primates	1)Albendazole 2)Fenbendazole	Quarterly
6	Herbivorous: Gaur, Giraffes, Rhinoceros Cape Buffalo, African Elephants, Asian Elephants, Spotted deers, Nilgai, Swamp Deer Barking deer, Hog deer, Thamin deer, Antelopes,	3)Albendazole 4)Fenbendazole 5)Ivermectin	Quarterly

S.n.	Species	Drug used	Periodicity
7	Birds	1)Fenbendazole and praziquantel copmbination. 2)Albendazole	Quarterly
8	Crocodiles and other reptiles	1)Fenbendazole and praziquantel copmbination. 2)Albendazole	Quarterly
9	Snakes	1)Albendazole and Pyrantel pamoate combination	Quarterly



NOTE: DOSAGE DEPENDS UPON THE BODY WEIGHT OF THE ANIMAL, SPECIES AND DRUGS TO BE GIVEN

16 Disinfection Schedule

S.n.	Species	Type of Enclosure	Disinfectant used and method	Frequency of disinfection
1	Felines: Tigers, Lions, Leopards, Jaguars, Leopard cats, Jungle cats, Civet cats, Palm civets.	1. Holding rooms 2. Day kraal	Kohrsolin-Th (Glutaraldehyde + 1, 6-Dihydroxy 2, 5-Dioxahexane + Polymethyl derivative) Microlyse (4%w/v Benzalkonium Chloride Solution)	1. Holding rooms are washed with disinfectants daily 2. Daykraal & exhibit area disinfected once in a month
2	Canines Indian grey wolf, Wild dogs, Jackals	1. Holding rooms 2. Day kraal	Kohrsolin-Th Microlyse	1. Holding rooms are washed with disinfectants daily 2. Daykraal & exhibit area disinfected once in a month
3	Hyenas	1. Holding rooms 2. Day kraal	Kohrsolin-Th Microlyse	1. Holding rooms are washed with disinfectants daily 2. Daykraal & exhibit area disinfected once in a month
4	Bears	1. Holding rooms 2. Day kraal	Kohrsolin-Th Microlyse	1. Holding rooms are washed with disinfectants daily 2. Daykraal & exhibit area disinfected once in a month
5	Primates	1. Holding rooms 2. Day kraal	Kohrsolin-Th Microlyse	1. Holding rooms are washed with disinfectants daily 2. Daykraal & exhibit area disinfected once in a month
6	Herbivorous Gaurs, Giraffes, Rhinoceros, Cape Buffalo African Elephants, Asian Elephants Spotted deers, Nilgai, Swamp Deer Barking deer, Hog deer, Thamin deer Antelopes.	Open Enclosure with rain shelters	Kohrsolin-Th Microlyse	Racking, cleaning of moats and spraying of disinfectant is done once in three months
7	Birds -All Birds	Closed Enclosure	Virkon S (Sodium Chloride+Salt containing Potassium monoper sulphate potassium hydrogen sulphate/potassium sulphate) Kohrsolin-Th Microlyse	Daily Once in a week
8	Crocodiles and other reptiles	Closed Enclosure	Kohrsolin-Th Microlyse	Once in a week
9	Snakes	Closed Enclosure	Kohrsolin-Th Microlyse	Once in a week
10	Zoo Pathways Entry gate foot dips Goods carriage vehicles	Open Air	Virkon S (Sodium Chloride+Salt containing Potassium monoper sulphate potassium hydrogen sulphate/potassium sulphate) Kohrsolin-Th Microlyse	Daily

17 Health Check-up of Employees for Zoonotic Diseases

All the Animal Keepers of the zoo were screened for Tuberculosis, Brucellosis and the results are awaited. They also underwent checkup for other ailments (BP, Diabetes, Eye Sight etc.) and are following up doctors prescriptions.



18 Development Works Carried Out in the Zoo During the Year

A. Enrichment Works

Environmental enrichment, also known as behavioral enrichment, provides species-appropriate challenges, opportunities and stimulation. Environmental enrichment includes the regular provision of dynamic environments, cognitive challenges and social opportunities. An enriched environment should promote a range of normal behaviors that animals find rewarding as well as allowing animals to positively respond to potential stressors.

Essential factors to consider before providing enrichment are to examine the species' natural history, the animal's individual history (including medical and behavioral), and the specific limitations of the exhibit in which they thrive in order to determine what provisions are most appropriate. Mimicking an animal's natural habitat is not always appropriate for improving the well-being of captive animals because they may either be unfamiliar with conditions in the wild and/or they may be incapable of thriving in an environment based on conditions in the wild due to potential stress or injury. Instead, each animal's captive environment should be assessed by suitable criteria. The environment created should increase the opportunity to express species-appropriate behaviors, while simultaneously decreasing the chances of displaying stereotypic behaviors, such as pacing or plucking, which may signal an animal's stress level.



A1. Enrichment for Birds of Prey

Enriched Enclosures for Kite and Eagle



Enriched Enclosures for Owls



A2. Enrichment for Primates

Breeding primates in captivity serves to research, educational, conservation and recreation purposes. In captivity, the success of a breeding colony depends on the managemental aspects and the knowledge of primates' behavioral needs. Environmental enrichment consists of a series of procedures that modify the physical or social environment, improving the quality of life of captive animals by meeting their ethological needs. Environmental enrichment, well-being and stress are associated concepts regarding techniques, physiology and behavior aspects. Enrichment can reduce stress, while increasing animal well-being and health in captivity. More than just physical space, environmental complexity or novelty has been considered a basic element for enrichment. Complex enclosure designs may reduce emotional reactions. Wooden perches in various positions increase available space, also providing segregation and avoidance options for subordinate individuals. Tree trunks, branches, ropes partially mimic the variability of natural-occurring substrates. Floors covered with wood shaving or leaves provide more natural conditions, positive esthetical effects, and, at the same time, decrease excremental odors. For colonies exposed to public visitation, enriched environments simulating natural conditions not only improve the individuals' quality of life, but also has a significant esthetical and educational effect.

A2.1 - Enrichment at Common Langur Enclosure:

The enclosure is enriched using naturally available tree logs with provision of feeding stations.



A2.2 - Enrichment at Ring Tailed Lemur Enclosure



A2.3 - Enrichment at Common Marmoset Enclosure

The enclosures are enriched using bamboo, coffee stumps, logs and ropes.

Maximum space of the enclosure is covered with plants, creepers and bamboo shrubs.



A2.4 - Enrichment at Chimpanzee Enclosure



A2.5 - Enrichment at Hoolock Gibbon Enclosure



A2.6 - Enrichment at Hamadryas Baboon Enclosure



A3. Enrichment at Reptile Enclosure

Enrichment for snakes may facilitate good exhibitory, husbandry practices and appropriate environment for species-typical behaviors to occur. It also provides a level of stimulation and activity conducive to good health. Snakes as a group vary widely in their natural history. They are found in an array of habitats and ecological niches. They have adapted to each of these vastly different conditions and capitalized on the microhabitats and climatic gradations of each in order to survive. They may be aquatic, terrestrial, arboreal, or subterranean, or in many cases some combination of these depending on stage of development and time of year. Snakes are exothermic, or cold-blooded, animals. As their body temperature is dictated by external temperature, reptiles can regulate their body temperatures through behavior. Their life and reproductive cycles are influenced by the availability and quantity of water. In some species the amount of moisture in the air is critical while in others, access to a pond, lake, river or estuary is essential for their health.

Mysuru Zoo houses 15 sub species of Snakes, Iguana, Monitor lizard and 7 sub species of crocodile family. Considering the above points, snakes enclosures at Mysuru Zoo are enriched according to the species specific needs.

A3.1 - Enriched Green Anaconda Enclosure



A3.2 - Enriched King Cobra Enclosures



A3.3 - Enriched Reticulate Python Enclosures



A3.4 - Enriched Rock Python Enclosures

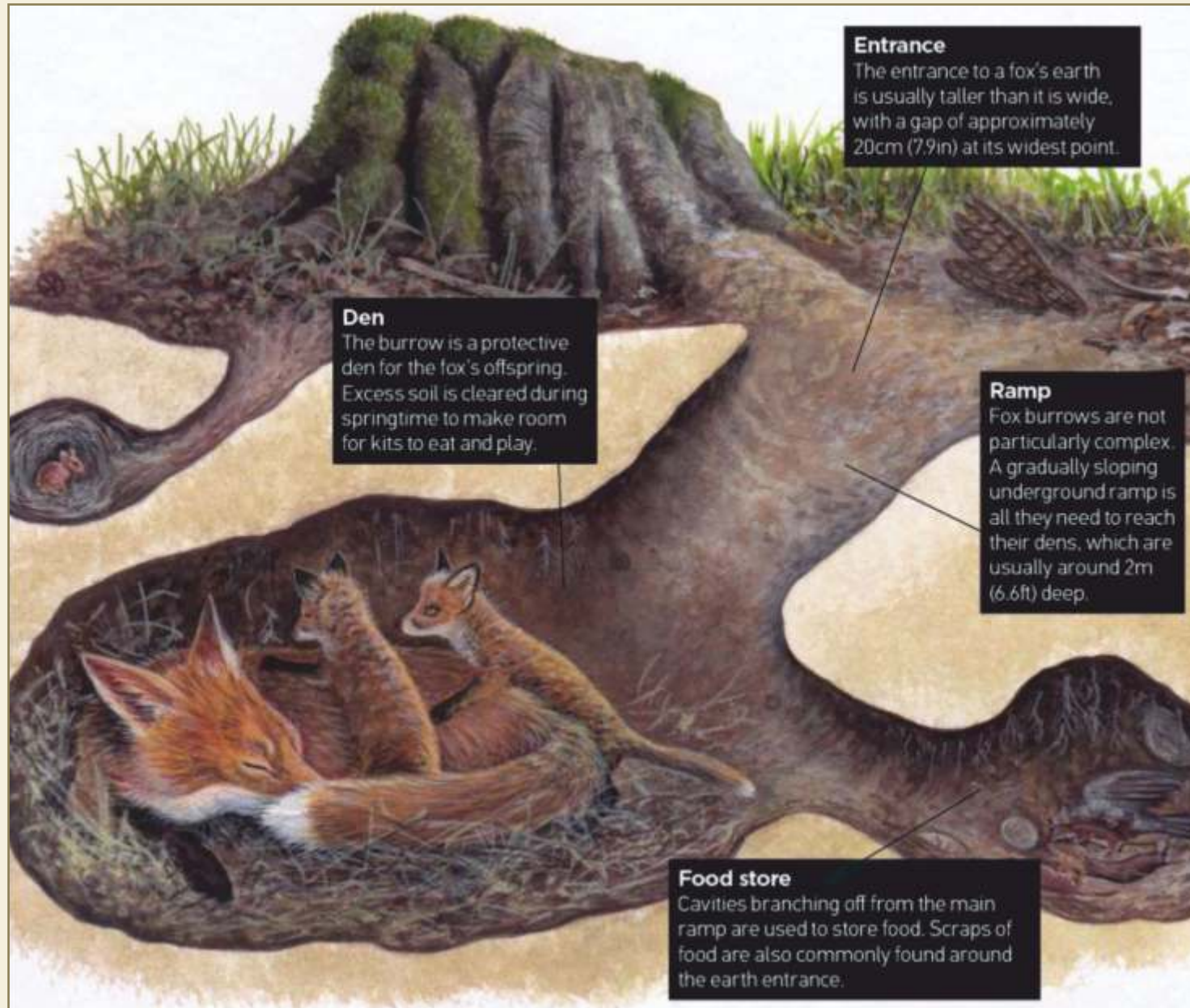


Perching in most reptile enclosures is crucial in providing pathways and arboreal access for both semi and fully arboreal species. When supplied in conjunction with heat sources, perching provides an important mechanism for thermoregulation. Perches are placed near heat sources to allow the snakes to bask, with at least as many basking sites as individuals housed. Placing perches at varying distances from the heat source provides a temperature gradation that allows the snakes to maintain body temperatures within a range appropriate to the species. It can also encourage locomotive behavior between sites.

Creating vertical (e.g., a rock pile, vine etc.) as well as horizontal sites can offer additional dimensions to the enclosure and stimulate climbing in some species.

A 3. 5 Breeding Den for Bengal Fox

A den was constructed following the below model:



Introduction

Indian fox also known as Bengal fox (*Vulpes bengalensis*), is endemic to the Indian subcontinent and is found from Himalayan foothills and Terai of Nepal through southern India. Bengal fox is relatively a small fox and weighs 5 to 9 pounds. They are mainly crepuscular in their habits and monogamous in nature. Both males and females attain sexual maturity at 1- 2 years. Mating season is usually from October to December and gestation period lasts up to 50-55 days. They are opportunistic species that feeds mainly on insects, birds, reptiles, small rodents and fruits.

Breeding at Mysuru Zoo

Mysuru zoo acquired a pair of Bengal fox (aged ~ 3 years) from Raipur Zoo on 19/11/2019 through animal exchange program. They were housed at nocturnal enclosure provided with sufficient ventilation, day kraal area and hiding boxes. During day time the foxes are given access from retiring cells to day kraal area. The diet offered is Chicken and insects. During the month of November mating was observed from 15th to 18th. After a span of 45 days, signs of pregnancy were evident. As in case of Bengal fox both the male and female take part in nursing the young ones, male was left with the female during the gestation period

The two channels were given a common entrance access.

The den measurements were as follows:

- Entrance: 9-10 inches wide
- Steep/ Ramp from the entrance up to a distance of 3 feet
- Larger den: 4 feet width and 3 feet depth
- Smaller den: 2.5 feet width and 3 feet depth



Den constructed with the above specified measurements at the Day kraal area for Bengal fox.

Also for better observations, a camera was fixed on top of the larger den, to monitor the whelping period and fostering of the young ones. Initially both the male and female hesitated to go inside the den, later the male started investigating the den, followed by the female. As the parturition days started nearing, the female started resting inside the den during day as well as night hours. During this time it was observed, wherein the male used to supply the food inside the den for the female.

On February 15th through camera recordings it was known that the female had given birth to 3 young pups. The female was seen nursing the pups well. Supplementary feeding was provided, along with insects such as grasshoppers to increase the milk production in the female. After 3 weeks the pups were seen coming out of the den.

Through the gestation and post gestation period, the male was very supportive to the female and also participated in nurturing the young ones.

Pups were seen out of the den for feeding.



B. Civil Works Carried Out During the Year

B 1. Improvement of White Rhino Enclosure and Visitor View Point at Zoo



B 2. Replacement of Stone Pillars at Thandi Sadak at Zoo



B 3. Construction of Grey Wolf Conservation Breeding Centre at Kurgalli



B 4. Desiltation of Karanji Lake



B 5. Construction of Jaguar Enclosure at Zoo



B 7. Construction of Additional Holding Facility for Zebra at Zoo



B 8. Resurfacing of Road in Zoo



B 9. Construction of Underground Water Tank near Spotted Deer Enclosure



B 6. Installation of Jet Sprinkler at Deer Enclosure



B 10. Construction of Underpass from Zoo to Vehicle Parking Area



B 11. Repair of Rain Shelters at Karanji Lake Nature Park



B 12. Construction of Moat Wall for Indian Rhino Enclosure



B 17. Renovation of Indian Rhinoceros Kraal



B 18. Repair of Nilgiri Langur Enclosure Roof at Zoo



B 13. Construction of Additional Day Kraal for Hippopotamus at Zoo



B 14. Renovation of Incinerator Facility at Zoo



B 19. Installation of SS Railing at Zoo Fountain (Kalyani)



B 20. Native Species Plantation at Kurgalli Rescue Centre



B 15. Installation of Jet Sprinkler for Giraffe Enclosure



B 16. Installation of Zoo Navigation Maps



B 21. Restoration of Karanji Butterfly Park



B 22. Maintenance of Orchidarium at Karanji



B 23. Repair of Karanji Lake Fence



B 24. Maintenance of Orchidarium at Karanji



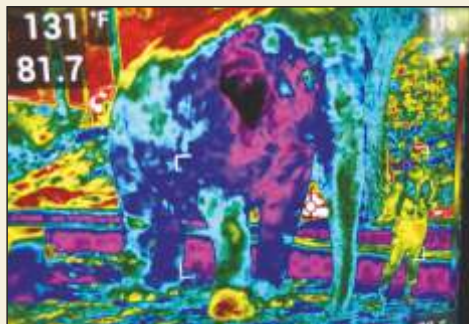
C. Addition of tools to Zoo Veterinary Hospital

C 1. Thermal Imaging Camera: A tool for contactless diagnosis of injury

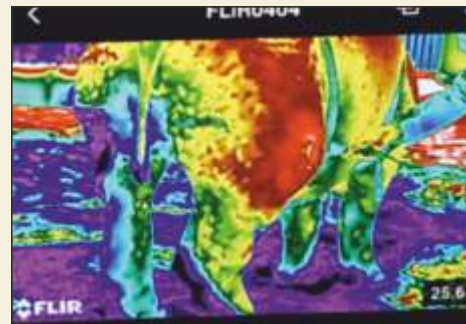
Most of the times veterinarians working at zoological gardens all over the world are faced with the problem of determining whether an animal should be treated under anesthesia or not. Many zoo animals are very sensitive to handling stress and to the physical side-effects of anesthetics. Thermal imaging camera helps to avoid handling unless it is really necessary, but in some situations waiting can be fatal. The great thing about thermal imaging technology is that it is a non-invasive method, so the stress level of the animal is kept to a minimum. So keeping in view of the welfare of the animals, Mysore zoo procured a Thermal Imaging camera to upgrade the zoo hospital facilities.

It works on the principle of thermal signature and variation in thermal signature of normal part and the affected part of the body. This varies from species to species and time to time. Over a time with lots to repetition one can improve the level of accuracy.

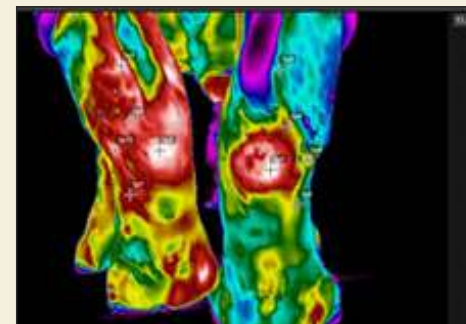
Thermal Imaging Camera



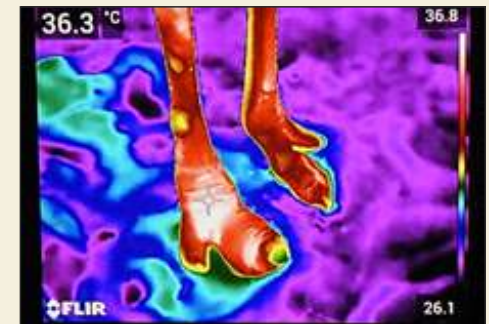
Elephant Foot Abscess



Abscess(Thigh) in Indian Rhino



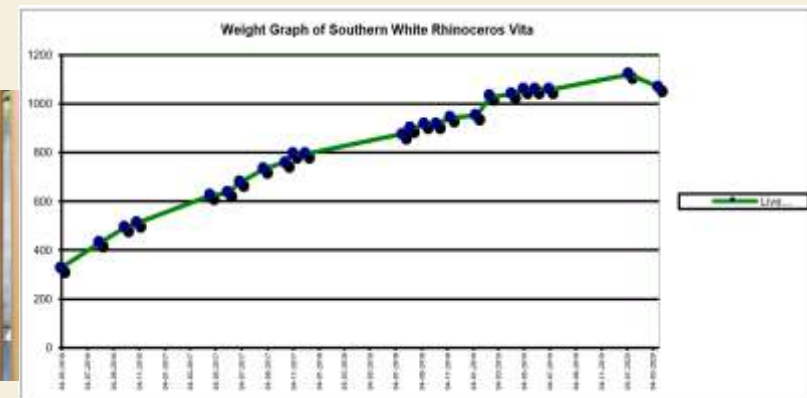
Inflammation at hock region in Indian Rhino



Inflammation at Toe in Ostrich

C 2. Installation of weighing balance at Southern White Rhino enclosure

Body weight is the primary criteria for adjusting drug dosage and to evaluate overall health condition of the animal. Most of the time in captivity, documentation of body weight of wild animals is challenging and constrain. In this regard we have customised a weighing balance which could be accommodated in the existing chute for White Rhinos to measure the body weight. With this once in every month we measure the weights of our Southern white rhinos.





19 Education and Awareness Programmes During the Year

Education is important part of conservation. Each year Mysore Zoo has around twenty five lakh visitors and Mysore Zoo recognizes the responsibility to educate while it entertains its visitors. Apart from information provided on each enclosure, there are number of educational programme conducted by the zoo throughout the year for different target groups.

a. Leading a Life of Visionary- Two Day Workshop

Mysore zoo in collaboration with Saddiksha Public Charitable Trust had conducted a two day workshop -“Lead a life of Visionary” on 13th and 14th April 2019 for students, helping them to live a life of visionary with an extra ordinary commitment for oneself, bringing in the new dimension of performance and productivity in the work in shortest time possible. The program was conducted by Sri. Prashanth Rao at Mysore zoo auditorium. Thirty students of various age category were present for the workshop and certificates were given to the participants.



b. Summer Camp - 2019

Summer Camp was organized by Mysuru zoo for students between the age 12 to 18 years for a period of 8 days and students were selected on first come first serve basis. This year Summer Camp- 2019 was collaborated with Regional Museum of Natural History. The camp was conducted in two batches with 65 students in each batch, during the month of April and May respectively. The members were given educational kit containing a briefing book, a cap, a t-shirt and identity card.



C. Creating Voting Awareness

A unique step taken by Mysore zoo to spread awareness among the visitors about the responsibilities and right to vote of every individual. Sign boards with different animal cartoons and a unique message in each board attracted our visitors for the selfie.



d. Workshop for Snake Rescuers

Mysore zoo in association with Forest department, Mysore Division, organised a workshop on 2nd July 2019 for snake rescuers. The aim of workshop was to encourage them and enhance the knowledge about snakes, threats to snakes, how they can be conserved. Shri. Gerard Martin and Shri. Sumanth Bindhumadhav, Humane Society International with Shri. Balasubramanyan(Snake Shyam), Mysore were the resource persons. Shri. Ravi B. P. IFS, Additional Principal Chief Conservator of Forests and Member Secretary, Zoo Authority of Karnataka, Shri. Ajit Kulkarni IFS, Executive Director, Mysore Zoo, Shri. Prashanth Kumar K.C. IFS, DCF, Mysore Division were also present during the workshop. More than 60 snake rescuers participated for the workshop and certificates were given to them.



e. World Snake Day- 16th July

Snakes are incredible creatures and there are at least 3000 different species of snakes. Apart from Antarctica they live in every continent and vary in size from 32 feet long pythons to tiny vine snakes. Only about one-fourth of all snakes are venomous. In India, there are 270 species of snakes and out of which only 60 are highly venomous. Snakes play a vital role in maintaining balance in the ecosystem. Boards and posters with information about snakes were displayed near Snake Houses at Zoo for the benefit of visitors. School students and visitors were also briefed about their role in controlling pests like rats, insects etc and how their survival is being threatened like habitat destruction, misconception and superstition.



f. Youth Club-2019

Mysuru Zoo has successfully organised 27 youth club programs since its initiation in 1993, providing vast knowledge to more than 1500 students till date. The program involves citizens of future enabling them to understand the importance of nature. In this program, 62 interested students between the ages of 12 to 18 years were selected on first come first serve basis.

The Youth Club-2019 was inaugurated on 28th July 2019 by Shri Yaduveer Krishnadatta Chamaraja Wadiyar, Mysuru and Shri B P Ravi IFS, Additional Principal Chief Conservator of Forests and Member Secretary, Zoo Authority of Karnataka, was presided over the function. Dr. N.H. Ravindranath, Retd. Professor, Centre for Sustainable Development, IISC, Bangalore and Shri T. Heeralal IFS, Conservator of Forests, Mysuru Circle, were the Chief Guest. Sri Prashanth Kumar K.C. IFS, Deputy Conservator of Forests, Mysuru Division, Mysuru and Sri Ajit Kulkarni IFS, Executive Director, Mysuru Zoo were present at this occasion.

Activities of Youth Club was held from July 2019 to February 2020. During Youth club, students were taught on various aspects of conservation pertaining to Wildlife and Environment, Importance of Zoos, working of Mysuru zoo, Animal Behaviour, sustainable practices at Mysore zoo, Road kills and Man-Animal conflicts, wildlife laws and tree identification giving them a basic idea of present biodiversity. The children were also engaged in activities like visit to Day kraal, Bird watching, competitions, Vermicompost unit and live feed units, plastic segregation, skits, waste utilization and keeper interaction. They were also taken to field trips to Karanji Lake, Koorghalli Rescue centre, Ranganathittu Bird Sanctuary, Regional Museum of Natural History and Bandipur National Park. The purpose was to give a practical exposure to conservation which is carried out ex-situ.

The valedictory function of the Youth Club – 2019 was held on 23rd February, 2020. Shri. B P Ravi IFS, Additional Principal Chief Conservator of Forests and Member Secretary, Zoo Authority of Karnataka and Shri Shridhar Bhat, Assistant Professor, College of Forestry Sirsi, were the guests of honour. Sri Ajit Kulkarni IFS, Executive Director, Mysuru Zoo and Shri. H B Manjunath SFS, Deputy Director, Mysuru Zoo were also present at this occasion.



g. World Tiger Day- 29th July

Tigers are the largest members of the cat family, and are renowned for their power and strength. Out of 9 subspecies of tigers 3 are already extinct, around 3900 tigers are left in wild throughout the world. India is home to about 2,967 tigers and Karnataka is home to 524 tigers. Tigers face unrelenting pressures from poaching and habitat loss forcing them to compete for space with growing human population. At the Saint Petersburg Tiger Summit, the heads of government of Asian countries where the last remaining tigers are present in the wild, declared the actions taken by them to double the number of wild tigers. One such action was by celebrating Global Tiger Day every year on 29th of July, to promote a global system for protecting the tigers in their natural habitats.

In this context, Mysuru zoo celebrated the Tiger day on 29th July 2019. Attractive information boards and fun facts about Tigers were displayed in front of the Tiger enclosure. The visitors were briefed about importance of tigers in ecosystem.



h. World Elephant Day – 12th August 2019

Elephants are the largest animals on earth today. In world, there are less than 450,000 African elephants and 40,000 to 50,000 Asian elephants in wild. India is home to approximately 90% of its population and Karnataka state tops the list with 6049 elephants in the wild. Poaching for ivory, loss or fragmentation of natural habitats, conflict with humans for common resources are the major causes for decrease in their population. World Elephant Day was co-founded on August 12, 2012, by Canadian Patricia Sims and The Elephant Reintroduction Foundation of Thailand, an initiative of HM Queen Sirikit of Thailand to create awareness about Elephants and their conservation. Millions of people worldwide show their concern through acknowledgement of World Elephant Day and would do their best to save them.

In this Regard, Mysuru zoo also took the initiative to create awareness about these majestic animals by celebrating World Elephants Day on 12th of August. In this event, school students, wildlife enthusiasts and youth club members were briefed about celebration of Elephant Day.



i. World Rhino Day, 22nd September

There are 5 species of rhinos in the world, of which 3 are critically endangered. About 30,000 rhinos are left in the world and India is home to nearly 2600 rhinos (Indian Rhino) and Assam is home to the largest population of rhinoceros. Their population is highly threatened by illicit poaching for its horn and due to habitat destruction. Rhinos will go extinct in a short span of time if immediate conservation action is not taken.

Mysuru Zoo has Indian Rhino and Southern White Rhino. To contribute to this worldwide celebration, Mysuru Zoo took an initiative to celebrate the World Rhino Day. Rhino feeding was made visible for the visitors. In this event, students, wildlife enthusiasts and youth club members were briefed about importance of Rhino Day.



j. Training Program for Volunteer Zoo Educators

Mysuru Zoo initiated an innovative program i.e. Volunteer Zoo Educators, to educate government school students about Zoo animals and maintenance of the zoo. Training program was organized for 50 members on 12, 13 and 19, 20th of October 2019.

This training program was inaugurated by Sri. B.P. Ravi IFS, Additional Principal Chief Conservator of Forests & Member Secretary, Zoo Authority of Karnataka, Mysuru. Sri Ajit Kulkarni IFS, Executive director, Mysuru Zoo and Dr K R Ramesh, Assistant Director were present at this occasion.

Participants were trained about role of zoos in conservation and Mysuru zoo conservation education program. Screening test was done and eligible 10 candidates were selected. Service will be availed to educate school students.



k. Celebration of Gandhi Jayanti & World Wildlife Week

In the first week of October Gandhi Jayanti and World Wildlife Week was celebrated. As a part of the celebration, photographs of Wildlife Photography Competition were displayed at the zoo library. This exhibition was inaugurated on 2nd October by Sri Javagal Shrinath, Indian Cricketer, Mysuru in the presence of Sri. B.P. Ravi IFS, Member Secretary, Zoo Authority of Karnataka, Sri. Ajit Kulkarni IFS, Executive Director, Mysuru Zoo.



L. 22nd Conservation Speak on 16th October 2019

- Conservation of Birds and Forest Fires: Past and Present.

Birds play an important role in ecosystem. Due to anthropogenic activities, their population is decreasing. We have to understand the need of birds and conserve them. In the recent days one of the biggest issue contributing to the climate change is Forest fires. Forest fire is also a threat to fauna and flora. To approach the above issues we should have an open and transparent discussion with researchers and conservationists.

With this background, Mysuru Zoo invited Kumari Varshini S to share her views on Birds and Sri Ameya Gode to share his experiences on "Forest fires: Past and Present" as a part of the 22th Conservation Speak. The event was followed by release of book "Challenges of a Tropical Forester for a Sustainable Development" written by A C Lakshmana IFS, Former Secretary to Government of Karnataka. Sri B P Ravi IFS, Additional Principal Chief Conservator of Forests and Member secretary, Zoo Authority of Karnataka, Sri Krupakar and Sri Senani, Wildlife photographers and filmmakers were the Guests for the program, Sri Ajit Kulkarni IFS, Executive director, Mysuru Zoo was also present at this event.



M. Literary Competition

Various literary completions were conducted at Sri Chamarajendra Zoological Gardens to involve various schools and colleges in a healthy competition. Competitions like Drawing and painting, Essay Writing, Quiz and Elocution were conducted. More than 500 Students participated in these competitions from institutes in and around Mysuru.



N. Two days Training Programme for Post-Graduate students of Salim Ali Center for Ornithology and Natural History, on “Conservation and Management of Wild animals in captivity” held on 11.11.2019 to 12.11.2019.

Details of session and speakers are as below:

Principles of In-situ and Ex-situ conservation	Sri. B.P. Ravi IFS, Additional Principal Chief Conservator of Forests & Member Secretary, Zoo Authority of Karnataka.
Introduction to Mysore Zoo	Sri. Ajit Kulkarni IFS., Executive Director, Mysuru Zoo.
Health care management of wild animals in captivity and translocation of captive bred wild animals	Dr. K R Ramesh, Assistant Director, Mysuru Zoo.
Study of Animal behavior and enrichment for captive wild animals	Ms.Sneha C, Biologist, Mysuru Zoo.
Physical and chemical restraining of wild animals and demonstration on tranquilization.	Dr.Madan, Veterinary Officer, Mysuru Zoo.
Roles of Zoos in rescue and rehabilitation of wild animals.	Dr. Manjunath, Veterinary Officer, Mysuru Zoo



O. Karanji Lake Festival (Karanji Kere Habba)

Karanji Lake Festival was celebrated for the first time by Mysore Zoo on 16th and 17th of December to create awareness about importance of lakes and their conservation. The festival was inaugurated by Mysore City Corporation Mayor Smt. Pushpalatha Jagannath. Sri. B.P. Ravi IFS, Additional Principal Chief Conservator of Forests and Member Secretary, Zoo Authority of Karnataka, Smt. Chaya Naveen, Corporator, Ittigegud, Smt. Roopa, Corporator, Siddhartha Layout and Dr. Indresh, Director, Regional Museum of Natural history, Mysuru graced the occasion. On this occasion, competitions like photography, drawing, quiz and fancy dress were held.

On second day of Karanji Lake Festival, Bird Watching programme was organized. Eminent Conservation Specialists such as Sri. Echanuru Kumar, Journalist, Prof. U.N. Ravi Kumar, Lake Specialist and Sri. B.P. Ravi IFS, Additional Principal Chief Conservator of Forests, Member Secretary, Zoo Authority of Karnataka delivered talks regarding Lake Conservation. Skit regarding Lake Conservation was performed by Government College Students. The festival was concluded with the panel discussion, where public interacted and suggested their opinion, also they expressed their interest in taking up the responsibility of Lake Conservation.



P. Special Lecture Series on Birds of Mysuru, Butterflies and Frogs

Every organism on the planet has an important role to play in a food chain and ecosystem, as a prey or predator. There is a need to understand the importance of every organism and it is our duty to protect them. In order to understand much about them and why they should be conserved, it is important to have a discussion with researchers and conservators who has eminent knowledge on them.

With this background, Mysuru Zoo invited Smt. Sahana B to share her experience on Birds of Mysuru, Forest guard Sri Mahaveer to share his knowledge about Butterflies and Forest guard Sri Anand to share his knowledge about Frogs as a part of Special lecture series which was held on 26th January 2020.

Q. World Wildlife Day, 3rd March

World Wildlife Day is an opportunity to celebrate many beautiful and varied forms of wild fauna and flora and to raise awareness for their conservation and benefits that is provided to humans. The theme of World Wildlife Day 2020 was "Sustaining all Life on Earth", hence various information poster were displayed at the zoo premises, to create awareness among the zoo visitors and students. Students who visited the zoo on 3rd and 4th of March were briefed about celebration of World Wildlife Day.



R. Training Program to field staff of Hampi Zoo, Ballary and Chitradurga Forest Division on Rescue and Rehabilitation of Wild Animals.

Karnataka is famous for its rich wildlife. At times, there are human-wildlife conflicts involving Leopards and Sloth Bears in northern parts of Karnataka.

The forest officials and its veterinary staff have been handling the conflict situation for a long time. The Zoo Authority of Karnataka thought it was a good opportunity to enrich their knowledge by giving them the training and hands-on experience by the Mysore Zoo Veterinarians team. Sri B P Ravi IFS APCCF, MS of Zoo Authority of Karnataka is the person to take such initiation to conduct the series of training programs for zoo and forest staff of the state.

From Mysore Zoo, Dr. Madan, and keeper's team conducted training program involving class room sessions and practical classes. They were exposed to basics animal behaviour, darting equipment, darting techniques especially leopards and sloth bears, handling the animals after sedation, evaluation of the animals, shifting the animal while in sedation, reviving the animals, and post rescue care.



S. Training Programme for Final Year B.Sc. Students of Sirsi Forestry College.

Training programme for students of final year B.Sc. Forestry, College of Forestry, Sirsi was held at Mysuru Zoo. Training program on “Captive Management of Wildlife: Principles and Practices” was scheduled from 19th February to 25th February 2020 with classes covering on various aspects about Zoo and its management. The students involved themselves with great interest and their participation is most valid for their future career. About 64 students with a faculty Sri. Sridhar Bhat, Assistant Professor participated in the programme and were awarded with Certificates.



20 Important Events & Happenings at Mysore Zoo

a. Independence Day celebration

On 15th August 2019 Independence Day was celebrated at Mysore Zoo. Ex-service men took initiation to organize Independence Day. Sri B P Ravi IFS, Additional Principal Chief Conservator of Forests and Member Secretary, Zoo Authority of Karnataka hoisted the flag and Sri Ajit Kulkarni IFS, Executive director Mysuru Zoo was present on this occasion. All the zoo staff were present for flag hoisting event.



b. Technical Committee Meeting on Proposed Conservation Breeding of Lion Tailed Macaque at Conservation Breeding Centre of Mysuru Zoo.

The following members was invited to attend the meeting to discuss in detail about setting up of Lion Tailed Macaque breeding plan at Chamundi Rescue, Rehabilitation and Conservation Breeding Center, Kurgalli.

1. Executive Director, Mysuru Zoo, Mysuru.
2. Dr. Mewa Singh, Former Professor, Dept. of Psychology, University of Mysuru, Mysuru,
3. Dr. G. Umapathy, Scientist, CCMB, (LaCONES) Hyderabad, Telangana.
4. Dr. Ajith Kumar, Faculty, NCBS, Bengaluru
5. Dr. H.N. Kumara, Principal Scientist, SACON, Coimbatore, Tamilnadu
6. Dr. Naveen, Associate Professor, Department of Animal Genetics and Breeding, Hassan Veterinary College, Hassan.
7. Deputy Director, Mysuru Zoo, Mysuru.
8. Executive Engineer, Bannerghatta Biological Park, Bangalore.
9. Assistant Director, Mysuru Zoo, Mysuru.
10. Veterinary Officers, Mysuru Zoo, Mysuru.
11. Assistant Engineer, Mysuru Zoo, Mysuru.
12. Sri. Manjunath P.O., Deputy Range Forest Officer, Mysuru Zoo.
13. Ms. Sneha C., Biologist, Mysuru Zoo, Mysuru.



The agenda discussed in the meeting is as below:

- LTM sub species: proposed for breeding
- Sourcing of genetically sound stock
- Breeding lines to maintain genetic diversity
- Laboratory support: LACONES
- Suitable housing: proposed at Kurgalli
- Ideal flora for plantation inside the enclosure
- Limitations and counteracting strategies in LTM breeding

c. Display of Western Hoolock Gibbon

Hon'ble Minister for Mines and Geology, Forest, Ecology and Environment, Govt of Karnataka Shri C C Patil visited Mysuru Zoo on 1/1/2020 and dedicated display of Western Hoolock Gibbon to Zoo visitors and also inspected electronic weighing of White Rhinos. Sri. S.A. Ramadas, MLA, Krishnaraja Constituency, Sri. B.P. Ravi IFS., Additional Principal Chief Conservator of Forests and Member Secretary, Zoo Authority of Karnataka, Smt. Chaya Naveen, Corporator, Ittigegudu, Sri T.Heeralal IFS CCF, Mysore, Dr.Prashanth Kumar IFS, DCF Mysore and other local Forest officials graced the occasion.



d. Celebration of Republic Day, Jan 26th

On 26th January 2020, Republic Day was celebrated at Mysuru Zoo. Sri B P Ravi IFS, Additional Principal Chief Conservator of Forests and Member Secretary, Zoo Authority of Karnataka hoisted the flag and Sri Ajit Kulkarni IFS, Executive director Mysuru Zoo was present on this occasion. All the zoo staffs were present for flag hosting event.



e. Zoo Day Celebration – 25th February

Every year the Zoo Day is celebrated in commemoration of birthday of Sri Chamarajendra Wodeyar, the founder of Mysuru Zoo. On 25th February 2020, Chamundeshwari Pooja was done, followed by lunch for the staff members. The Zoo day is celebrated to bring cordial relationship amongst employees.

Mysore zoo conducted various games such as cricket, short put, kabadi, throw ball etc for the employees apart from cultural programs. In this programme, the winners of the competition were awarded.



f. Giraffe transportation to Assam

Mysuru Zoo successfully transported a male sub-adult Giraffe named Jayachamarajendra to Assam Zoo on animal exchange program. This exchange program was approved by Central Zoo Authority, New Delhi. The transportation of long necked giraffe by road for a long distance is really a risky and challenging task, as giraffes are prone to neck injuries and capture myopathy.

Journey to Assam Zoo started on 28/12/2019 and reached successfully on 5/01/2020. This is was one of the longest Giraffe transportation by road covering 3200kms over 8 days and 7 nights. The 7 member team was led by Dr. K Ramesh, Assistant Director.

Following is the brief of various issues and aspects involved in the entire transportation.

1. Selection of the animal

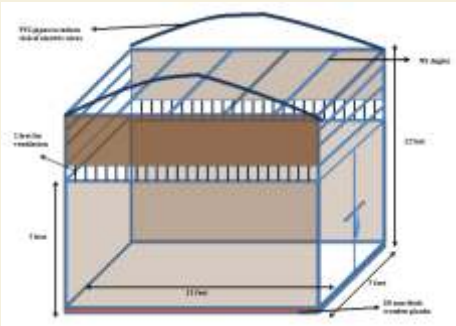
The major limiting factor in Giraffe transportation is the height of the animal and getting road clearance especially within urban limits of roads is quite challenging and at the same time ensuring that young calf is weaned from its mother is another factor needs consideration. It should be noted that Giraffe because of its long neck and height is more prone for severe injuries due to smallest accident or mistake in transport. The experiences across the globe shows that transportation of Giraffe between 10 – 18 months is safer and practicable. Keeping these points in view, a male calf aged 12 months with height of 11 feet was selected for shipment.



2. Preparation of crate

Crate was ready two months before the tentative date of transportation. The dimensions of the crate were decided based on past experience regarding size of the Giraffe at different ages.

Crate Dimension



3. Conditioning of the animal for transportation

The designed crate was placed outside the enclosure to accustom the animal to the crate for a week time. Later on the crate with closed door was placed inside the animal enclosure with the help of crane. Animal started visiting and exploring the crate by sniffing around. After 2-3 days of placement of the crate, cut branches were tied outside the crate. Slowly the animal started taking the feed without any anxiety. Further, both the door was kept open and cut branches were tied outside the crate only. The floor of the crate was covered with adequate quantity of sand bed as a naturalistic substrate. Slowly the feed was tied at the quarter length of the crate and gradually to the half the length and finally at the end of inside edge. Even the concentrated feed was fed through the fitted troughs inside the crate. The animal started entering the crate and taking the feed normally without any anxiety. This was continued for a period of a month. Later one side of the door was closed and the animal was made to enter the crate through one door access. A week before the shipment another door was also closed while the animals was inside for around 30 minutes and animal was found to be comfortable. Overall it took almost one and a half month to condition the animal to the crate.



Crate conditioning is one of the critical parts of Giraffe transportation, because this reduces the stress and makes animals to stay comfortably inside the crate.

4. Survey of route for transportation



Animal could be transported by road, rail and by air. In our case transportation by road was adopted as getting train and suitable aircraft was a difficult proposition.

The survey of transportation route was made by both Mysuru Zoo as well as Assam State Zoo. Mysuru zoo made a survey up to Kharagapur, West Bengal and from then onwards to Guwahati by Assam Zoo. The itinerary included 5 states namely Karnataka, Andhra Pradesh, Odisha, West Bengal and Assam covering 3300Kms.

5. Scheduling the date for Transportation

Since the transportation route was all along the coastal belt of Eastern Ghats, by considering climate conditions such as rainfall, cyclone and extreme weather conditions it was scheduled on 28th of November 2019.

6. Formulation of the team accompanying the animal

A team of 7 members was led by Dr K R Ramesh, Assistant Director Mysuru Zoo. The team comprised of a senior supervisor Uday Kumar, Giraffe Keeper Vinod Kumar, Hospital Attendant A K Kumara, Rhinoceros Keeper Madhu, Carpenter Swamy and Swamy a stand by driver and translator. The team was formulated to address any such eventuality during the transportation of the animal.



7. Animal and staff transportation vehicle

Considering the height of crate, Ashok Leyland 14 wheeler, low bed trailer truck was engaged for the transportation of animal. The low bed trailer height from the ground measured 3 feet. In between the driver engine cabin and low bed trailer, where crate was placed, provision was made to accommodate feed fodder, water and place for 1 or 2 keepers for observations.

Note: While selection of vehicle, it is very important to make sure that, one has to personally inspect the vehicle and look for following:

- Verify the documents: RC book, Interstate permit, valid driver's License.
- Condition of the vehicle: Check for the wear and tear of the vehicle tires, ensure availability of Stepney wheel, head lights, condition of the body, brake systems, shock absorbers, availability of suitable tool kits, availability of FASTag and tarpaulins etc.
- Ropes and chains to secure the crate.
- Experience of the driver, preferably 2 drivers to drive on shift basis.
- An Innova vehicle was hired for the staff journey along with truck.



8. Preparedness for the journey

A. Coordination with Local Electricity Board and Police Department

A week in advance local Electricity Board was communicated about the date of shipment of Giraffe and requested to ensure that all the electric wires up to National Highway which are likely to obstruct Giraffe Loaded Vehicle (16 feet height) are removed or power supply is cut so that vehicle moves smoothly. Police Department was requested to provide with convoy security so that Vehicle with Giraffe moves smoothly without any traffic congestion. Both the Department supported overwhelmingly and ensure very smooth movement of vehicle till Karnataka State Boundary.

B. Food, fodder and other essentials

Giraffe was fed with Banyan/ Ficus cut branches, concentrate feed, lucern, fruits and vegetables in zoo. For journey cut branches, lucern, fruits and vegetables were carried for initial 1 or 2 days and decided to procure the required items on the way of journey. Sufficient quantity of concentrate feed was stored for 10 days. Ten, 20 litres portable water cans were also made available for both animal and staff. In addition to that following items were carried:

- Torch ·Tarpaulins ·Knife · Bed & Blankets ·Toiletries · Buckets ·Feeders ·Ropes
- Waterers ·Ladder · Carpenter tool kit · First Aid Kit

C. Veterinary care

Emergency medicines, antibiotics, immune boosters, supplements, tranquilizing drugs, guns, accessories and other equipments were carried. In addition to that a first aid kit for the staffs was made available.

D. Supporting documents related to animal exchange program

- Approved animal exchange details ·Office order for transportation ·Diet Chart
- Animal Health certificate ·Handed over and Taken over animals certificate
- Staff identity cards

E. Briefing the truck drivers and animal keepers on the importance of animal transportation.

Before the commencement of journey, drivers and animal keepers were briefed about the animal exchange program and about the safety of the giraffe during transportation. Especially the truck drivers were advised for smooth and gentle driving and also informed them about the consequences of negligence/rash driving which may lead to stress and cervical injuries to the animal. Animal keepers were instructed on the dos and don'ts during the transpiration.

F. Commencement of Journey

The journey was scheduled on 28/12/2020 and previous day of journey, animal was partially fed and on the day of journey early in the morning animal was fed with concentrate feed, fruits and vegetables. The keeper was assigned to crate the animal calmly. At 7am, keeper succeeded in crating the animal. During this process the animal was found to be calm inside the crate and was having feed as usual. Executive Director and Zoo Veterinarians along with concerned staff were present at the site. With the help of Crane, crate was lifted out of the enclosure with all precautions and loaded on to the truck cautiously. The crate was secured tightly to truck with the help of hook and fitting chains and Ratchet tie down. Crate stability check was made during the movement of the loaded vehicle and minor stabilization issues were rectified. After the ritual, the journey

was started. Executive Director coordinated with the inter district police personnel to escort the vehicles in the city limits to avoid traffic congestion and avoid disturbance due to public. The biggest challenge presumed was crossing Bengaluru metropolitan traffic and electrical wire issues. However, even in Bengaluru city, Traffic Police coordinated well with the help of control room to clear the traffic and ensured smooth movement of the vehicles through city. Up to Karnataka State Border, similar coordination was extended by the Police Officials.



G. Feeding, watering and monitoring of the animal during transportation

Truck was made to halt at isolated area with sufficient shade and water availability and animal was offered feed and water over there. Animal was monitored throughout the journey for activeness, alertness, rumination, resting, urination and defecation. Throughout journey, the keeper was interacting with the animal so that animal remains calm and comfortable.



H. Ensuring the basic needs of staff and health status

For day to day basic needs of the staff, we used to stop at road side restaurants and Dhabas or food and petrol bunks were preferred for night stay to ensure the safety of animal and staff. During the journey, due to change in food habits and climatic conditions keepers suffered some minor issues like gastric disturbance, body aches and cold. These were taken care with available medications in the first aid kits. Keepers were given adequate rest on shift basis. Both the truck and Innova drivers were allowed to rest after food intake for an hour. During this time feeding and watering of the animal was taken care. A standard journey schedule was followed, where the journey used to begin early 5 am and stop for breakfast at 9am-10am, 2pm-3pm for lunch, a short break for an hour around 4pm -5pm, dinner at 9pm-10.30pm and drive at night till 12.30 am. Later after having enough sleep, next day morning the journey would commence and follow the same time schedule for the rest of the day.



H. Procurement of feed and fodder for the animal

Fruits and vegetables were procured on the way at local markets, whereas cut branches were sourced from the Banyan/Ficus trees on the road side of highways and village areas. So obtained fruits, vegetable and fodder was used to be washed with potable water before offering it to the animal.



9. Challenges encountered during the journey

A.Vehicle: Though the condition of the vehicle was good, due to less weight of cargo compared to vehicle capacity along with wear and tear of the tires there were lot of jerk movements thereby weakening strength of the crate. Later on this issue was discussed with the driver and tyre air was reduced a bit so as to minimise the jerky movements.

B.Crate: Due to lot of jerk movements the crate started weakening and cracks were seen in some of the welded joints of the crate. Meanwhile some of the nuts and bolts also got loosened; this required constant tightening of the bolts to ensure the stability. On the second day of journey, the severity was found to be more and needed immediate attention.



As the repair of crate required at least half a day of time, stopping at the road side was not ideal and hence a resort was chosen at Annavaram, Andhra Pradesh in the interest of privacy and for other needs on 30th December 2019. Welding of the cracked joints was ruled keeping the animal safety in mind; it was decided to secure the crate from the locally available materials with the help of carpenter. Accordingly wooden poles and other accessories were procured from the city limits and the work was initiated. It almost took more than half a day of time, meanwhile rooms were booked for refreshment and after lunch the journey was started. The crate stability issue was resolved to a greater extent till the arrival of destination point.



Procurement of local materials such as wooden poles for crate repair work



Repairing of crate

C. Health of the animal: In spite of crate training for months together, animal was found stressful initially for two days and did not urinate or pass faeces. This issue was sorted with oral medications and stress elevator. Also it was noticed that change in feeding schedule led to the minor digestive issues. This was rectified by adopting the same feeding schedule followed at zoo, like feeding concentrate in the morning, Lucerne in the afternoon and cut branches in the evening. From then onwards no such health issues were recorded.

Giraffe monitored for activity, feeding, urination & defecation



D. Interstate RTO permits: It is always wise to hire a vehicle with All India Permit and FASTag otherwise there will be lot of wastage of time in reaching RTO office, waiting in queue. Moreover, at many places these offices are located inside cities. In our case, vehicle did not have All India Permit and it was required to obtain permit at the entrance of every state. To avoid waiting time, Innova vehicle reached early to the concerned RTO office and obtain permit for both the vehicles so that truck with animal was not required to stop at the border. However, while moving from West Bengal Border to Assam, the vehicle was stopped by the RTO officials for the verification of the documents and permit which took a considerable time for allowing the vehicle to proceed.

E. Food for Staff :

In order to avoid onlookers disturbance to the animal, we were stopping at Restaurants and Dhabas which were less crowded and most of the time those were not upto the standards. But thanks to commitment of zoo staff and able leadership of Dr Ramesh things went smooth.



F. Traffic congestion and road condition/bridges: The entire journey from Mysore to till we crossed Kolkata road was excellent and journey was smooth. After Kolkata, the journey became more and more challenging with respect to road condition. It really tested the driver's driving skills.

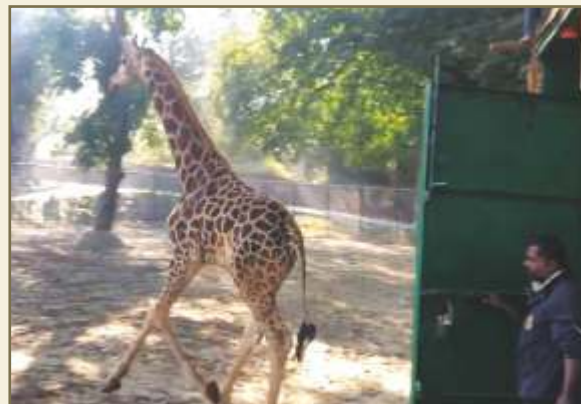
On 3rd December 2019, there was a huge traffic up to 10kms with a bad road at Uttar Dinjapur. It took almost 10 hours to cover 10kms. After reaching Dalkhola railway station, we meet with another issue which was the height of the railways bridge. Bridge height and the height of our truck with animal was almost same. Thanks to pot holes and eroded road berms we could carefully negotiate critical points and cross the bridge. But it took considerable time to cross the bridge.



10. Releasing of the animal at Assam Zoo

After 8 days and 7 nights journey by road, with one of the tallest mammal, we reached Guwahati on 5th of December 2019. Since the zoo is located in the heart of the city it was decided to enter the city during early hours of day so as to avoid traffic. The Director and staff of Assam zoo whole heartedly welcomed the team and Giraffe. With the help of crane, crate was unloaded from the truck and animal was safely released inside the enclosure. Animal started exploring the enclosure and started feeding normally. Animal was found healthy and active and the whole journey ended with a huge success.

In exchange to the Giraffe, Mysuru Zoo received a female one horned rhino, a pair of Hoolock gibbon and a female Black Panther. Dr Madan Kompal Veterinary officer accompanied the animals and staff from Assam to Mysuru.



Tallest Animal Travels Longest Distance

12-foot tall Chamarajendra covers 3,200 kms in a 16-foot crate from Mysuru to Guwahati Zoo



The 16-foot crate that carried giraffe Chamarajendra from Mysuru Zoo to Guwahati Zoo was lowered in Assam. Picture right shows the giraffe inside the cage.

Mysuru Zoo (14 JANUARY): A male giraffe from the Chamarajendra Zoological Gardens (Mysuru Zoo) has started its long journey to Guwahati Zoo. The 12-year-old giraffe, Chamarajendra, traveled 3,200 kilometers to arrive at the Assam Zoo. The journey was a record for the longest distance a giraffe has traveled on road. The 16-foot-tall giraffe, Chamarajendra, traveled 3,200 kilometers to arrive at the Assam Zoo. The journey was a record for the longest distance a giraffe has traveled on road. The 16-foot-tall giraffe, Chamarajendra, traveled 3,200 kilometers to arrive at the Assam Zoo. The journey was a record for the longest distance a giraffe has traveled on road.



The male and female giraffe Chamarajendra and his mate at Guwahati Zoo was shared by Assam Minister of Forest, Environment and Wildlife.

Giraffe will be part of Assam State Zoo-cum-Botanical Garden at Guwahati Zoo after a period of eight weeks. Chamarajendra is now sharing its enclosure with a female companion. The Assam State Zoo, in an exchange programme between Mysuru Zoo and Assam State Zoological Park, Forest and Environment, Guwahati, has acquired a female giraffe. Assam Minister of Forest, Environment and Wildlife, Purnima Sabitri, shared a photograph of the male and female giraffe standing in the sun and shade on the field. 'The male and female are happy together'.

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The giraffe Chamarajendra is now sharing its enclosure with a female companion at Guwahati Zoo.

21 Seasonal Special Arrangements for Upkeep of Animals and Animal Welfare Activities:

A. Seasonal special arrangements



Ponds for Carnivores with regular water flow during summer



Wallow Ponds at Southern White Rhinoceros and Indian Rhinoceros enclosures during summer



Ponds at Crocodile enclosures with regular water flow



Tender Coconut provided for Chimpanzees during summer



Fogger at Birds enclosure during summer



Sprinklers and Shower at Elephant enclosures during summer



Frozen fruits provided for Asiatic Bears during summer



Ponds at Asiatic Bear enclosures with regular water flow

B. Animal Welfare activity - Veterinary Intervention

Case 01 : Leopard Chintu - Follicular Cyst

Chintu is the most adorable one amongst all our leopards. She was rescued from a bus-stop by the Karnataka Forest Department staff and later shifted to Mysuru Zoo Rescue Centre. She was 2-weeks old when she came and now she is 4.5 year old.

She was shifted to the main Leopard House when she turned 8 months and soon she got used to the other leopards. One day, the leopard keeper, Mr. Krishna, noticed some abnormal behavior like, she started to show the heat signs for a prolonged period. Day by day the heat sign became prominent where she started hurting herself by rubbing vigorously to the mesh, to the wall, and so on. As a result of this, there were wounds on her ear tips, lateral aspect of the face, and lateral thoracic region. Due to the continuous licking and rubbing, the vulva started to show ulcerations. The ulcerations would heal due to veterinary care; however, the wound would again aggravate due to her continuous rubbing behavior.

On examination, she was diagnosed with hormonal issues, specifically a condition called Follicular cyst.

Follicular cyst results in the prolonged secretion of estrogen, continuous signs of estrus (heat), and attraction to males. Sometimes it is difficult to differentiate this condition from normal or frequent cycles. Ultrasonography of her reproductive system revealed abnormal ovaries. The most recommended treatment for this condition is spaying (removal of the ovaries and uterus). In some cases, non-surgical methods through drugs might help in resolving the condition.

For Chintu, the surgery was carried out at Zoo Hospital's operation theatre, anesthesia was maintained with an intubation-inhalation method. Surgery and anesthesia recovery went well. The dressing of the wound was done once in 3 or 4 days, no complications were seen throughout her postoperative days.

Estrus signs considerably reduced within 24 hours of surgery. By 5th postoperative day, her estrus signs completely disappeared.

Now she is back to her normal happy life with her co-mates.

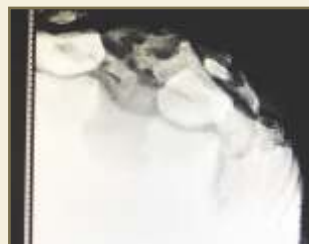


Case 02 : Elephant Gajalakshmi - Foot Abscess

The matter of pride to Mysore Zoo is that it houses four generations of elephants.

- Padmavathi, the Great Grandmother aged 70years
- Gajalakshmi, the Grandmother aged 38 years
- Airavathi, the Mother aged 15 years
- Parvathi, the Daughter aged 3 years

Gajalakshmi, a massive Indian female elephant named after her massive physique. Keepers of Gajalakshmi noticed that she had some discomfort while walking. Her foot therapy was regularly going on and no abnormalities were seen. The Lameness became evident day by day. Initially, it was a bit challenging to sight the lesion. So she was prepared for a thorough physical examination carried out to point out the problem and confirmed by diagnosing using a thermal camera. The problem was pointed out to exist just above the third digit, where one cannot observe any sort of physical change. The medication was initiated and after about 6 days the site started to swell and opened. The abscess was treated in a standardized way. She took almost 2 months to recover and now she is doing fine with no signs of Lameness.



Case 03 : Tigress Gowri Seizures and MRI

Tigress Gowri was rescued from the Antharasanthe, Nagarahole range in Karnataka. When she came to Mysuru Zoo Rescue Centre on 09.10.2017, she was approximately 10 years old with infected lacerations at either side of her shoulders. The wound reconstruction, repeated cleaning, and dressings healed her wounds soon. In the beginning, like any other rescued wild tiger, she was grumpy and aggressive, but soon she got used to our keepers.

On an unfortunate morning (on 20.08.2019), suddenly she had aggressive seizures which lasted for about 10 minutes. Immediate veterinary intervention calmed her down and she was back on her feet in a few minutes following the seizures. Just 2 days later, she had another seizure episode but this time it was much severe than the previous one. With immediate veterinary care, she made through the seizures, but she continued to be unconscious. MRI scan was also carried out, and it was observed that she is suffering from cerebral edema in the frontal lobes of her brain. Doctors continued with medication to address the problem but as the condition was severe, Tigress Gowri did not make it. It was a great loss for the zoo.

However, Gowri's case gave us a good exposure on neuro scanning of the tigers which will help us in treating the carnivores in the future.



Case 04 : Grey Wolf - Ventral wound

Indian Grey Wolf in one of the 7 native species which Mysore Zoo aims at conservation breeding. They have been doing pretty well and breeding also. Usually there will be about 5 puppies in every litter. The mischiefs of these growing puppies are endless, which most times involves them playing, snatching feed from others, hiding, and so on.

With the above background, we can look at one mischievous puppy who got a punctured wound over the ventral region of the neck (throat region) which soon developed into an abscess, which caught the attention of the veterinary team. The veterinary examination confirmed that the abscess was so massive that it might open into a large tissue loss. Repeated dressing, reconstructive surgical repair, medication, and photobiomodulation seatings ensured the healing in a short period. Soon after healing, the puppy was reunited with his family.



Case 05 : Rhino Bubbly - Laceration and Tail Surgery

Bubbly, a 7-year old female Indian Rhinoceros and Virat, a 9-year old male Indian Rhinoceros were housed together in Mysuru zoo. They both came to Mysuru zoo when they were just 2 years of age. Since then, they have lived together and are one of the most famous attractions of Mysuru Zoo.

Both attained puberty. It is common among Indian Rhinoceros that when the female is in estrus, the male chases the female and they even have a milder fight. During one such instance, Bubbly was bitten by Virat at her hindquarters and mid-tail region. The wound over the caudal thigh would heal by the second intention. But the tail wound got infected and extended till the vertebral bone, which might lead to the loss of the tail. Surgical intervention was essential to save the tail.

The animal was sedated, and the wound was surgically reconstructed by Dr Madan, Dr Ramesh, Dr Manjunatha and zoo hospital team. Whole operative was laborious and managed by Executive director Mr. Ajit Kulkarni IFS. An Elizabethan collar had to be applied to avoid the contamination by the urine and dung.

Postoperative care went smoothly as Bubbly was so cooperative for veterinary care. Finally, the tail wound got healed thus saving the tail.

Managing Indian Rhinoceros during their mating time requires well-planned housing, monitoring the heat cycle of the female rhinoceros, feed management, and so on.



Case 06 : Goral - Humerus Fracture

The Himalayan Goral (Naemorhedus Goral) is a bovid species found across the Himalayas. It is listed as Near Threatened on IUCN red list because their population is thought to be declining significantly due to habitat loss and hunting for meat.

Mysore Zoo is currently housing 8 gorals (6:2) (M:F). The Himalayan Goral is very agile and can run quickly. Due to its coloration, it is very well camouflaged, so it is extremely difficult to sight it. The goral enclosure at Mysore zoo provides good facilities to the animal, especially a pile of huge rocks, where the goral's natural hiding and climbing on the rocks, gives immense viewing experience for zoo visitors.

One adult male goral from the group wasn't bearing weight on the left forelimb suspected for fracture. The animal at this time was in the exhibit area and it is quite risky to dart and capture the animal as the animal tends to move vigorously during the darting and capturing time. The animal was sedated cautiously avoiding the fracture end of the bone from damaging the tissue further.

The fractured site was radiographed and the nature of the fracture and its fixative techniques were decided. The next day, the animal was sedated and intubated for inhalant anesthesia. The fracture site was opened surgically and fixed with bone implants. The animal was revived from anesthesia and housed in an inpatient ward for 2 weeks. Postoperative care was very simple, the medicines were given orally, no wound dressing was required, and the wound healing was observed every day. Everything went well and the animal was able to bear weight on 4th postoperative day with lameness. Day by day the lameness reduced and the animal was able to walk in a normal stance. The metal bone implant will be left inside the body. The animal is now with its family with comfort and ease.

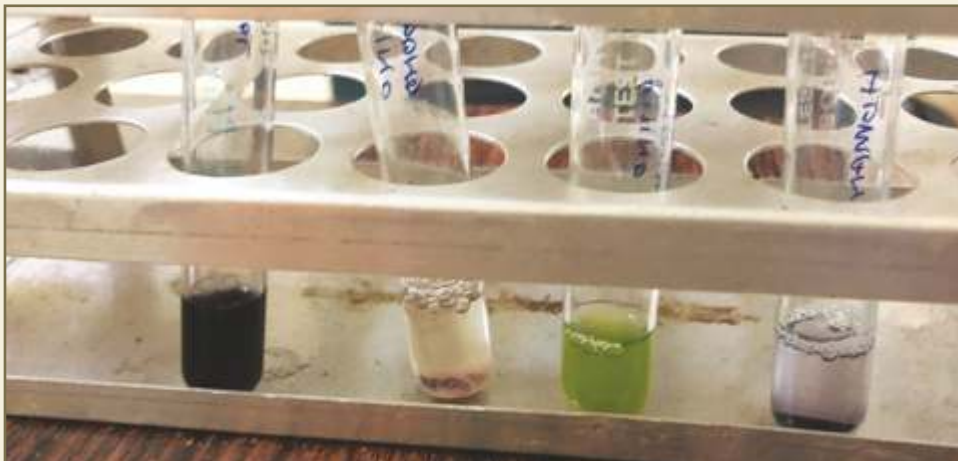


Case 07 : Rhino Bubbly - Salivary Duct

As we discussed Indian Rhinoceros mating behavior in the previous case, our female rhino Bubbly, had a superficial injury at the right lower jaw region, for which dressing was going on. Day by day the swelling became larger and clear odorless fluid started to drip continuously which was well-demarcated and ensured that it is not pus, exudate, and transudate kind of fluids.

There was a major observation made by Veterinarian, where he noticed that the fluid started to drip in large quantities when the animal was given feed and even during mastication. To confirm his observation, the digestive enzyme amylase test was carried out on the fluid which was dribbling out. The test result came positive for amylase again confirming the fluid dribbling out is nothing but saliva from mandibular salivary duct. This is a rare condition that occurs more often due to trauma.

It was very unfortunate for the Mysuru Zoo crew to face such a problem in Indian Rhinoceros. The treatment for the salivary duct fistula is conservative medicinal and if there is no response then by surgical methods. The wound management finally resulted in the spontaneous stoppage of dribbling saliva and eventually healed the wound.



Case 08 : Swamp Deer - Dystocia

Dystocia, difficulty in giving birth, is a rare condition among wild animals as such. The reason for this complication can be either on the mother's side or the fetus's side or even both. Wild animal dystocia is more often due to fetus and is the outcome of abnormal fetal presentation, position and posture, and excessive size of the fetus.

It must be treated in much the same way as it is in domestic species, but animal sedation is a must, and care should be taken to remove the fetus as soon as possible.

One of our young female swamp deer got pregnant and she showed signs of parturition early in the morning. Keepers and veterinarians were watching for any complications. The fetal head and front limbs passed through, as the time passed the mother swamp deer was trying to push the fetus out but in vain, and vets felt that assistance was needed. The mother swamp deer was sedated and the fetus was pulled out and neonatal care was given. Both newborn and mother swamp deer were in the enclosure for few hours and they were reunited with their group once they started exhibiting normal behavior.



Case 9 : Tigress Chamundi - Tumour Excision

Tigress Chamundi was born at Bannerghatta Biological Park in 2012. Her history, in short, includes that she was operated on umbilical hernia when she was 3 months old. Currently, she is housed at Gadag Zoo. The Keepers and veterinarians observed a mass hanging at her lower abdomen.

On sedation, Tigress Chamundi was physically examined and Ultrasonography scanning confirmed the tumorous condition, particularly a fat tissue tumor (Lipoma). To avail the services of experienced Veterinarians, it was shifted to Mysore Zoo for further treatment.

At Mysore Zoo, she was examined thoroughly and it was decided to remove the tumour surgically. Veterinarians team composed of Dr Madan (Vet Surgeon), Dr Ramesh, Dr Manjunatha and hospital team could successfully remove the tumour. Tumor tissue, weighing about a kilogram, was resected from her body. She recovered well from anesthesia. She was on medication for a week. As the surgical wound was quite big, keen monitoring was essential to ensure proper healing. She recovered completely in 20 days and was shifted back to Gadag Zoo and she is doing fine after that.



Case 10 : Meerkat - Digit Amputation

Mysore zoo received 1:3 Meerkats from Zoo Zlin zoo of the Czech Republic. After the quarantine period, the meerkats were doing well and were ready for the exhibit.

While pairing them, there was a small fight between them. No physical injuries were seen but there was a bite between the interdigital spaces of the last two digits of the right forelimb for one of the meerkats.

The wound was dressed regularly but later on the last digit started to sluff-off because of the hampered blood circulation due to injured vessels by the bite.

The animal was given inhalant anaesthesia for the surgical intervention. The digit has to be removed surgically, and the paw was reconstructed surgically.

The induction and recovery were smooth.

Postoperative wound management was quite challenging. The animal hasn't mutilated the wound and the wound healed well.



Case 11 : Dhole Olecranon fracture fixation

As we all know that Dholes are very shy animals. One young male dhole was limping on his left forelimb and we had no idea about the history. Complete non-weight bearing lameness was evident.

Physical examination and radiographs taken on sedation showed a fracture (Avulsion fracture of Olecranon) at the left elbow joint. The fracture site is very crucial for the functioning of the entire leg, so surgical intervention was confirmed and a Cross Pin plus Tension Band Wiring surgical technique was employed to fix the fracture by Dr. Madan, Dr Manjunatha and team. The animal was on a bandage for 10 days. Later when the bandage was removed, the animal was able to bear weight on the affected limb.



Dholes are very sensitive candidates for restraining, anesthesia, and even for surgery and understanding, their psychological response to the overall treatment plays a vital role in successful outcomes.



Case 12 : Mandarin Duck Femur fracture, Pinning

The Mandarin duck is a perching duck species native to Palearctic ecozone and it is closely related to North American wood duck. Mysuru zoo is currently housing 5 Mandarin ducks, 2 males, and 3 females. They are living with other duck species. Visitors have great viewing experience looking at various species of water birds in a single pond enclosure.

The Mandarin ducks in Mysuru zoo are breeding well. One day, our avian keeper Mr. Srinivas found an adult female duck limping, precisely the left limb was hanging. The veterinarian observed the bird, and fracture of the limb was evident. Any bird, with fracture, has to be handled very carefully because the fractured bone ends can injure the vital structure surrounding the fracture site.

The bird was confined and restrained gently for a physical examination which confirmed the fracture in the femur bone. The radiographs were taken to determine the type of fracture. An overriding oblique type of fracture was seen and only surgical fixation could fix the fracture. The bird was sedated and intubated under inhalant anesthesia and the fracture was surgically fixed by Dr. Madan and team. The overall process went well.

Postoperatively, the bird was lame for a week. Gradually the bird started to take support on the fractured limb. Day by day the bird got more grip on the fractured limb. Postoperative radiographs were taken to ensure proper healing of the fractured bone. One month postoperative day, the bird was sedated for removal of the bone-implant fixed at the time of surgery.

The bird started to walk almost immediately with no pain. She is now happily living with her family and she even laid fertile eggs demonstrating her comfortable lifestyle.



Case 13 : White Rhino - Colic

Uban and Vita, our Southern White Rhinoceros are the only Southern White Rhinoceros in India. We are proud to keep them in their specially-designed enclosure.

Uban, 2-years old male and Vita, 4-years old female White Rhinos, came from Singapore Zoo. Two weeks passed by when the time came when their feed brought from Singapore zoo was slowly being shifted to our ration (feed). In Singapore, there were mostly fed on dry hay grass and other concentrates. But here they were being offered green grass, green lucerne, soaked Bengal gram along with bran in addition of dry hay bought from Singapore.

One early morning, 20 days after she arrived at Mysuru zoo, Vita was very restless, getting up, sitting down repeatedly, while doing so, injuring herself against the walls. This behavior was consistent with that of colic, abdominal pain of various origins. The zoo vet team started her immediately on medication, following the rectal evacuation and infusion of a large amount of lukewarm fluid intrarectally relieved her pain.

Her ration was managed accordingly and Phyllium was added to remove the sand particles from her gut because sand colic is the most common type of colic among Rhinoceros.

The second episode of colic was seen a week later but this time the severity of pain was a little less. The same medications followed and there was great recovery with few minutes.

The Third episode of colic was seen again a week later, here the severity was lesser. Medications resulted in a fast response.

It has been 4 months now, no further episodes of colic were seen. The colic signs were never seen in the Male Rhino, Uban, this happened only in, Vita, the female rhino.

There will always be variation in response to changes and no colic signs confirmed the adaptability of the Rhinos to local ration. The reason for the previous colic with the white Rhinos might be because of the change in feed material and also time required for the development of gut flora (microbe). Slowly, the animal's digestive system got adjusted to new feed supply and colic did not recur.



Case 14 : Flapshell Turtle-Fish hook in the throat

Indian Black turtle and Flapshell turtles are commonly found in local freshwater ponds in India. And fishing is not a common hobby among localities here. But one day some local rescuers bought an adult Flapshell turtle with a fishhook stuck in the oral cavity.

Mysuru Zoo Executive Director Mr. Ajit Kulkarni IFS, a person with a great love for animals immediately asked the zoo hospital staff to treat this turtle. Radiographs show the location of the fish hook in the throat region of the turtle. On general anesthesia, the fish hook was carefully dislodged from the throat. The turtle recovered from anesthesia. After monitoring the turtle for any complications, the animal was rehabilitated back to its natural habitat.



Case 15 : Guar - Tail tip Gangrene

Herbivores generally use their tails to repel flies at the hindquarters. One of our adult male gaur's tail got dry gangrene following an injury. Dry gangrene happens due to loss of blood supply to a part of the body. The tail lost its fur, followed by hardness and flaky appearance. The skin appears brittle. The treatment of choice is to remove the affected part. The surgery was performed by Dr. Madan and Dr. Manjunatha early in the morning. The animal was sedated and with infiltration of local anesthesia, the affected tail part with a portion of the healthy part has been resected with standardized surgical procedure.

Postoperatively, the surgical wound was managed, avoiding auto-mutilation, flies, and maggot infestation. The keeper, Mr. Sunil, has good relations with the Gaurs. He can go near and spray the antiseptic solution on the wound, thus expediting the healing of the wound.



Case 16 : Swamp Deer - Hip Dislocation: Toggle Pinning

Swamp deers are another attraction of the Mysuru Zoo herbivore section. A female swamp deer was found to have developed sudden lameness on the left hind limb. Sedation and evaluation were essential as the animal was completely lame on the left hind limb.

The physical examination of the animal revealed the dislocation of the left hip joint. The radiography confirmed the condition and surgery were scheduled for the very next day. Animal was sedated and anesthesia was maintained on inhalation, Surgery-Toggle wiring technique was performed, successfully fixing the dislocated hip.



22 Research Work Carried Out and Publications

21 A. A Study on diversity of Spiders in and around Karanji Lake, Mysuru

By Ms. Padma .S, M.Sc. Zoology (JSS College of Arts, Commerce and Science, Mysuru)

Spiders belong to order Araneae which is the largest order in class Arachnidae. The diversity of spiders in the ecosystem is influenced by several factors and play an important role in the ecosystem and also act as Bio-indicators for the change of the environment. Study on diversity of spiders in Karanji Lake was carried out from 1st to 25th February, 2019 using the methods like active searching, visual observation and hand picking. Total of 218 spider specimen representing 34 species of spiders belonging to 27 genera and 11 families were identified. Family wise percentage of spider fauna was as follows Araneidae(27%), Amaurobidiidae(18%), Lycosidae(22%), Salticidae(11%), Theridiidae(6%), Pholcidae(6%), Uloboridae(5%), Clubionidae(3%), Tetragnathidae(2%), Hersiliidae(1%) and Sparassidae(1%). Family is the most dominated family was, Araneidae (Orb weavers) represents 30%, could be due to wide area, lack of competition, rich food resource and thick vegetation. The result shows that spider diversity in the study area is higher and further studies may yield more information about the diverse Araneae fauna of this area.

21 B. A Study on Diurnal activities of Macaca silenus in captivity

By Ms. Aishwarya S. Raj, M.Sc. Zoology (JSS College of Arts, Commerce and Science, Mysuru)

The Lion-tailed Macaque or "LTM" is a species of primates. Their strikingly similar characteristics with a lion brought its name, the Lion-tailed Macaque. This specific specie is listed as Endangered under IUCN status and is found only in the tropical evergreen forest in the Western Ghat Mountains of Southern India. Study on diurnal activities of Macaca silenus in captivity was carried out at Sri Chamarajendra Zoological Gardens, Mysuru by a standard focal sampling method. Focal sampling was done for three Lion-tailed Macaques, all activities were recorded and photographed. The diurnal period was divided into three phases, where each phase is 2hours long, each Lion-tailed Macaque was observed for 10 minutes, which was repeated 4 times in each phase. 3 Lion-tailed Macaques were observed and all three spent a significant amount of time in resting. As enclosure are large enough, it gave the macaques a reasonable wild experience in captivity. The results show that, time spent by Lion-tailed Macaques in various activities was similar to those found in wild. But, time spent in probing and foraging were considerably less, due to easy availability of food. Another behavioural concern that was seen in captivity is the social aspect, various vocal communications observed in the wild was never exhibited. Lion-tailed Macaques were very well taken care in captivity. It would make an excellent living if social aspects of the specie were also take into consideration.

Sri Chamarajendra Zoological Gardens

21 C. A Study on Diurnal activities of Peafowl (Pavo cristatus) in captivity

By Ms. Preethi .J.M, M.Sc. Zoology (JSS College of Arts, Commerce and Science, Mysuru)

The Indian Peafowl is the largest among the pheasants and belongs to the class Aves, family Phasianidae and order Galliformes. This specie is listed as Least concern under IUCN status, which are widely distributed in India. Study on diurnal activities of Peafowl (Pavo cristatus) in captivity was carried out from January to March at Sri Chamarajendra Zoological Gardens, Mysuru by a standard focal sampling method. The diurnal period was divided into three phases, where each phase is 2hours long. Focal samples were taken on all the peafowls for a period of 10 minutes at every 30 minutes interval and all the activities of peafowls were noted. 4 peafowls were observed in this study. The results show, preening to be more in males during morning compared to females. Most of the time was spent in standing followed by walking behavior and minimum time was spent for drinking and aggressiveness. Peafowls preferred roof tops for roosting and initiation of display by males was seemed to be unrelated to the female's presence.

21 D. Partial mitochondrial genome of Indian rose-ringed parakeet (Psittacula krameri) from India

A study by Machaiah Periyanda Nachappaa,b , Prateek Deya , Sanjeev Kumar Sharmaa , Indrani Sarkara, Swapna Devi Raya and Ram Pratap Singh. MITOCHONDRIAL DNA PART B 2020, VOL. 5, NO. 2, 1232–1233

Indian rose-ringed parakeet (Psittacula krameri) is one of the most recognizable illegally trafficked wild birds. With feral populations in Europe and Australia, its phylogeny and taxonomy are of great interest amongst biologists. The information regarding the genetic composition and make up of Psittacula species from various geographic regions is scarce and incomplete. This study aimed to generate the first partial mitogenome sequence of the species from India. Researchers generated 2611 base pair long mitochondrial sequence of P. krameri. The overall base composition was calculated at AT (52.59%) and GC (47.41%). The complete NAD1 protein-coding gene was annotated along with partial NAD2 protein-coding gene. The sequence encoded four tRNA genes (Isoleucine, Leucine, Glutamine, and Methionine) as well as partial sequence of 16 s rRNA. Psittacula krameri demonstrated closer phylogenetic relation with P. eupatria than P. derbiana. It was also reported that Psittacula species have closest phylogenetic relationship with E. roratus than any other parrots.

Mysore Zoo provided biological samples for this study as well.

21 E. Study on Olfactory enrichment for captive Tigers at Mysore Zoo”.

Darshan CS 1st year, 2nd semester, Kuvempu University

Sneha C, Biologist, Mysuru zoo &

Dr K R Ramesh Assistant Director, Mysuru zoo

Environmental enrichment or Behavioural enrichment techniques are practised on captive animals for encouraging them to display a variety of behaviour using different samples. Captive animals often show stereotypic or abnormal behavioural patterns if there is no enrichment provided. Big cats like tigers use their olfactory sense in communication through spraying and scent marking in the wild, to enhance this activity in captive tigers, olfactory enrichment via novel scents or odours was carried out at Sri Chamarajendra Zoological Garden for a period of one month on Captive Tigers using Focal sampling method. Of the 7 tigers housed at Mysore zoo 4 individuals namely, Brahma, Arjuna, Rahul and Amrutha were chosen for the study. Spices (non-toxic spices), fecal sample of Sambar deer and Gaur was used and samples were placed at selected spots of kraal area for the study. The results showed that there was increased locomotion (walking/moving around) in all tigers, especially two male tigers, Brahma and Arjun showed cheek rubbing (type of scent marking) when spices were used which was not observed before the experiment. Overall the response of tigers towards olfactory stimulus was found to be more in case of spices, which states that the olfactory enrichment through spices influenced a lot on the behaviour of tigers compared to other samples. Hence often subjecting the captive tigers to an olfactory enrichment through spices results in the stimulation of the behaviour of captive tigers and enhances their activity.

Ongoing Research Works:

1. Sequencing all Indian primate species for the understanding of many human diseases.

-By Dr. Umopathy, Principal Scientist and Project Leader, Laboratory for the Conservation of Endangered Species, CSIR-Centre for Cellular and Molecular Biology (CCMB), Hyderabad.

Samples Provided : Blood samples (2ml) of Nilgiri Langur, Common Langur and Rhesus Macaque.

2. Mitochondrial genome sequencing of Mithun to find out its origin.

-By Dr. Sabyasachi Mukerjee, Principal Scientist, ICAR-NRC on Mithun, Nagaland.

3. Population management of species involved in human wildlife management

-By Dr. Sanath Krishna Muliya, Project Scientist, Wildlife Institute of India, Deharadun



23 Conservation Breeding Programme of the Zoo

Mysore Zoo is coordinating zoo for Indian Gaur and participatory Zoo for Nilgiri Langur and Lion Tailed Macaque as per the CZA recognition. Apart from the above, Mysore zoo on its own is proposing to take up conservation breeding of Grey Wolf, Dhole, Grey Jungle Fowl and Malabar Giant Squirrel.

Enclosure Construction Work for Grey Wolf and Indian Gaur has already been completed and for Dhole and Lion Tailed Macaque, tender has been floated.

We have requested the competent authorities for permission to capture founder stock of Gaur from forests of Karnataka as per the provisions of Wildlife Protection Act 1972.

As far as Grey Wolf and Dhohes are concerned, we already have founder stock and are breeding well. To infuse new blood line, efforts being made to acquire individuals from other zoos.

Most of the animals housed at Mysore Zoo are doing well and breeding well. The detail of the same could be obtained from inventory and births and deaths data in coming pages of this report.





24 Animal Acquisition/ Transfer/Exchange During the Year

A. Acquired Animals

Sl. No.	H.NO.	Species	Number (M:F)	From which Zoo	Date of arrival in the zoo
1	M01484-85	Himalayan Black Bear	0:2	Received from Nagaland Zoo	10/02/2019
2	M01486	Indian Grey Wolf	1:0	Received from NZP, Delhi on animal exchange program	24/03/2019
3	M01487	Hamadryas Baboon	1:0	Received from NZP, Delhi on animal exchange program	24/03/2019
4	B01909	Silver Pheasant	1:0	Received from NZP, Delhi on animal exchange program	24/03/2019
5	B01910	Golden Pheasant	1:0	Received from NZP, Delhi on animal exchange program	24/03/2019
6	M01488-91	Asiatic Wild Dog	2:2	Received form Vizag	30/03/2019
7	M01527	Royal Bengal Tiger	0:1	Received from H D Kote range	16/06/2019
8	M01528	Chimpanzee	0:1	Received from Singapore zoo on animal exchange program	23/06/2019
9	M01529-30	Asiatic Lion	1:1	Received from Junagadh Zoo on animal exchange program	26/06/2019
10	M01533	Indian Grey Wolf	1:0	Acquired from Pune Zoo, Maharashtra	22/9/2018
11	M01536-37	Southern White Rhinoceros	1:1	Acquired from Singapore Zoo	12/8/2019
12	M01545	Tiger	1:0	Rescued from Bandipura range Hosahundi, Gundlupet	13/10/2019
13	M01546-47	Indian Fox	1:1	Raipur Zoo, Chattisgarh	19/11/2019
14	M01549-50	Common Marmoset	1:1	Received from Zoo Zlin, Czech Republic, Prague	6/12/2019
15	M01551-54	Meerkat	1:3	Received from Zoo Zlin, Czech Republic, Prague	6/12/2019
16	B01920-23	Military Macaw	2:2	Received from Zoo Zlin, Czech Republic, Prague	6/12/2019
17	B01924-27	Scarlet Macaw	2:2	Received from Zoo Zlin, Czech Republic, Prague	6/12/2019
18	M01555	Indian Rhino	0:1	Received from Guwahati, Assam	13/12/2019
19	M01556-7	Western Hoolock Gibbon	1:1	Received from Guwahati, Assam	13/12/2019
20	M01558	Black Panther	0:1	Received from Guwahati, Assam	13/12/2019
21	M01548	Muntjac	1:0	Received from Virajpet Forest Division	27/12/2019
22	M01405	Leopard	1:0	Captured by Forest Department at Wonderla, Ramanagara and handed over to Zoo on 27/1/2018	1/1/2020
23	M01380	Leopard	1:0	Captured by Forest Department at Hosadurga Forest Division and handed over to Zoo on 12/7/2018	1/1/2020
24	M01573	Mysuru Lories	1:1	Received from T.N.Range, Thayur Village from Forest Dept.	21/1/2020
25	B01928	Grey Jungle Fowl	4:4	Received from Tirupati Zoo, Andhra Pradesh	24/1/2020
26	R00215	King Cobra	1:2	Received from Pilikula Zoo, Mangalore on animal exchange programme	28/2/2020
27	M01577	Royal Bengal Tiger	0:1	Received from Pilikula Zoo, Mangalore on animal exchange programme	28/2/2020
28	R00214	Water Monitor Lizard	1:1	Received from Pilikula Zoo, Mangalore on animal exchange programme	28/2/2020
29	B01929	Lesser Whistling Teal	1:1	Received from Pilikula Zoo, Mangalore on animal exchange programme	28/2/2020

B. Animals Spared to other Zoo

Sl. No.	H.NO.	Species	Number (M:F:U)	Going to which Zoo	Date of deposition from the Zoo
1	M01467-1470	Nilgai	2:2:0	Transferred to Sri Lanka Zoo on Animal exchange program	28/04/2019
2	M01256, M01267, M01262, M01266	Black Buck	2:2:0	Transferred to Sri Lanka Zoo on Animal exchange program	28/02/2020
3	M01350; M01351; M01352	Asiatic Elephant	1:2:0	Shifted to Bandipur forest camp	7/12/2019
4	M01054	Royal Bengal Tiger	1:0:0	Shifted to Hosapet Kamalapur Zoo Bellary	17/6/2019
5	M00429, 31-34; M00453-61; M00462-68	Spotted Deer	5:15:0	Released to Arabhitittu Wildlife Sanctuary	14/06/2019
6	M00435-39; M00469-78	Spotted deer	5:10:0	Released to Arabhitittu Wildlife Sanctuary	15/06/2019
7	M01450	Sloth bear	0:1:0	Shifted to Singapore Zoo on animal exchange program	26/06/2019
8	M01423; M01398-99	Gaur	1:2:0	Shifted to Sakkarbaug zoo Junagad on animal exchange program	28/06/2019
9	B01733; B01741	Black Swan	1:1:0	Shifted to Sakkarbaug zoo Junagad on animal exchange program	28/06/2019
10	M00436, M00443, M00441, M0466, M0460, M00485, M00490	Spotted Deer	3:4:0	Released to Arabithittu Wildlife Sanctuary	15/07/2019
11	M00033; M01131	Hippopotamus	1:1:0	Shifted to Sakkarbaug zoo, Junagad on animal exchange program.	30/07/2019
12	M00393, 94,453-456	Spotted Deer	2:4:0	Transferred to Chitradurga Zoo as a gift	28/8/2019
13	M00518-19, 562,64,66	Nilgai	2:3:0	Transferred to Chitradurga Zoo as a gift	28/8/2019
14	M01483, 1493, 1480, 1456	Gaur	2:2:0	Transferred to Zoo Zlin, Czech Republic on animal exchange programme	19/9/2019
15	M00584,853	Nilgai	1:1:0	Transferred to Tiger and Lion Safari, Tyavarekoppa, Shivamogga	27/9/2019

B. Animals Spared to other Zoo

Sl. No.	H.NO.	Species	Number (M:F:U)	Going to which Zoo	Date of deposition from the Zoo
16	M01143,52,65,213,225,239,257,85,87,305,02,03,14,15,31	Black Buck	5:10:0	Transferred to Tiger and Lion Safari, Tyavarekoppa, Shivamogga	27/9/2019
17	R00208-09	Indian Rock Python	1:1:0	Transferred to Tiger and Lion Safari, Tyavarekoppa, Shivamogga	27/9/2019
18	B01683-88	Emu	3:3:0	Transferred to Tiger and Lion Safari, Tyavarekoppa, Shivamogga	27/9/2019
19	B01657-59,559,558Red	Red Jungle Fowl	3:3:0	Transferred to Tiger and Lion Safari, Tyavarekoppa, Shivamogga	27/9/2019
20	B01569	Chinese Ring Necked Pheasant	1:0:0	Transferred to Tiger and Lion Safari, Tyavarekoppa, Shivamogga	27/9/2019
21	M01298, M01540	Hyena	1:1:0	Transferred to Bannerghatta Biological Park, Bangalore.	30/9/2019
22	M01436,1345	Gaur	0:2:0	Transferred to Bannerghatta Biological Park, Bangalore.	30/9/2019
23	M01274-75,	Indian Grey Wolf	1:1:0	Transferred to Nagaland Zoo	25/1/2019
24	M00593,83	Nilgai	1:1:0	Transferred to Bellary Zoo	26/10/2019
25	M00843-44,126,709	Jackal	2:2:0	Transferred to Bellary Zoo	26/10/2019
26	M01204,07	Indian Grey Wolf	2:0:0	Transferred to Gadag Zoo	28/10/2019
27	M01481,306-08,22	Rhesus Macaque	2:3:0	Transferred to Gadag Zoo	28/10/2019
28	B01629,34	Black Swan	2:0:0	Transferred to Gadag Zoo	28/10/2019
29	b00286,88,90,93,89,84,87,83,92,82,94	Budgerigars	0:0:10	Transferred to Gadag Zoo	28/10/2019
30	B01910,1575	Yellow Golden Pheasant	1:1:0	Transferred to Raipur Zoo, Chattisgarh	14/11/2019
31	B00417,682	Golden Pheasant	1:1:0	Transferred to Raipur Zoo, Chattisgarh	14/11/2019
32	B00753,1865	Lady Amherst Pheasant	1:1:0	Transferred to Raipur Zoo, Chattisgarh	14/11/2019
33	B01637,677	Black Swan	1:1:0	Transferred to Raipur Zoo, Chattisgarh	14/11/2019
34	M01255	Striped Hyena-Vaayu	1:0:0	Transferred to Raipur Zoo, Chattisgarh	14/11/2019
35	M01420	Giraffe - Jayachamaraja	1:0:0	Transferred to Assam State Zoo, Guwahati	28/11/2019
36	B016300	Ostrich	1:0:0	Transferred to Assam State Zoo, Guwahati, Assam on animal exchange programme	16/12/2019
37	B01816-20,59	Black Swan	3:3:0		
38	B00900-1263	Sarus Crane	1:1:0		
39	M01249-50,46	Hog Deer	1:2:0	Shifted to Shivamogga Zoo	20/12/2019
40	R00026	Mugger Crocodile	1:0:0	Shifted to Shivamogga Zoo	20/12/2019

B. Animals Spared to other Zoo

Sl. No.	H.NO.	Species	Number (M:F:U)	Going to which Zoo	Date of deposition from the Zoo
41	M01445-46	Leopard	2:0:0	Shifted to Chitradurga Zoo	27/12/2019
42	B00291,95-9, 85,1036,30,22	Budgerigar	0:0:10	Shifted to Chitradurga Zoo	27/12/2019
43	M01253, M01237	Hyena (Varun and Sowmya)	1:1:0	Transferred to Veermata Jijabai Udyan Zoo, Mumbai	31/12/2019
44	B01811-12	Black Swan	1:1:0	Transferred to Tirupathi Zoo on animal exchange programme	24/1/2020
45	BCNH-1	Black Crowned Night Heron	5:5:0	Transferred to Tirupathi Zoo on animal exchange programme	24/1/2020
46	B01913-14	Plum Headed Parakeet	1:1:0	Transferred to Tirupathi Zoo on animal exchange programme	24/1/2020
47	B01680-82,92	Black Swan	2:2:0	Transferred to Pilikula Zoo, Mangalore on animal exchange programme	27/2/2020
48	M01373, 1463	Hyena	1:1:0	Transferred to Pilikula Zoo, Mangalore on animal exchange programme	27/2/2020
49	M01526, 43	Gaur	1:1:0	Transferred to Pilikula Zoo, Mangalore on animal exchange programme	27/2/2020

Transporting of Hippopotamus to Sakkarbaugh Zoo, Junagadh



Transporting of Animals to Zoo Zlin, Czech Republic



25 Rescue and Rehabilitation of Wild Animals Carried Out by the Zoo

	Date of Rescue	Species with number of animals rescued with their sex (M: F:U:T)	Received from	Date of Submission of Report to the CWLW / CZA	Action taken	
					Date and Place of rehabilitation in their habitat	Reasons for housing in the zoo, if not released in their habitat
1	16/06/2019	Royal Bengal Tiger 0:1	Received from H D Kote Range	25/06/2019		Conflict Animal. No directions from CWLW for release.
2	13/10/2019	Royal Bengal Tiger 1:0	Rescued from Bandipura Range Hosahundi, Gundlupet	18/10/2019		Conflict Animal. No directions from CWLW for release.

Inventory Report for the Year : 2019-20

Part – A Endangered Species*

MAMMALS

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020					
							Births			Acquisitions			Disposals			Deaths								
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T		
1	Asiatic Elephant	<i>Elephas maximus</i>	5	11	0	16	0	0	0	0	0	0	0	0	1	2	0	0	0	0	4	9	0	13
2	Slender Loris	<i>Loris tardigradus</i>	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	2	1	0	3
3	Rhesus Macaque	<i>Macaca mulatta mulatta</i>	7	7	0	14	0	0	1	0	0	0	2	3	0	0	0	0	0	5	4	1	10	
4	Lion-tailed Macaque	<i>Macaca silenus</i>	3	3	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6	
5	Northern Plains Grey Langur	<i>Semnopithecus entellus</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	2	
6	Nilgiri Langur	<i>Trachypithecus johnii</i>	1	2	0	3	1	1	1	0	0	0	0	0	0	1	0	0	1	2	0	0	3	
7	Western Hoolock Gibbon	<i>Hoolock hoolock</i>	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0	2	
8	Indian Giant Squirrel	<i>Ratufa indica</i>	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1
9	Jungle Cat	<i>Felis chaus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
10	Leopard Cat	<i>Prionailurus bengalensis bengalensis</i>	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	
11	Rusty Spotted Cat	<i>Prionailurus rubiginosus rubiginosus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
12	Asiatic Lion	<i>Panthera leo percicus</i>	1	1	0	2	0	0	0	1	1	0	0	0	0	0	0	1	0	2	1	0	3	
13	Indian Leopard	<i>Panthera pardus fusca</i>	8	13	0	21	0	0	0	2	1	0	2	0	0	0	1	0	8	13	0	21		
14	Tiger (white)	<i>Panthera tigris</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3		
	Bengal Tiger	<i>Panthera tigris tigris</i>	9	3	0	12	0	0	0	1	2	0	1	0	0	1	1	0	8	4	0	12		
15	Common Palm Civet	<i>Paradoxurus hermaphroditus</i>	2	2	2	6	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	6		
16	Small Indian Civet	<i>Viverricula indica</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
17	Golden Jackal	<i>Canis aureus</i>	4	3	5	12	0	0	0	0	0	0	2	2	0	0	0	0	2	1	5	8		
18	Indian Grey Wolf	<i>Canis lupus pallipes</i>	8	8	0	16	10	1	0	2	0	0	3	1	0	2	1	0	15	7	0	22		
19	Dhole	<i>Cuon alpinus</i>	6	2	0	8	2	2	0	2	2	0	0	0	0	0	0	0	0	6	0	0	15	
20	Bengal Fox	<i>Vulpes bengalensis</i>	0	0	0	0	0	0	3	1	1	0	0	0	0	0	0	0	1	1	3	5		
21	Sloth Bear	<i>Melursus ursinus</i>	6	4	0	10	0	0	0	0	0	0	0	1	0	0	0	0	6	3	0	9		
22	Asiatic Black Bear	<i>Ursus thibetanus</i>	3	1	0	4	0	0	0	0	2	0	0	0	0	0	0	0	3	3	0	6		
23	Smooth-coated Otter	<i>Lutrogale perspicillata</i>	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	2		
24	Mouse Deer	<i>Moschiola meminna</i>	2	3	0	5	0	1	1	0	0	0	0	0	1	2	0	1	2	1	4			
25	Barasingha/swamp Deer	<i>Rucervus duvaucelli</i>	1	19	0	26	0	0	10	0	0	0	0	0	1	1	0	6	18	10	34			
26	Manipur Brow-antlered Deer	<i>Rucervus eldii eldii</i>	7	6	1	14	0	0	2	0	0	0	0	0	1	0	0	6	6	3	15			
27	Black Buck (white)	<i>Antilope cervicapra</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1		
	Black Buck	<i>Antilope cervicapra cervicapra</i>	22	14	6	42	0	0	3	0	0	0	7	12	0	0	1	0	15	1	9	25		
28	Gaur	<i>Bos frontalis gaurus</i>	17	18	2	37	6	5	1	0	0	0	4	7	0	2	2	0	17	14	3	34		
29	Four-horned Antelope	<i>Tetracerus quadricornis</i>	9	15	3	27	2	1	0	0	0	0	0	0	2	0	0	9	16	3	28			
30	One Horned Rhino	<i>Rhinoceros unicornis</i>	1	1	0	2	0	0	0	0	1	0	0	0	0	0	0	1	2	0	0	3		
Total			132	144	19	301	21	11	22	12	13	0	22	28	0	13	11	0	126	128	40	303		

BIRDS

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020						
							Births			Acquisitions			Disposals			Deaths									
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T			
1	Grey Junglefowl	<i>Gallus sonneratii</i>	2	4	0	6	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	6	8	0	14
2	Peacock-white	<i>Pavo</i>	1	3	4	8	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2	4	0	6
	Common Peafowl	<i>Pavo cristatus</i>	10	15	0	25	0	0	0	0	0	0	0	0	0	0	1	0	10	14	0	24			
3	Eurasian Spoonbill	<i>Platalea leucorodia</i>	2	1	3	6	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	6			
4	Tawny Eagle	<i>Aquila rapax</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1
5	Brahminy Kite	<i>Haliastur indus</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1
6	Asian Grey Hornbill	<i>Ocyrceros birostris</i>	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	0	0	1	0	0	1
7	Great Hornbill	<i>Buceros bicornis</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1
TOTAL			15	25	8	48	0	0	0	5	4	0	0	0	0	2	3	0	19	27	8	54			

REPTILES

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020						
							Births			Acquisitions			Disposals			Deaths									
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T			
1	Indian Flapshell Turtle	<i>Lissemys punctata punctata</i>	3	3	0	6	0	0	0	0	0	0	0	0	0	0	1	0	3	2	0	5			
2	Reticulated Python	<i>Python reticulatus</i>	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	4			
3	Indian Rock Python	<i>Python molurus molurus</i>	2	3	2	7	0	0	0	0	0	0	1	1	0	1	0	0	1	2	2	5			
4	Common Rat Snake	<i>Ptyas mucosus</i>	2	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3			
5	Indian Cobra	<i>Naja naja naja</i>	2	2	1	5	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	5			
6	Albino Indian Cobra	<i>Naja</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1
7	King Cobra	<i>Ophiophagus hannah</i>	1	1	0	2	0	0	0	1	2	0	0	0	0	1	0	0	1	3	0	4			
8	Russell's Viper	<i>Daboia russelii</i>	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2			
9	Mugger Crocodile	<i>Crocodylus palustris</i>	2	1	1	4	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	3			
10	Saltwater Crocodile	<i>Crocodylus porosus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2			
11	Gharial	<i>Gavialis gangeticus</i>	2	3	2	7	0	0	0	0	0	0	0	0	0	0	0	0	2	3	2	7			
12	Monitor Lizard	<i>Varanus bengalensis</i>	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	2			
TOTAL			16	17	10	43	0	0	0	2	3	0	2	1	0	2	1	0	15	18	10	43			

*Animals under Schedule I and Schedule II of the Wild Life (Protection) Act, 1972

Part – B Other than Endangered Species

Mammals - Other Schedule

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020					
							Births			Acquisitions			Disposals			Deaths								
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T		
1	Indian Crested Porcupines	<i>Hystrix indica</i>	2	2	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	6
2	Striped Hyena	<i>Hyaena hyaena</i>	2	10	1	17	1	1	0	0	0	0	0	4	3	0	0	1	0	0	3	7	1	11
3	Spotted Deer	<i>Axis axis</i>	29	42	0	71	0	0	17	0	0	0	15	33	0	0	0	0	0	0	14	9	17	40
4	Hog Deer	<i>Axis porcinus</i>	30	11	0	41	0	3	10	0	0	0	1	2	0	0	0	0	0	0	29	12	10	51
5	Indian Muntjac	<i>Muntiacus muntjak</i>	9	4	0	13	0	0	9	1	1	0	0	0	0	0	0	0	0	0	10	4	9	23
6	Sambar	<i>Rusa unicolor</i>	9	19	4	32	0	0	3	0	0	0	0	0	0	0	0	0	0	0	9	19	7	35
7	*Nilgai	<i>Boselaphus tragocamelus</i>	22	19	0	41	3	12	0	0	0	0	6	7	0	0	0	0	0	0	19	24	0	43
8	Himalayan Goral	<i>Naemorhedus goral</i>	6	2	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	0	8
			109	109	7	229	4	16	39	1	1	0	26	45	0	0	1	0	0	0	92	79	46	217

Reptiles - Other Schedule

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020					
							Births			Acquisitions			Disposals			Deaths								
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T		
1	Indian Black Turtle	<i>Melanochelys trijuga</i>	9	10	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	10	0	19
2	Star Tortoise	<i>Geochelone elegans</i>	0	0	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
3	Rough-scaled Sand Boa	<i>Gongylophis conicus</i>	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
4	Green Vine Snake	<i>Ahaetulla nasuta</i>	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
5	Striped Keelback Snake	<i>Amphiesma stolata</i>	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
6	Bronzeback Tree Snake	<i>Dendrelaphis tristis</i>	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
7	Common Kukri Snake	<i>Oligodon arnensis</i>	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
8	Common Indian Krait	<i>Bungarus caeruleus</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
		TOTAL	9	10	23	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	10	23	42

Birds - Other Schedule

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020					
							Births			Acquisitions			Disposals			Deaths								
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T		
1	Red Junglefowl	<i>Gallus gallus</i>	6	7	0	13	0	0	0	0	0	0	0	3	3	0	0	0	0	0	3	4	0	7
2	Bar-headed Goose	<i>Anser indicus</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
3	Greylag Goose	<i>Anser anser</i>	0	0	2	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
4	Spot-billed Duck	<i>Anas poecilorhyncha</i>	3	5	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	5	0	8
5	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	0	0	3	3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	3	5
6	Comb Duck	<i>Sarkidiornis melanotos</i>	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
7	Ruddy Shelduck	<i>Tadorna ferruginea</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
8	Flamingo	<i>Phoenicopterus roseus</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
9	Painted Stork	<i>Mycteria leucocephala</i>	3	4	3	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	4	3	9
10	Lesser Adjutant Stork	<i>Leptoptilos javanicus</i>	2	0	0	2	0	0	0	0	0	2	0	0	0	0	1	0	0	0	2	0	0	2
11	Black-headed Ibis	<i>Threskiornis melanocephalus</i>	3	3	14	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	14	20
12	Purple Heron	<i>Ardea purpurea</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
13	Indian Pond Heron	<i>Ardeola grayii</i>	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
14	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	45	45	0	90	0	0	0	0	0	0	5	5	0	0	0	0	0	0	40	40	0	80
15	Great White Pelican	<i>Pelecanus onocrotalus</i>	5	5	2	12	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4	5	2	11
16	Spot-billed Pelican	<i>Pelecanus philippensis</i>	3	2	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	2	7
17	Sarus Crane	<i>Grus antigone</i>	8	4	0	12	0	0	0	0	0	1	1	0	1	2	0	0	0	0	6	1	0	7
18	Rock Dove	<i>Columba livia</i>	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
19	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>	4	6	1	11	0	0	2	0	0	0	1	1	0	0	0	0	0	0	3	5	3	11
20	Alexandrine Parakeet	<i>Psittacula eupatria</i>	2	3	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	6	11
21	Rose-ringed Parakeet	<i>Psittacula krameri</i>	3	9	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9	0	12
22	Common Barn Owl	<i>Tyto alba</i>	2	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	4
23	Brown Wood Owl	<i>Strix leptogrammica</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
24	Red Avadavit	<i>Amandava amandava</i>	10	10	4	24	0	0	0	1	1	0	0	0	0	0	0	0	0	0	10	10	4	24
25	White-throated Munia	<i>Lonchura malabarica</i>	10	7	10	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	7	10	27
			112	117	54	283	0	0	2	2	2	2	10	10	2	3	3	0	0	0	100	106	54	260

Mammals Exotic

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020			
							Births			Acquisitions			Disposals			Deaths						
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
1	Red-necked Wallaby	<i>Macropus rufogriseus</i>	3	1	2	6	0	0	0	0	0	0	2	0	0	0	0	0	1	1	2	4
2	African Elephant	<i>Laxodonta africana</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
3	Ring-tailed Lemur	<i>Lemur catta</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
4	Common Marmoset	<i>Callithrix jacchus</i>	3	2	0	5	0	0	0	1	1	0	1	1	0	0	0	0	3	2	0	5
5	Brown Capuchin	<i>Cebus apella apella</i>	3	3	2	8	0	0	0	0	0	0	0	1	0	0	0	0	3	2	2	7
6	Hamadryas Baboon	<i>Papio hamadryas</i>	1	3	0	4	0	0	1	1	0	0	0	0	0	0	0	0	2	3	1	6
7	Chimpanzee	<i>Pan troglodytes</i>	3	1	0	4	0	0	0	0	1	0	0	0	0	0	0	0	3	2	0	5
8	Cheetah *	<i>Acinonyx jubatus</i>	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
9	Lion (hybrid)	<i>Panthera leo</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
10	Slender Tailed Meerkat	<i>Suricata suricatta</i>	1	2	0	3	0	0	0	1	3	0	1	1	0	0	0	0	1	4	0	5
11	Jaguar	<i>Panthera onca</i>	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1
12	Bat Eared Fox	<i>Otocyon megalotis</i>	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1
13	Grant Zebra	<i>Equus quagga boehmi</i>	2	4	0	6	1	0	0	1	3	0	0	1	0	0	0	0	3	3	0	6
14	South American Tapir	<i>Tapirus terrestris</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
15	Southern White Rhinoceros	<i>Ceratotherium simum simum</i>	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	2
16	Hippopotamus	<i>Hippopotamus amphibius</i>	5	6	0	11	0	0	0	0	0	0	0	2	0	1	1	0	4	5	0	9
17	Giraffe	<i>Giraffa camelopardalis</i>	4	4	0	8	0	0	0	0	0	0	0	0	0	1	0	0	3	4	0	7
18	Cape Buffalo	<i>Syncerus caffer caffer</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
EXOTIC TOTAL			32	31	4	67	1	0	1	5	9	0	6	7	0	2	1	0	31	31	5	67
SCH 1 & 2 TOTAL			132	144	19	301	21	11	22	12	13	0	22	28	0	13	11	0	126	128	40	303
OTHER SCH TOTAL			109	109	7	229	4	16	39	1	1	0	26	45	0	0	1	0	92	79	46	217
GRAND TOTAL			273	284	30	597	26	27	62	18	23	0	54	80	0	15	13	0	249	238	91	587

Birds Exotic

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020				
							Births			Acquisitions			Disposals			Deaths							
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T	
1	Common Ostrich	<i>Struthiocamelus</i>	4	3	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	3	3	0	6
2	Darwin's Rhea	<i>Pterocnemiapennata</i>	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
3	Cassowary	<i>CasuariusCasuarius</i>	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4	Emu	<i>Dromaiusnovaehollandiae</i>	4	13	0	17	0	0	0	0	0	0	0	0	0	3	3	0	1	10	0	11	
5	Silver Pheasant	<i>Lophuranycthemera</i>	3	8	14	25	0	0	0	1	0	0	0	2	0	1	1	0	4	6	14	24	
6	Common Ring Necked Pheasant	<i>Phasianuscolchicus</i>	2	2	0	4	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	3	
7	Yellow Golden Pheasant	<i>Chrysolophus</i>	3	7	6	16	0	0	0	0	0	0	0	0	0	1	1	0	2	6	6	14	
8	Lady Amherst's Pheasant	<i>Chrysolophusamherstiae</i>	6	6	5	17	0	0	0	0	0	0	4	1	0	2	2	0	0	3	5	8	
9	Golden Pheasant	<i>Chrysolophuspictus</i>	7	6	8	21	0	0	0	1	0	0	1	1	0	0	0	0	7	5	8	20	
10	Lesser Snow Goose	<i>Ansercaerulescenscaerulescens</i>	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	
11	Black Swan	<i>Cygnusatratrus</i>	11	9	7	27	0	0	15	0	0	0	1	1	0	10	8	0	0	-0	22	22	
12	Black-necked Swan	<i>Cygnusmelanocoryphus</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
13	Mandarin Duck	<i>Aixgalericulata</i>	3	2	0	5	0	0	0	2	2	0	1	0	0	0	0	0	2	2	0	4	
14	North American Wood Duck	<i>Aixsponsa</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
15	Muscovy Duck	<i>Cairinamoschata</i>	1	1	2	4	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	
16	Scarlet Ibis	<i>Eudocimusruber</i>	9	6	0	15	0	0	3	0	0	0	0	0	0	1	1	0	9	6	3	18	
17	Red Lory *	<i>Eosrubra</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
18	Dusky Lory	<i>Pseudeosfuscata</i>	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	
19	Rainbow Lorikeet	<i>Trichoglossushaematodus haematodus</i>	2	2	0	4	0	0	5	0	0	0	0	0	0	0	0	0	2	2	5	9	
20	Australian Rainbow Lorikeet	<i>Trichoglossusmoluccanus</i>	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	
21	Budgerigar	<i>Melopsittacusundulatus</i>	7	17	126	150	0	0	0	0	0	0	0	0	0	5	5	20	7	17	106	130	

Birds Exotic

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020					
							Births			Acquisitions			Disposals			Deaths								
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T		
22	Eclectus Parrot	<i>Eclectus roratus</i>	2	1	1	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	1	2	5
23	Peach-faced Love Bird	<i>Agapornis roseicollis</i>	10	10	13	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	13	33
24	Masked Love Birds	<i>Agapornis personata</i>	2	1	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	5
25	Grey Parrot	<i>Psittacus erithacus erithacus</i>	1	3	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	5
26	Western Grey Parrot	<i>Psittacus erithacus timneh</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
27	Blue-and-yellow Macaw	<i>Ara ararauna</i>	2	3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	5
28	Green Winged Macaw	<i>Ara chloroptera</i>	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4
29	Scarlet Macaw	<i>Ara macao</i>	1	1	0	2	0	0	0	2	2	0	0	0	0	0	0	0	0	0	3	3	0	6
30	Military Macaws	<i>Ara militaris</i>	2	2	0	4	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4	4	0	8
31	Jandaya Conure	<i>Aratinga jandaya</i>	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
32	Sun Conure	<i>Aratinga solstitialis</i>	2	2	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	5
33	Nanday Conure	<i>Nandayus nenday</i>	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
34	Patagonian Burrowing Parrot	<i>Cyanoliseus patagonus patagonus</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
35	Goffin's Cockatoo	<i>Cacatua goffini</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
36	Salmon-crested Cockatoo	<i>Cacatua moluccensis</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
37	Lesser Sulphur Crested Cockatoo	<i>Cacatua sulphurea</i>	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4
38	Cockatiel	<i>Nymphicus hollandicus</i>	5	6	3	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	3	14
39	Livingston's Turaco	<i>Tauraco livingstonii</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
40	Red-billed Toucan	<i>Ramphastos tucanus</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
41	Paradise Whydah	<i>Vidua paradisaea</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
42	Javan Sparrow	<i>Padda oryzivora</i>	2	4	0	6	0	0	15	0	0	0	0	0	0	0	0	0	0	0	2	4	15	21
43	Zebra Finch	<i>Poephila guttata</i>	4	4	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	8
EXOTIC TOTAL			111	133	199	443	0	0	39	8	6	0	7	5	0	26	22	22	90	117	216	423		
SCH 1& 2 TOTAL			15	25	8	48	0	0	0	5	4	0	0	0	0	2	3	0	19	27	8	54		
OTHER SCH TOTAL			112	117	54	283	0	0	2	2	2	2	10	10	2	3	3	0	100	106	54	260		
GRAND TOTAL			235	275	261	774	0	0	41	15	12	2	17	15	2	31	28	22	209	250	278	737		

Reptiles Exotic

Sl. No.	Common Name	Scientific Name	Opening Stock as on 01-04-2019				From April 2019 - March 2020												Closing Stock as on 31-03-2020							
							Births			Acquisitions			Disposals			Deaths										
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T				
1	Green Iguana	<i>Iguana iguana</i>	1	2	0	3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	2	0	3	
2	Green Anaconda	<i>Eunectes murinus</i>	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
3	Spectacled Caiman	<i>Caiman crocodilus</i>	4	4	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	8	
4	African Slender-Snouted Crocodile	<i>Crocodylus cataphractus</i>	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
5	Morelet's Crocodile	<i>Crocodylus moreletii</i>	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	
6	Nile Crocodile	<i>Crocodylus niloticus africanus</i>	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
EXOTIC TOTAL			6	12	3	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	12	3	21	
SCH 1& 2 TOTAL			16	17	10	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	18	10	43	
OTHER SCH TOTAL			9	10	23	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	10	23	42	
GRAND TOTAL			31	39	36	106	0	0	0	2	3	0	2	1	0	2	1	0	30	40	36	106				



27 Mortality of Animals

Sl. No.	Animal Name (With individual identification mark, if any)		Scientific Name	Sex	Date of Death	Reason for Death as per the Post mortem report
	Species	Local ID				
1	Smooth Coated Otter	M00320	<i>Lutrogale perspicillata</i>	M	07/04/2019	Multi organ failure and senile
2	White Peacock	B00170	<i>Pavo cristatus</i>	F	28/04/2019	Senile
3	Swamp Deer	M00280	<i>Rucervus duvaucelli</i>	F	20/05/2019	Infighting and trauma
4	Black Buck	M00224	<i>Antilope cervicapra cervicapra</i>	F	22/05/2019	Infighting
5	Gaur (Pen 2) Vipin	M00094	<i>Bos frontalis gaurus</i>	M	27/05/2019	Pneumonia, multi organ failure and Senility
6	Lady Amherst's Pheasant	B00144	<i>Chrysolophus amherstiae</i>	M	28/05/2019	Infighting
7	Golden Pheasant	B00415	<i>Chrysolophus pictus</i>	F	05/06/2019	Senility
8	Nilgiri Langur	M01482	<i>Trachypithecus johnii</i>	M	07/06/2019	Fell from height with multiple head injuries
9	Dusky Lorry	B00859	<i>Pseudeos fuscata</i>	M	09/06/2019	Infighting
10	Golden Pheasant	B00416	<i>Chrysolophus pictus</i>	M	10/06/2019	Infighting
11	Indian Grey Wolf Pup	M01460	<i>Canis lupas pallipes</i>	M	13/06/2019	Gastroenteritis
12	Indian Grey Wolf Pup	M01461	<i>Canis lupas pallipes</i>	F	19/06/2019	Gastroenteritis
13	Sarus Crane	B01625	<i>Grus antigone</i>	F	26/06/2019	Hepatic failure
14	Royal Bengal Tiger (Macha)	M01466	<i>Panthera tigris tigris</i>	M	02/07/2019	Multi-organ failure/Pyothorax
15	Bat Eared Fox	M01074	<i>Otocyon megalotis</i>	M	05/07/2019	Senile and multi organ failure
16	Silver Pheasant	B00969	<i>Lophura nycthemera</i>	F	05/07/2019	Infighting
17	Lady Amherst Pheasant	B00145	<i>Chrysolophus amherstiae</i>	M	06/07/2019	Predator attack
18	Mouse Deer	M01203	<i>Moschiola meminna</i>	F	26/07/2019	Gastroenteritis
19	Gaur Pen 1 (Rani)	M01251	<i>Bos frontalis gaurus</i>	F	29/07/2019	Pneumonia/ cardiac failure
20	Mouse Deer	M01504	<i>Moschiola meminna</i>	F	05/08/2019	Died due to Septicemia
21	Indian Peafowl	B00175	<i>Pavo cristatus</i>	F	06/08/2019	Died due to Hepatitis / Enteritis
22	Capuchin	M00831	<i>Cebus apella apella</i>	F	12/08/2019	Died due to Septicemia
23	Asiatic Lion-Gowri	M00149	<i>Panthera leo percicus</i>	F	22/08/2019	Died due to Septicemia
24	Tiger - Gowri	M01346	<i>Panther tigris tigris</i>	F	24/08/2019	Died due to Neurological shock
25	Mouse Deer	M01494	<i>Moschiola meminna</i>	M	05/09/2019	Died due to Multi- organ failure
26	Gaur - Kurugahalli		<i>Bos frontalis gaurus</i>	F	05/09/2019	Died due to Malignant Catarrhal Fever
27	Indian Flapshell Turtle	R00039	<i>Lissemys punctata punctata</i>	F	06/09/2019	Died due to Infection
28	Zebra - Sanvi	M01219	<i>Equus quagga boehmi</i>	F	12/09/2019	Died due to Tetanus
29	Gaur - Pen 1	M00058	<i>Bos frontalis gaurus</i>	M	17/09/2019	Died due to Senility
30	Indian Grey Wolf	M01206	<i>Canis lupas pallipes</i>	M	21/06/2018	Died due to Gastro Enteritis.
31	Red necked Wallaby	M00163	<i>Macropus rufogriseus</i>	M	01/10/2019	Died due to Multiorgan Failure
32	Hunting Cheetah	M00175	<i>Acinonyx jubatus</i>	F	15/10/2019	Died due to Senility

Sl. No.	Animal Name (With individual identification mark, if any)		Scientific Name	Sex	Date of Death	Reason for Death as per the Post mortem report
	Species	Local ID				
33	Wild Dog	M01432	<i>Cuon alpinus</i>	M	16/10/2019	Died due to Infigting and Trauma
34	Leopard-Motamma	M01368	<i>Panthera pardus fusca</i>	F	20/10/2019	Died due to Multiorgan Failure
35	White Peafowl	B01898	<i>Pavo cristatus</i>	M	6/11/2019	Died due to infection
36	Grey Pelican	B00421	<i>Pelecanus philippensis</i>	M	7/11/2019	Died due to senility
37	Four Horned Antelope	M00607	<i>Tetracerus quadricornis</i>	M	10/11/2019	Died due to infection
38	Rusty Spotted Cat	M00161	<i>Prionailurus rubiginosus</i> <i>rubiginosus</i>	M	15/11/2019	Died due to infection
39	Black Swan	B00067	<i>Cygnus atratus</i>	F	23/11/2019	Died due to senility
40	Lady Amherst Pheasant	B01875	<i>Chrysolophus amherstiae</i>	M	4/12/2019	Died due to Pneumonia
41	Sarus Crane-000727F031	B00051	<i>Grus antigone</i>	M	15/12/2019	Died due to multi-organ failure
42	Common Marmoset	M00772	<i>Callithrix jacchus</i>	M	18/12/2019	Died due to senility
43	Sarus Crane	B01732	<i>Grus antigone</i>	F	30/12/2019	Died due to multi-organ failure
44	Hyena - Rajani	M00164	<i>Hyaena hyaena</i>	F	4/1/2020	Died due to senility
45	Four Horned Antelope	M00805	<i>Tetracerus quadricornis</i>	M	/1/2020	Died due to senility
46	Common Langur	M01535	<i>Semnopithecus entellus</i>	F	7/1/2020	Died due to Carcinoma
47	Thamin Deer	M01223	<i>Rucervus eldii eldii</i>	M	13/1/2020	Died due to Infigting trauma
48	Mandarin Duck	B00480	<i>Aix galericulata</i>	M	14/1/2020	Died due to Senility
49	Silver Pheasant	B01902	<i>Lophura nycthemera</i>	F	20/1/2020	Died due to Multiorgan failure
50	Painted Stork	B00668	<i>Mycteria leucocephala</i>	M	21/1/2020	Died due to Infigting trauma
51	Lady Amherst Pheasant	B01861	<i>Chrysolophus amherstiae</i>	M	28/1/2020	Died due to Infigting trauma
52	Common Marmoset	M01004	<i>Callithrix jacchus</i>	F	15/2/2020	Died due to Intestinal obstruction
53	Swamp Deer	M00883	<i>Rucervus duvaucelli</i>	M	18/2/2020	Died due to Hepatic Carcinoma
54	Lady Amherst Pheasant	B01873	<i>Chrysolophus amherstiae</i>	F	23/2/2020	Died due to Infigting Trauma
55	King Cobra	R00199	<i>Ophiophagus hannah</i>	M	28/2/2020	Died due to Necrotic Enteritis
56	Black Swan	B00076	<i>Cygnus atratus</i>	M	28/2/2020	Died due to Infigting Trauma
57	Red-Necked Wallaby	M00820	<i>Macropus rufogriseus</i>	M	25/3/2020	Died due to Pneumonia/Senility
58	Slender Tailed Meerkat	M01552	<i>Suricata suricatta</i>	F	4/3/2020	Died due to Pneumonia
59	Slender Tailed Meerkat	M01554	<i>Suricata suricatta</i>	M	30/3/2020	Died due to Pneumonia

Nativity of Animals

	Date	Local ID	Species	M	F	U	T	Remarks
1	9/02/2019	M01471	Four Horned Antelope	0	1	0	1	Born in enclosure
2	4/02/2019	M01472-76	Inidan Grey Wolf	4	1	0	5	Born to Arpitha in enclosure
3	8/03/2019	M01478	Sambar	0	0	1	1	Normal birth
4	9/03/2019	M01479	Sambar	0	0	1	1	Normal birth
5	10/03/2019	M01480	Gaur	1	0	0	1	Transponder ID: 000770AAA5, orange Et435
6	16/03/2019	M01481	Rhesus Macaque	0	0	1	1	Born in enclosure
7	16/03/2019	M01482	Nilgiri Langur	0	0	1	1	Born in enclosure
8	26/03/2019	M01483	Gaur	0	1	0	1	At Gaur Pen-2 enclosure
9	14/04/2019	M01492	Hamadryas Baboon	0	0	1	1	Normal birth, born in enclosure
10	17/04/2019	B01912	Electus Parrot	0	0	1	1	Hatched naturally in enclosure
11	17/04/2019	B01913-14	Plum Headed Parakeet	0	0	2	2	Hatched naturally in enclosure
12	18/04/2019	M01493	Gaur	1	0	0	1	Normal birth, born in enclosure pen1
13	29/04/2019	M01494	Mouse Deer	0	0	1	1	Normal birth, born in enclosure
14	8/5/2019	M01495	Gaur	1	0	0	1	Normal birth, born in enclosure
15	11/5/2019	M01496	Grant Zebra	1	0	0	1	Normal birth, born in enclosure
16	31/05/2019	M01497	Swamp Deer	0	0	1	1	Normal birth, born in enclosure
17	8/6/2019	M01502-03	Four Horned Antelope	2	0	0	2	Normal birth, born in enclosure
18	22/06/2019	M01504	Mouse Deer	0	1	0	1	Normal birth, born in enclosure
19	22/06/2019	M01505-06	Muntjac	0	0	2	2	Normal birth, born in enclosure
20	22/06/2019	M01507-08	Swamp Deer	0	0	2	2	Normal birth, born in enclosure
21	22/06/2019	M01509-10	Black Buck	0	0	2	2	Normal birth, born in enclosure
22	23/06/2019	M01511-13	Hog Deer	0	0	3	3	Normal birth, born in enclosure
23	24/06/2019	M01514	Muntjac	0	0	1	1	Normal birth, born in enclosure
24	24/06/2019	M01515-16	Hog Deer	0	0	2	2	Normal birth, born in enclosure
25	24/06/2019	M01517	Swamp Deer	0	0	1	1	Normal birth, born in enclosure
26	25/06/2019	M01518-20	Hog Deer	0	0	3	3	Normal birth, born in enclosure
27	26/06/2019	M01521-22	Swamp Deer	0	0	2	2	Normal birth, born in enclosure
28	26/06/2019	M01523	Muntjac	0	0	1	1	Normal birth, born in enclosure
29	26/06/2019	M01524-25	Hog Deer	0	0	2	2	Normal birth, born in enclosure
30	28/06/2019	M01526	Gaur	1	0	0	1	Normal birth, Born in enclosure
31	4/7/2019	M01531	Swamp Deer	0	0	1	1	Normal birth, born in enclosure
32	6/7/2019		Swamp Deer	0	0	1	1	Normal birth, born in enclosure
33	19/07/2019	M01426	Black Buck	0	0	1	1	Normal birth, born in enclosure
34	20/07/2019	M01532	Spotted Deer	0	0	4	4	Normal birth, born in enclosure
35	22/07/2019		Spotted Deer	0	0	3	3	Normal birth, born in enclosure
36	23/07/2019		Spotted Deer	0	0	3	3	Normal birth, born in enclosure
37	26/07/2019		Spotted Deer	0	0	5	5	Normal birth, born in enclosure

	Date	Local ID	Species	M	F	U	T	Remarks
38	29/07/2019		Spotted Deer	0	0	2	2	Normal birth, born in enclosure
39	16/8/2019	M01538	Nilgai	2	5	0	7	Born in enclosure
40	21/8/2019	M01531	Swamp Deer	0	0	1	1	Born in enclosure
41	22/8/2019	M01539	Hog Deer	0	3	0	3	Born in enclosure
42	22/8/2019	M01538	Nilgai	1	4	0	5	Born in enclosure
43	25/8/2019		Nilgai	0	3	0	3	Born in enclosure
44	17/9/2018	M01540-41	Striped Hyena	1	1	0	2	Born in enclosure
45	18/9/2019	B01915	Black Swan	0	0	3	3	Born in enclosure
46	23/9/2019	M01542	Gaur Pen	1	0	0	11	Born in enclosure
47	24/9/2019	M01531	Swamp Deer	0	0	1	1	Born in enclosure
48	15/9/2019	B01916	Scarlet Ibis	0	0	3	3	Born in enclosure
49	25/9/2019	M01437	Sambar	0	0	1	1	Born in enclosure
50	7/10/2019	M01543	Gaur - Pen1	0	1	0	1	Born in enclosure
51	5/11/2019	B01917	Java Sparrow	0	0	6	6	Hatched at enclosure.
52	9/11/2019	B01918	Rainbow Lorikeet	0	0	3	3	Hatched at enclosure.
53	9/11/2019	M01548	Muntjac	0	0	2	2	Born in enclosure.
54	10/11/2019		Muntjac	0	0	1	1	Born in enclosure.
55	12/11/2019	B01917	Java Sparrow	0	0	5	5	Hatched at enclosure.
56	12/11/2019	B01918	Rainbow Lorikeet	0	0	2	2	Hatched at enclosure.
57	15/11/2019	M01548	Muntjac	0	0	2	2	Born in enclosure.
58	16/11/2019	B01917	Java Sparrow	0	0	4	4	Hatched at enclosure.
59	10/11/2019	B01915	Black Swan	0	0	2	2	Hatched at Karanji Lake
60	11/12/2019	M01531	Thamin Deer	0	0	1	1	Born in enclosure.
61	7/10/2019	M01560-62	Wild Dog	2	1	0	3	Kurgalli
62	31/10/2019	M01563	Wild Dog	0	1	0	1	Kurgalli
63	13/12/2019	M01564-69	Grey Wolf - Arpitha	6	0	0	6	Born in enclosure.
64	31/12/2019	M01570	Gaur - Pen2	1	0	0	1	orange-0425, 968000010742180
65	10/1/2020	M01376	Thamin Deer	0	0	1	1	Born in enclosure.
66	19/1/2020	M01571	Gaur - Pen2	0	1	0	1	Born in enclosure.
67	31/1/2020	M01572	Gaur - Pen1	0	1	0	1	968000010961991, Ora-SCZG436
68	2/2/2020	M01574	Gaur - Pen 1	1	0	0	1	Born in enclosure, 000771739E, Red-SCZG0002
69	7/2/2020	M01575	Gaur Pen1	0	1	0	1	Born in enclosure, 0007717569, Yellow-SCZG0351
70	7/2/2020	B01915	Black Swan	0	0	5	5	Hatched in enclosure.
71	15/2/2020	M01576	Indian Fox	0	0	3	3	Born in den.
72	22/2/2020	B01915	Black Swan	0	0	5	5	Hatched in enclosure.

List of Surplus Animals at Zoo

Mammals

S.N.	Species	M	F	U	T	Remarks
1	Royal Bengal Tiger	4	0	0	4	Wild Born
2	Leopard	4	7	0	11	Wild Born
3	Hyena	0	2	0	2	Captive Born
4	Wild Dog (Dhole)	3	0	0	3	Captive Born
5	Grey Indian Wolf	4	0	0	4	Captive Born
6	Common Palm Civet Cat	2	0	0	2	Wild Born
7	Indian Elephant	0	3	0	3	Captive Born
8	Giraffe	1	1	0	2	Captive Born
9	Indian Gaur	6	6	0	12	Captive Born
10	Hippopotamus	3	1	0	4	Captive Born
11	Rhesus Macaque	3	1	0	4	Captive Born
12	Four Horned Antelope	3	3	0	6	Captive Born
13	Muntjac	2	2	0	4	Captive Born
14	Black Buck	5	5	0	10	Captive Born
15	Hog Deer	10	10	0	20	Captive Born
16	Nilgai	10	10	0	20	Captive Born
17	Swamp Deer	2	4	0	6	Captive Born
18	Spotted Deer	10	10	0	0	Captive Born
19	Sambar	5	5	0	10	Captive Born
20	Himalayan Goral	4	1	0	5	Captive Born
21	Sloth Bear	2	0	0	2	Captive Born
22	Asiatic Black Bear	1	0	0	1	Captive Born

Birds

S.N.	Species	M	F	U	T	Remarks
1	Indian Common Peafowl	2	2	0	4	Captive Born
2	Red Jungle Fowl	2	2	0	4	Captive Born
3	Silver Pheasant	3	3	0	6	Captive Born
4	Common Ring Necked Pheasant	1	2	0	3	Captive Born
5	Golden Pheasant	3	3	0	6	Captive Born
6	Common Barn owl	2	1	0	3	Wild Born
7	Sarus Crane	2	0	0	2	Captive Born
8	Plum Headed Parakeet	3	3	0	6	Captive Born
9	Alexandrine Parakeet	2	2	0	4	Captive Born
10	Rose Ringed Parakeet	4	4	0	8	Captive Born
11	Eclectus Parrot	1	1	0	2	Captive Born
12	Black Crowned Night Heron	40	40	0	80	Captive Born
13	Emu	2	2	0	4	Captive Born
14	Scarlet Ibis	5	5	0	10	Captive Born
15	Javan Sparrow	2	2	0	4	Captive Born
16	Cockatiel	2	2	0	4	Captive Born
17	Budgerigar	50	50	0	100	Captive Born
18	Peach-Faced Love Bird	5	5	0	10	Captive Born
19	White Throated Munia	10	10	0	20	Captive Born
20	Red Avadavit	10	10	0	20	Captive Born
21	Black Swan	8	8	0	10	Captive Born

28 Compliance with Conditions Stipulated by the Central Zoo Authority

Sl. No.	Norm No. Under RZR, 2009	Conditions stipulated	Time period to Comply	Since when pending	Status with regard to Compliance of the conditions
A. Upkeep & health care of animals					
1	10(5.2)	Plastic drums for storage of animal feed be provided with covers or may be replaced with eco-friendly containers.	Immediately	Not Applicable	The plastic drums which are being used for storage of animal feed have proper lids and the lids are being used to cover the drums. The photographs showing the above are attached with this letter.
B. Acquisition and breeding of animals : Other observations					
2	9.4	The King Cobra and Jungle Cats reportedly rescued should not be housed in the zoo unless they require long term care. Also, they should not be displayed to visitors	Immediately	Not Applicable	This condition is always being complied with.

29 List of Free Living Wild Animals within the Zoo Premises

Birds:

- | | |
|------------------------------|-----------------------------|
| 1. White Browed Fantail | 12.Green Bea Eater |
| 2.Peacock | 13.Spotted Whistling Duck |
| 3.Eurasian hoopoe | 14.Indian Jungle Crow |
| 4.Indian Grey Hornbill | 15.Bear Faced Ibis |
| 5.Indian Blue Robin | 16.Golden Backed Woodpecker |
| 6.Purple Rumped Sun Bird | 17.Rose Ringed Parakeet |
| 7.Black Crowned Night Heron | 18.Myna |
| 8.Pond Heron | 19.Koel |
| 9.Little Egret | 20.Greater Coucal |
| 10.Red Whiskered Bulbul | 21.Brahminy Kite |
| 11.White Throated Kingfisher | 22.Painted Stork |

Mammals:

- 1.Mongoose
- 2.Bonnet Macaque
- 3.Squirrel

Reptiles:

- 1.Rat Snake
- 2.Indian Cobra
- 3.Russel's Viper
- 4.Krait
- 5.Rock Lizard
- 6.Snake Eyed Skink

New Arrivals



Eastern Hoolock Gibbon



Indian Fox



One Horned Rhinoceros



Southern White Rhinoceros



Asiatic Lions



Royal Bengal Tiger

Young Ones



Bengal Fox Pup



Four Horned Antelope with Fawns



Gaur calf



Mouse Deer with Fawn



Nilgiri Langur with Baby



Scarlet Ibis



Dhole with Pups



Zebra with Foal



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