

## **1. Report of the officer in Charge**

The Tiger and Lion safari, Thyavarekoppa, Shimoga initially it was an area of 27.50 Ha with three safari enclosures namely Lion, Tiger & Herbivorous were started and now the whole Zoo and safari area is extended to 195.00 Ha.

The animals housed in the municipal Zoo of Shimoga were also relocated to this place after Central Zoo Authority of India de recognized its existence.

This zoo has been recognized as a small Zoo with Safari by the Central Zoo Authority of India and now the steps have been taken up by the Zoo Authority of Karnataka for the improvement of this zoo permitting to carry out necessary developmental works to create good infrastructure. This zoo has all the potential to become one of the finest zoos in the country in future days.

Shivamogga Zoo, an emerging prominent zoo in India, proudly announces its transformation into a medium-sized zoo with state-of-the-art modern glass enclosures. With immense dedication and innovation, we have successfully introduced 29 new animal enclosures, catering to a diverse array of species.

Further enhancing our offerings, Shivamogga Zoo is delighted to introduce India's first Gaur Safari, offering visitors a unique and immersive experience. Our animal collection has bloomed to include an impressive variety of 40 species, with over 350 individuals under our care.

We are immensely proud to declare that our efforts have yielded not only a remarkable environment for our animals but also a prosperous business model. The revenue generated by Shivamogga Zoo has exhibited exceptional growth, facilitating a sustainable future for our facility.

At Shivamogga Zoo, we remain committed to providing our visitors with a captivating and educational experience. Our team continually strives towards the betterment of the zoo, promoting conservation, and fostering a deep appreciation for wildlife.

## **2. About Shivamogga**

Shivamogga, situated in the central region of Karnataka, India, is a prominent city straddling the banks of the Tunga River. Revered as the "Gateway of Malnad," it serves as the entry point to the hilly expanse of the Western Ghats.

## **3. History of the Zoo**

The foundation stone for Tiger & Lion Safari was laid on 1984 and was established in the year 1988, at Thyavarekoppa village situated 10 Km away from Shimoga city in the Shimoga District of Karnataka State. The total extent of the TLST is 250.00 hectares. It was

developed with the financial assistance mainly from ZillaPanchayat, Shimoga and supported by Malnad Area Development Board (MADB), Mysore Paper Mill (MPM) Ltd. Bhadravathi, few voluntary organisations and Karnataka Forest Department (Karnataka forest department), Zoo Authority of Karnataka and Central Zoo Authority.

## **Zoo**

The animals housed in the mini zoo located at Municipal Park of Shimoga city were shifted to TLST Shimoga on December 1992 as per the government of India notification dated 04<sup>th</sup> August 1992 which derecognized the Municipal Zoo at Shimoga city.

Separate enclosures were constructed for Leopards, Striped Hyenas, Sloth Bears, Jackals, Crocodiles and Porcupine during the year 1996-97. Different varieties of birds and few other small Mammals were also housed in the Zoo.

Zoo displays native and Non native animal species in its natural habitat providing conservation education and experience based tourism activities. At present there are 400 animals of 39 species. Some of the exotic animals are displayed such as Ostrich, Emu and different Pheasants of the world. Even among the native fauna there is a great diversity comprising of felids, canidae, deer (cervids), reptiles, birds and other beautiful and majestic animals that can be seen in open natural enclosure. Hence, a visit to the Tiger & Lion Safari is quite rejuvenating and rewarding.

## **Safari**

The Tiger & Lion Safari, Tyavarekoppa (TLST) is the second safari established in Karnataka after Bannerghatta Biological Park, Bangalore. It was started with three safari enclosures viz. Lion of 21 ha, Tiger of 20 ha and Herbivore safaris covering an extent of 30 ha. Shivamogga zoo has 6 tigers with male female ratio of (1:5) 5 lions with (3:2) ratio and herbivores of about 145 numbers of different species. Tigers and lions were introduced to the safari from various zoos on their respective safari enclosures.

A diversity of herbivore species like spotted deer, sambar deer, blackbucks, hog deer and Nilgai were introduced to the herbivore safari over the period of time.

Tiger & Lion Safari has 8 (eight) buses of 25-30 seats to take the visitors around the safari, safari experiences a large group of people and to allow uninterrupted service, there are 8 temporary drivers for the safari buses. Two safari jeeps Mahindra Bolero was also introduced to safari during 2018, for the closest view of the animals and presumes privacy for the visitors.

#### 4. Vision:

To inspire the public to value the presence of wildlife in their lives. Through an enjoyable and educational experience, visitors are encouraged to develop a deeper appreciation for wildlife and its conservation.

#### 5. Mission:

The Tiger & Lion Safari aims to become a dynamic center for animal breeding and exhibition. By showcasing these magnificent creatures up close, the Safari endeavors to inspire people to develop a deep love for wildlife, encouraging them to actively care for and protect natural habitats.

#### 6. Objectives

- Provides the best possible care for our animals
- Display of wild animals in natural habitat enclosure to connect with the nature
- Animal welfare
- Participating in Conservation breeding programs
- Deliver best wildlife education training and research
- Rescue and rehabilitation of wild animals and birds
- Education and recreation for zoo visitors and tourist

#### 7. About Us:

Sl.No.	Particulars	Information
<b>Basic Information about the Zoo</b>		
1	Name of the Zoo	Tiger & Lion Safari, Tyavarekoppa
2	Year of Establishment	1988
3	Address of the Zoo	Tyavarekoppa, Shivamogga
4	State	Karnataka
5	Telephone Number	9448125892
6	Fax Number	-
7	E-mail address	tigerlionsafari@gmail.com
8	Website	<a href="http://www.shivamoggazoo.com">www.shivamoggazoo.com</a>
9	Distance from nearest	Airport: 30 km Shimoga Airport
		Railway Station: 13 km Shivamogga Town Railway Station

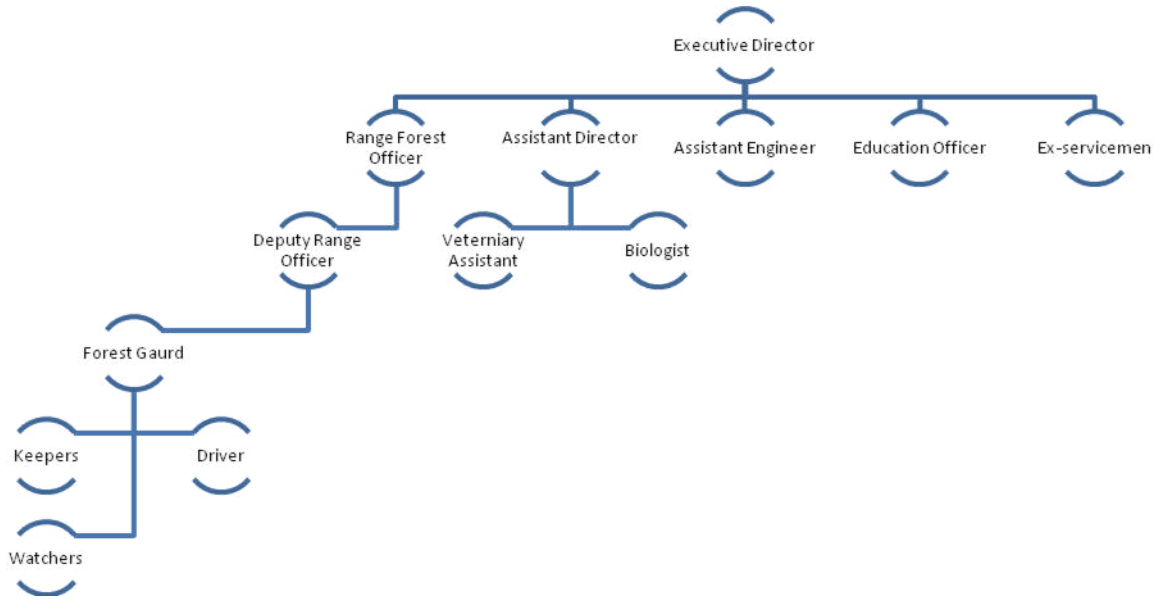
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		Bus Stand: 10 km K.S.R.T.C Bus Stand, Shivamogga
10	Recognition Valid upto (Date)	September
11	Category of zoo	Medium Zoo
12	Area (in Hectares)	250.00 Ha
13	Number of Visitors (Financial Year)	Adult : 249599
		Children : 50467
		Total Visitors: 300066
14	Visitors' Facilities Available in Zoo	<ol style="list-style-type: none"> <li>1. Parking Space</li> <li>2. Drinking Water (R.O.Plant Installation)</li> <li>3. Reception Hall</li> <li>4. Pergolas</li> <li>5. Children Park</li> <li>6. Watch and Ward facilities</li> <li>7. Canteen</li> <li>8. Rest rooms</li> <li>9. Museum</li> <li>10.Security</li> <li>11.Interpretation center</li> <li>12. Baby care room</li> </ol>
15	Weekly Closure Day of the Zoo	Tuesday
<b>Management Personnel of the zoo</b>		
16	Name with designation of the Officer in-charge	Sri. B.Mukunda Chandra Executive Director & Deputy Conservator of Forests, Tiger and Lion Safari, Thyavarekoppa, Shimoga.
	Name of the Veterinary Officer	Sri. Dr.Murulimanohara
	Name of the Curator	Sri.NageshBalegar
	Name of the Biologist	Sri.Abhilash
	Name of the Education Officer	Ms. Sameena Iza
	Name of the Compounder/ Lab Assistant	Sri. Ranganath. B
<b>Owner / Operator of the Zoo</b>		
17	*Name of the Operator	ShriJaveedAkhtar

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18	Address of the Operator	Additional Chief Secretary to Government, Forest, Environment and Ecology Department, Karnataka Government Secretariat, Room No.447, 4th Floor, Gate No.2, M.S.Building, Bangalore.
19	Contact details/Phone number of Operator	080-22256722/ 22032509
20	E-mail address of Operator	<a href="mailto:prsfec@gmail.com">prsfec@gmail.com</a>

## 8. Organizational Chart



**Manpower of the Zoo**

Sl.No.	Designation	Number of Sanctioned Posts	Names of the incumbent
1	Executive Director (Deputy Conservator of Forests)	1	Sri.B.Mukunda Chandra
2	Assistant Director	1	Sri.Dr.Muralimanohara
3	Range Forest Officer	1	Sri. Nagesh Balegar
4	Deputy Range Forest Officer	3	Sri.Yashodhar B.H
5	Education Officer	1	Ms.Sameena Iza
6	Biologist	1	Sri.Abilash Nayak
5	Forest Guard	1	Vacant
6	Forest Watcher	3	Vacant
7	Driver	1	Vacant
8	Attender	1	Vacant
<b>Total</b>		<b>12</b>	-

**10. Capacity Building of Zoo Personnel**

Sl. No.	Name and designation of the zoo personnel	Subject matter of Training	Period of Training	Name of the Institution where the Training attended
1	B.Mukunda Chandra Executive director	Zoo directors conference	January -18-19 2023	Greens Zoo Jamnagar, Gujrath
2	Sameena Iza Shaik	Nation Biologist Conference	January -18-19 2023	Sanjay Gandhi Biological Park .Patna,Bihar
3	Sameena Iza Shaik	National Education Officers Conference		Nawab Wajid Ali Shah Zoological Garden, Lucknow, Uttar pradesh

## 11. Zoo Advisory Committee

a. Date of constitution- Nil

b. Members proposed:

The Addl. Principal Chief Conservator of Forests and Member Secretary, Zoo Authority of Karnataka, Mysore- Chairman

Executive Director, Tiger & Lion Safari, Thyavarekoppa, Shimoga

Assistant Director(V.S), Tiger & Lion Safari, Thyavarekoppa, Shimoga

Range Forest Officer, Tiger & Lion Safari, Thyavarekoppa, Shimoga

Executive Engineer, Bannerghatta Biological Park, Bangalore

c. Dates on which Meetings held during the year: Nil

## 12. Health Advisory Committee–

Health committee members

Meeting held on 09.03.23

Sl no	Name	Designation
1.	Sri Mukund Chandra .B	Executive Director Tiger & Lion Safari Tyavarekoppa Shivamogga
2.	DrShivayogiYali	Deputy Director Dept of AHVS Shivamogga
3.	Dr Madhav Prasad	Professor and Head Dept of Veterinary epidemiology Veterinary College, Shivamogga
4.	Dr Nagabhushan	Professor and Head Department of Nutrition Veterinary College, Shivamogga
5.	DrRavindra B G	Associate Professor Dept of medicine Veterinary College, Shivamogga



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6.	Dr Ravi Raidurg	Associate Professor and Head Dept of veterinary surgery and radiology Veterinary College, Shivamogga
7.	Dr Rajesh S BS	Regional Research Officer IAH & VB, Shivamogga
8.	Dr Vinay S	Chief Veterinary Officer, Shivamogga wildlife Division, Shivamogga
9.	Dr Murulimanohar	Veterinary officer, Tiger & Lion Safari, Tyavarekoppa, Shimoga.

**13. Statement of income and expenditure of the Zoo**

Sl. No.	Year	Revenue Collected (Rs.)	Expenditure (Rs.)
1	2016-2017	17768875.00	24182637.00
2	2017-2018	17596145.00	33317785.00
3	2018-2019	21802750.00	51243119.00
4	2019-2020	26605615.00	76906800.00
5	2020-2021	26601521.00	89591046.00
6	2021-2022	26601521.00	89591046.00
7	2022-2023	42431089.00	87736600.00
8	2023-2024	50603632.00	108595742.00

**14. Daily feeding Schedule of animals**

Sl No	Name of the animal	Feed item	Quantity	Day of fasting
	Carnivores	Carabeef	-	Evenin Tuesday

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01		Chicken,Liver		g	
02	Herbivores	Concentrates,Wheatbran,Vegetables ,Green leaves,Fruits ,Green grasses ,Grains ,Grasses ,Lucerne	Morning Vegetables,concentrates	Green grass fodder	-
03	Birds	Grains,greenleaves,fruits ,vegetables	Morning	-	-
	Birds of prey	Chicken ,fish	-	Evening	Tuesday
04	Reptiles	Chicken ,rabbit,egg ,Carabeef			
	Python		Once in a week		
	Crocodile		Once in a week		
	Monitor lizard		Daily		Tuesday

**15. Deworming, Vaccination and health Supplements Schedule(Zoo/RC/Safari)**

Month	De-wormer	Prophylaxis	Vaccine	Health Supplements
<b>January</b>	Pyrental Palmate/Closantel/Plazin (3 in 1)	-	-	calcium Supplements
<b>February</b>	-	-	Cats CRP +ARV (felines)	-
<b>March</b>	-	Surral/ Triquin		Iron Supplements
<b>April</b>	Oxyclosanide,Levamisole/ Plazin/Closental	-	FMD,HS,BQ (Gaur & DEERS)	Septillin
<b>May</b>	-	-	-	Nutricoat advance + Calcium Supplement

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<b>June</b>	-	-	DHPPi+L +ARV (Canines)	-
<b>July</b>	Albendazole /Fenbendazole	Surral/ Triquin		Verol Syrup/ Drops/ Mineral Mixture
<b>August</b>	-	-	-	-
<b>September</b>	-	-	FMD,HS,BQ (Gaur,deers)	Liv 52/Livotas+ calcium Supplement
<b>October</b>	Ivermectin/ Fenbendazole	-	-	-
<b>November</b>	-	Surral/ Triquin	-	Proviboost syrup/ Drops/ Mineral Mixture
<b>December</b>	-	-	HS	Immunol

**16. Disinfection Protocol Format**

Sl no	Animal	Daily	Weekly	Monthly	Quarterly	Annually
		Holding house and periphery	water tank/trough/ pond cleaning	Anit viral spray	Gas burning	Pesticide sprays
1	Lion	Daily	I week	II week	Jan / May/ Sep	Mar
2	Tiger	Daily	II week	I week	Feb/ June/ Oct	Apr
3	Zoo				Mar/ July/ Nov	May

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4	Leopards	Daily	III week , Mon	IV week, Mon		
5	Sloth Bear	Daily	III week, Wed	IV week, wed		
6	Hyena/ Jackal	Daily	III week, Thu	IV week, Thu		
7	Crocodile	Daily		IV week, Fri Pond cleaning and spray		
8	Python	Daily	III week, Wed	IV week, Wed		
9	Ostrich, emu	Daily	III week, Fri	IV week, Fri		
10	Other mammals and birds	Daily	III week, Sat and Sun	IV week, sat and Sun		
11	Duck pond area				Mar / July/ Nov Pond cleaning, anti viral spray and gas burning	
12	Herbivore safari	Daily	IV week	III week	Apr/ Aug/ Dec	

**17. De-worming Schedule of animals**

Sl.No.	Species	Drug used	Month
1	All animals	Closantal	Jan
		Oxyclosinidelevamizole	April
		Fenbendazole	July
		Albendazole/ivermectin	Oct

**19. Population management of captive spotted deer and Sambar deer**

A translocation of spotted deer and sambar deer to shetihalli wildlife sanctuary



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**20. Developmental and Maintenance work for the year 2022-23**



**Construction of Blackbuck enclosure**



**Construction of Sloth Bear enclosure and holding house**





**Construction of Common Langur enclosure and holding house**





**Construction of Lion tail macaque enclosure and holding house**



**Construction of Toilet Block near Museum**



**Construction of Road in Zoo path (Chainage 0.0.00 to 807.00=  
807.00m)**



**Construction of Road in Zoo path (Chainage 808.00 to 1400.00=  
593.00m)**



**Construction of Toilet Block near Hyena enclosure**



**Construction of Zebra enclosure and holding house**





**Providing Chainlink Mesh along the outer boundary (Block IV : 1330.00 to 2920.00m)**



**Construction of jackal enclosure and holding house**

## 21. Education and Awareness Program during the year 2023-24

### Special Events



To celebrate World Bear Day, the shivamogga zoo organized a special event for ATNCC college shivamogga. The aim of the event was to raise awareness about bear conservation and to highlight the value of these beautiful creatures. The zoo invited a special resource person named ShravanSutthar, who is a senior research assistant with the Holemathi Nature Conservation Foundation. Shravan began his session by discussing the different types of bears, including the Asiatic black bear, the sun bear, and the sloth bear, and how their habitats are threatened by human intervention. Sharavan then led the students on a tour of the zoo's bear enclosure, explaining the different behaviors of the bears and how they interact with each other. He pointed out the different features of the bear's habitat and how it is designed to mimic their natural environment.





To celebrate Environment Day, the shivamogga zoo organized a special program for National public school students to raise awareness about the importance of reducing waste and composting. The program included several activities focused on the 3Rs - reuse, reduce, and recycle - and composting.

In the reuse activity, students were given various items that can be reused, such as plastic bottles, tin cans, and newspapers. They were encouraged to come up with creative ideas on how to reuse these items instead of throwing them away. Finally, in the composting activity, the students were taught how to turn organic waste into compost. They were shown a demonstration of how to make a compost bin and were encouraged to bring organic waste from home or school to add to the compost bin.



World honey bee day celebration: Shivamogga zoo invited government school to take part in the world honey bee day celebration.

## **Wildlife week celebration (2 October -8 October)**

Wildlife week is a highly anticipated event in most zoos all over the world. During this week, zoos try to raise awareness about preserving endangered species and their natural habitats, educate visitors on different animal species, and foster appreciation for the biodiversity of the planet.



**Wildlife awareness program**

**Keeper talk**



**Snake awareness Program**

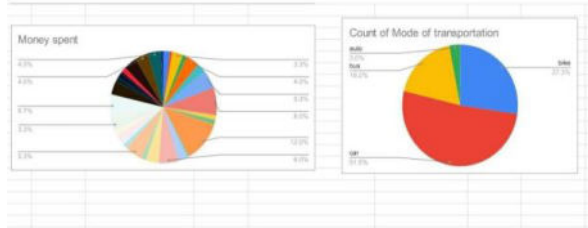
**Creature –Feature activity**

# Visitors Interaction



Identifying the” animal pugmark” activity conducted for the visitors

Name	Age	Gender	Occupation	Source	Mode of Transportation	Amount Spent
Deepthi	18	Female	Student	Yes	Yes	4000 Rupees
Ashika	19	Female	Student	Yes	Yes	3000 Rupees
Prathap	20	Male	Student	Yes	No	1000 Rupees
Padma	21	Female	Student	Yes	Yes	4000 Rupees
Aradhya	22	Female	Student	Yes	No	1000 Rupees
Aparna	23	Female	Student	Yes	Yes	1000 Rupees
Aravind	24	Male	Student	Yes	Yes	1000 Rupees
Aravind	25	Male	Student	Yes	Yes	1000 Rupees
Aravind	26	Male	Student	Yes	Yes	1000 Rupees
Aravind	27	Male	Student	Yes	Yes	1000 Rupees
Aravind	28	Male	Student	Yes	Yes	1000 Rupees
Aravind	29	Male	Student	Yes	Yes	1000 Rupees
Aravind	30	Male	Student	Yes	Yes	1000 Rupees
Aravind	31	Male	Student	Yes	Yes	1000 Rupees
Aravind	32	Male	Student	Yes	Yes	1000 Rupees
Aravind	33	Male	Student	Yes	Yes	1000 Rupees
Aravind	34	Male	Student	Yes	Yes	1000 Rupees
Aravind	35	Male	Student	Yes	Yes	1000 Rupees
Aravind	36	Male	Student	Yes	Yes	1000 Rupees
Aravind	37	Male	Student	Yes	Yes	1000 Rupees
Aravind	38	Male	Student	Yes	Yes	1000 Rupees
Aravind	39	Male	Student	Yes	Yes	1000 Rupees
Aravind	40	Male	Student	Yes	Yes	1000 Rupees



Demography survey of visitors



Awareness program on Cheeta reintroduction(India) for visitors



**Awareness program on endangered animals for the organized school groups**



**Snake awareness program for visitors**



**Animal Quiz activity for visitors**

## OUTREACH PROGRAMS

A zoo outreach programme is a way for a zoo to extend its educational outreach beyond the walls of the zoo itself. These programs can take many forms and may include school visits, community presentations, mobile exhibits, and even virtual events. The goal of a zoo outreach program is to engage people of all ages in learning more about the animals housed at the zoo, as well as to promote conservation efforts and raise awareness about environmental issues.



An outreach program conducted for blind students through a touch and feel program is a great way to introduce them to the world of animals and natural objects. Different birds Eggs, feathers and deer antlers are all excellent examples of objects that can be included in such a program.

The program started with a brief introduction to the sense of touch and its importance for blind people. Next, participants could be introduced to different types of eggs, feathers and antlers allowing them to touch and feel the texture and shape of each wildlife trophies.



The Snake awareness program was conducted for the students of Gadikoppa Higher primary school, Shivamogga



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Bird Watching and nature walk program was conducted for the abandoned senior citizens from JeevanaSanjeRudrashrama, Shimoga



Snake awareness program was conducted for the orphan students at MadavaNele, Shimoga



Snake awareness program for orphan students of Teye mane orphan home



Anti rabbies awreness program was conducted for girideepam schoolstudents

## ZOO CAMP

**Winter zoo camps:** Camps are outdoor educational programs designed for children during winter. These camps offer a unique opportunity to learn about wildlife, conservation, and animal care in a fun and interactive setting. Children typically spend their time participating in various activities such as animal encounters, zoo tours, craft making, games, and more. They provide an exciting way for children to spend their winter break while learning about the importance of wildlife conservation and appreciation for nature.



**Bird watching**



**Face Painting**



**Introduction to veterinary equipments**



**Be a researcher activity**



**Education program for visitors by students**



**Visit to Hippo enclosure**

**Summer Camp:** Zoo summer camp is an educational program designed for children during summer break. These camps provide a unique and exciting opportunity for children to learn and experience different aspects of zoo life. Children typically spend their time participating in various activities such as animal encounters, zoo tours, hands-on activities, games, and more. Along with fun activities, the camps also aim to educate children about animal welfare, conservation, and ecology. These camps allow children to develop an appreciation of wildlife and learn how to be good stewards of the environment.



**Presentation on reptiles**



**zoo design activity**

**Be a zoo keeper camp:** Be a zoo keeper camp is a program that offers an immersive experience for children or teenagers who are interested in learning about the responsibilities and daily activities of a zoo keeper.

During the camp, participants work alongside trained zookeepers, learning how to feed animals, clean enclosures, and provide enrichment activities for animals under the zoo's care. They may also receive hands-on training in animal handling, such as learning how to handle small mammals or reptiles

Be a zoo keeper camps aim to inspire a love and appreciation for animals, while also educating and empowering young people to become advocates for animal welfare and conservation.



**Visit to hippo enclosure**



**Visit to herbivore safari**



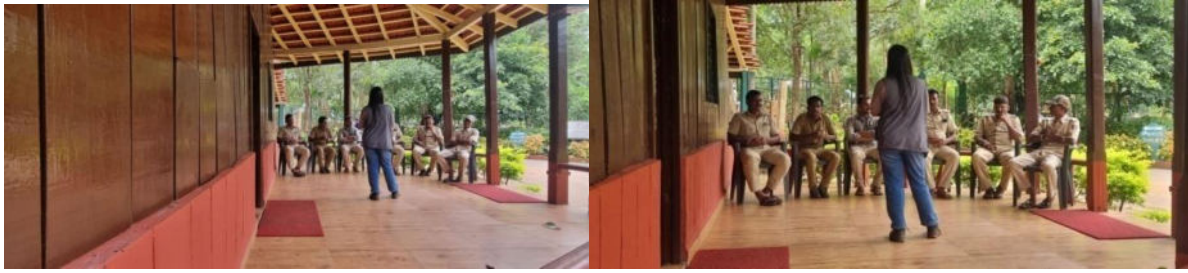
**Education program for zoo visitor**



**Collecting pellets of herbivores**

## **Staff Training programs**

A zoo staff training program is comprehensive training offered by zoos for their staff members. The program is designed to equip zoo employees with the knowledge and skills needed to carry out their roles effectively. The training typically covers a variety of topics including animal care, exhibit design, visitor experience, safety and emergency procedures, conservation practices, and more.



**Capacity building program for drivers**



**Workshop on world zoonosis day for zoo staff**

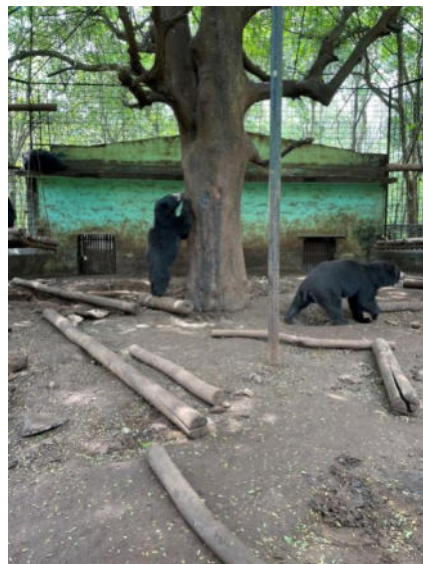
## **ENRICHMENT ACTIVITIES**

### **1. LANGUR PHYSICAL/STRUCTURAL ENRICHMENT**



Physical and structural enrichment for langurs enhancing their environment to stimulate natural behaviours, encourage physical activity, and improve their overall well-being. Enrichment activities help the animal by many ways like. Encouraging Natural Behaviors, Physical Health, Social Interaction, Stress Reduction.

## **2. SLOTH BEAR ENRICHMENT**



Sloth bear feeding and olfactory enrichment conducted to increase the activity and enhance the olfactory organs of the animals, Honey smeared on a tree trunk and logs at various heights, this enrichment increased the animal's overall activity was observed.

## **3. HYENA ENRICHMENT**



Hyena and Jackal feeding enrichment had conducted where pedigree (dog food) is filled inside the dry coconut shell and tied then given to the animal this enrichment increased their activity time and also enhanced the olfactory organs of the animals was observed.

#### **4. FOWLS AND PHEASANT ENRICHMENT**



The natural environment had created in the Fowls and Pheasant enclosures by planting different plants, providing logs, perching sites, and also leaf litters, presence of leaf litter is very important for Fowls and Pheasants because these birds are ground feeders so the presence of leaf litter increased their feeding behaviors and scratching ground for insects which are naturally develop in leaf litter. And this also provides natural nutrition for birds.

## **5. PALM CIVET ENRICHMENT**



enrichment for palm civets in zoos serves several purposes, enhancing their physical and mental well-being. Here are the key benefits and uses of rope enrichment for palm civets



Physical Exercise:•Climbing: The Ropes provide opportunities for palm civets to climb, mimicking their natural arboreal behavior and Natural Behaviors Mimicking Wild Habitat and also help them to Hiding and Resting, Active engagement with the environment lowers stress levels.

## **6. DEER'S ENRICHMENT**



Hanging fodder in the deer's enclosure had carried out to enhance the natural behavior of the deer species

## **7.LEOPARD ENRICHMENT**



Scattered fooding placing food in various location within the enclosure to promote natural foraging behavior, Enrichment helps the animal to engage their physical and mental faculties.

## **8. LION ENRICHMENT**



Lions live in dry and semi-arid regions with scrub and deciduous forests with undulation and rocky hills of the world, so in the new lion enclosure we have constructed natural habitat-like habitat using locally available rocks and different grass species, these enrichment animals are utilizing very much and expressing their natural behaviors in the captive condition.

## **9. TIGER ENRICHMENT**



Tiger is one of the big cats found in India and it is a habitat generalist species it enjoys the wetlands in the wild. So because of that, we have constructed a waster cascade in the new tiger enclosure at the viewing area for the tiger to enjoy and express natural behaviors, and also visitors enjoy the tiger behaviors in the pond.

## **10. VERMICOMPOSTING**



vermicomposting using worms to decompose organic waste, such as animal manure, food scraps, and plant material into the compost.

## **REPTILES MANAGEMENT DURING MONSOON SEASON**



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Monsoon is the toughest season for reptile management in captive because during monsoon in Tiger and Lion Safari, we receive heavy rainfall and sometimes we didn't receive a good amount of sunlight for up to 2-3 days, so during these days, reptiles especially Snakes, Turtles and Tortoise need attention and care because reptiles are cold-blooded animals they need sunlight (UV-A and UV-B) for their vitamin synthesis and as well as for their metabolism activity so during monsoon season and also in cold days of winter season we provide artificial light which emit UV-A and UV-B rays based on the species and body size we give artificial light with time intervals in a day and we maintain all the parameters and also record the data for better management.

### **LIVE FEED UNIT**

In March we started planning of setting up of live feed unit of worms for Fowls, Pheasants, and Sloth bears. In the initial stage, we brought some of the mealworms from Mysore Zoo to set up the founder population of worms we successfully bred the worm within the month and we started breeding more to get a good amount of worms, occasionally or twice in a month we provide mealworm for birds and to the Sloth bear as enrichment.



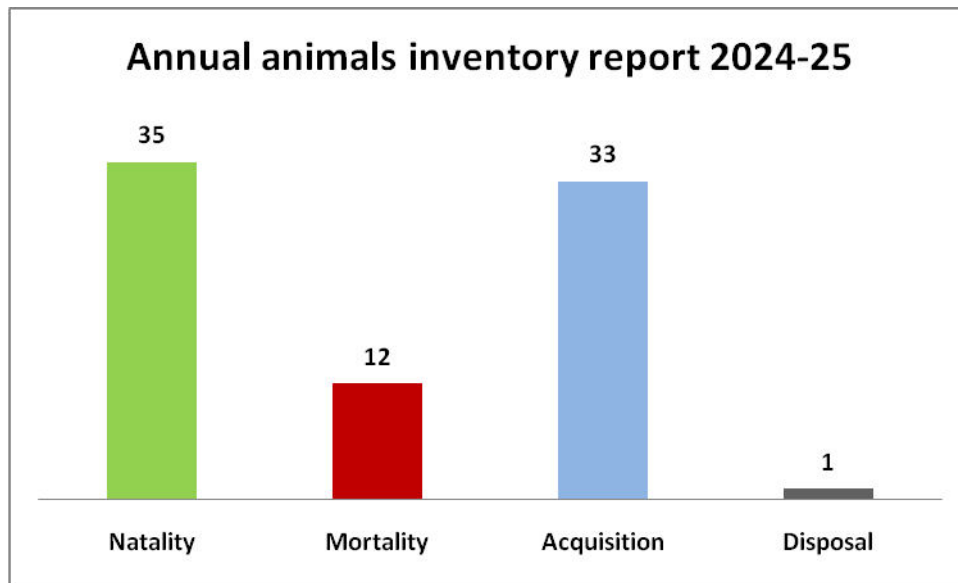
In May we started Mice live feed unit for our baby pythons we had successfully bred the mice at present more than 30 mice we are housing and for our baby pythons we feed one mice per week and based on requirements we breed mice and breeding and stock record are maintained in the live feed unit, in future we have plan for setting up of Rat and Hamster breeding unit for our future serpentarium.



Striped Hyena Translocation from mysure Zoo to Tiger and Lion Safari.

**ANNUAL ANIMAL INVENTORY**

Sl. No.	Natality	Mortality	Acquisition	Disposal
1.	35	12	33	1



Sl. No.	Natality	Mortality	Acquisition	Disposal	Total individuals
1.	8.92%	3.06%	8.41%	0.25%	<b>392</b>

**TRAINING PROGRAMS**



Education and Training programs have been carried out to various school and college students, Forest Guards, RFO trainees, we explain Zoo management, Enrichment, Animal Nutrition, Health management, and safe rescue technique methods, and the importance of zoos in the conservation of Wildlife like that various aspects are discussed and explained during the training program.

### **Keeper Training**

1. Mr. Girish Kumar N. Bird's keeper participated in the "Regional Capacity Enhancement Workshop for Zookeepers" a three-day program, held at Bannerghatta Biological Park, Bengaluru from February 27<sup>th</sup> to March 1<sup>st</sup>, 2023 in collaboration with Central Zoo Authority.

## **A. Animal welfare activity –Important treatment**

## **B. Animal welfare activity –Important treatment**

### **ENUCLEATION IN HOG DEER**

Female hog deer had severe injury in its left eye due to infighting ,eye ball was found to be necrotised ,enucleation was the best option.

### **PRE-OPERATIVE PREPARATIONS :-**

The deer was sedated with xylazine (1.5mg/kg) and ketamine (2.75mg) . deer was positioned on its right side with the affected eyes facing up a periorbital incision was made around the eye to access the ocular muscles and optic nerve. The conjunctiva and extraocular muscles were dissected to free the eye. The optic nerve was severed to remove then eye, bleeding was controlled using cautery of blood vessels.

### **POST- Post-Operative Care**

The deer was monitored for signs of infection, bleeding, or other complications. administered nsoids to ensure the animal's comfort. Antibiotics were given to the deer to prevent infection.The deer was kept in a controlled environment until it has recovered sufficiently to return to its natural habitat .





b. Indian gaurs in captivity were under great deal of stress due to fly menace, 22 Indian gaurs of all age groups were suffering and showing clinical signs such as swollen eyelids, oedema, eye irritation, blepharospasm excessive tearing, corneal opacity, conjunctivitis and in few gaur's cloudiness of eye/s with corneal ulcers and impaired vision were evident. From few animal's blood and eye swabs were collected and submitted to the laboratory. The peripheral blood smear examination ruled out Trypanosomiosis in herd, further an attempt was made to isolate and identify the organism from the eye lesions. The laboratory findings revealed that, the presence of *Serratia plymuthica* as an underlying cause and flies might have played important role in the transmission of infection from one animal to other resulted into outbreak of keratoconjunctivitis in Indian gaurs. Affected gaurs were symptomatically treated using Oxytetracycline (10mg/kg P/O), Eyewash with diluted Boric acid powder, Chloramphenicol eye ointment (topically), Vit-A liquid (P/O) and to control vectors Neem oil sprayed (both On and Off) to reduce further spread of infection to other captive wild animals. After 28 days of treatment all the animals recovered completely without any untoward all the gaurs in zoo are recovered.



C. Successfully breeding of ostriches : shivamogga zoo has one male and one female ostriches.

This season female ostrich had bred successfully giving birth to five chicks all the chicks are healthy and growth rate is satisfactory



D. Internship programs for veterinary internship students from veterinary college bidar, Bangalore, hassan , shivamogga and gadag were on 7 days rotational internship program at shivamogga zoo during this period students were intensively trained on wild animal identification, taxonomic grouping, restraining, handling , shifting prophylactic measures and treatment aspects.



E. Treatment of head injury in golden pheasant :Female golden pheasant was unconscious with severe twisting of the head was noticed. It was observed that bird had mild head injury during mating .fluids were administered through ulnar vein.DNS and RL was infused through ulnar vein.mannitol was infused through intravenous route.injection levofloxacin and dexamethasone was given and kept in a cage where adequate warm temperature was maintained.bird started recovering and it regained consciousness and completely recovered after two days.levofloxacin was given for 3 days.



**27. List of free living wild animals, insects and birds within the zoo premises.**

<b>Birds</b>	<b>Mammals</b>	<b>Reptiles</b>	<b>Insects</b>	<b>Amphibians</b>
Red whiskered bulbul	Sloth bear	Spectacled cobra	Daddy long leg spider	Dataphrynum melanoticus
Red wented bulbul	Palm squirrel	Wolf snake	Marbled moth	Minervarya species
Orange minivet	Toddy cat	Green wine snake	Owlet moth	Common tree frog
Scarlet minivet	Small Indian civet	Common krait	Danid egg fly	Bicolored frog
Pradise fly cathcher	Pangolin	Rat snake	Crimson rose	Srilanka painted frog
Golden oriole	Leopard	Bhramini skink	Common rose	Skittering frog
Wabblers	Spotted deer	Monitor lizard	Common crow	Wynad bush frog

<b>Birds</b>	<b>Mammals</b>	<b>Reptiles</b>	<b>Insects</b>	<b>Amphibians</b>
Jungle Babbler	Sambar deer	Bengal monitor lizard	Southern bird wing	Nobe handed bush frog
Leaf bird	Bonnet macaque	King cobra	Jeepsy moth	-
White cheeked barbet	Wild bore	Russell's viper	Common emigrant	-
Copper smith barbet	Common languor	Garden lizard	Chocolate phansy	-
Brown headed barbet	Royal Bengal tiger	Wolf snake	Tawny costar	-
Black drongo	Elephant	-	Blue leopard	-
Rocket tail drongo	Spotted deer-	-	Common tiger	-
Ashy drongo	Rusty spotted cat-	-	-	-
Fire brested fly cather	Indian golden jackal-	-	-	-
Orange thrush	-	-	-	-

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Ashy priniya	-	-	-	-
Shrike	-	-	-	-
Bushchat	-	-	-	-
Forest wagtail	-	-	-	-
White throated kingfisher	-	-	-	-
Hoopie	-	-	-	-
Greater flame back wood pecker	-	-	-	-
Lesser flame back	-	-	-	-
Pigmy hog woodpecker	-	-	-	-

<b>Birds</b>	<b>Mammals</b>	<b>Reptiles</b>	<b>Insects</b>	<b>Amphibians</b>
Yellow crowned woodpecker	-	-	-	-
Rufoustreepie	-	-	-	-
Blue monarch	-	-	-	-
Tailor bird	-	-	-	-
Sun bird	-	-	-	-

**28. Animal Adoption Scheme**

Adoption details

1	2022-23	128011.00
2	2023-24	359300.00

**29. List of Surplus Animals**

<b>Sl.No</b>	<b>Name of surplus animals</b>	<b>Sex (M:F)</b>
1	Spotted deer	14:6
2	Sambar deer	4:5
3	Toddy cat	2:2