# KURUMBAPATTI ZOOLOGICAL PARK SALEM

# Annual Report for the Year

# 2017-18



# SALEM FOREST DIVISION

# TAMIL NADU FOREST DEPARTMENT

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#### From the Desk of Officer-in-Charge:

Kurumbapatti Zoological Park is one of the Small Category zoos in Tamil Nadu involved in conservation and nature awareness for native fauna under the aegis of Zoo Authority of Tami Nadu (ZAT). The Zoo is also home to the abandoned and rescued animals under Salem Forest Division and acts as a special elephant rescue centre for a rehabilitated temple elephant by virtue of a court directive.

The Zoo has over 200 animals and birds in its collection representing about 30 varieties. Many native and exotic species have successfully bred indicating successful zoo keeping. The Zoo has also achieved self-sufficiency in meeting its fodder demand. The Zoo has been making progress in fulfilling requirements of animal housing, feed and healthcare needs for its inmates. The Zoo management strives to comply with rules, regulations and guidelines issued time to time by Central Zoo Authority, New Delhi.

In spite of its decadal existence, the zoo remained under developed for long as it faced many constraints and was in a state of neglect. Only in the recent past, many basic infrastructures like zoo office, concrete pavement, outer fencing, water pump house and water embankments were created. Successively, the zoo had improved the care given to the animals by renovating many cramped animal holdings. Fodder bank was made for zoo ungulates. R.O water treatment plant was setup at the Zoo to provide clean drinking water for zoo visitors free of cost. These sparkling changes in development had generated goodwill in the public and Business houses to get involved in corporate sponsorship programme for the Zoo. Iconic animal monument & animal feed sponsorship bear testimony to that.

The period 2017-18 witnessed another wave of infrastructural developments and improvements with addition of three more animal housings, stand-off barriers for all exhibits, secured vehicle parking lot, face-lift for zoo entrance, access stairway to children park, two quarantine wards of veterinary unit, power line for motor pump, extension of concrete pavement & visitor's circulation path, battery operated vehicle for zoo visitors. Master Layout Plan and Master Plan for the Zoo was also revised and has been submitted for AAZP Vandalur Zoo Director's approval.

The Zoo is frequented by many schools and higher academic institutions from near and far, throughout the year as part of their curriculum. This provides an excellent opportunity for creating a Zoo Interpretation Centre and planning Zoo School programmes. The Zoo will make strides to bring wholesome developments in all frontiers of zoo management. The vast area of the Zoo is managed with a meager staff strength of 13 full-time staffs. Despite, constraints faced by the zoo management like inadequate resources, the zoo staffs stand motivated in achieving better results for the Zoo.

Officer-in-Charge Kurumbapatti Zoological Park.

## **HISTORY OF THE ZOO:**

Kurumbapatti Zoological Park, Salem is a "Small category Zoo" developing under the aegis of Zoo Authority of Tamilnadu (ZAT). The Zoo is managed by Tamil Nadu Forest Department under Salem Forest Division. Located amidst reserve forest in foothills of Shevaroys (Eastern Ghats) the Park is well wooded and offers a forest ambience. The natural vegetation of the area consists of mixed dry deciduous forests & scrubs.

Initially opened to public as a Forest Recreation Centre in the year 1976 by Tamilnadu Forest Department under Salem Circle. Later on, this centre was setup as a small museum in 1981, on **11.5** hectares of reserve forest land. With its rudiment legacy as a public recreation centre this Park has slowly transitioned over a period of four decades, from a menagerie to a small modern zoo, only recently. Existing area of the Zoo is **31.73** ha and vast area of land is available for future expansion.

The Tamil Nadu State Government had constituted a State Zoo Authority known as Zoo Authority of Tamil Nadu (ZAT) on 03.12.2004. It is a registered Society under Tamil Nadu Societies Registration Act, 1975. The Governing Board of ZAT was reconstituted on 06.03.2013 to administer the zoological parks more effectively under G.O. No.23 Environment and Forests. The Order sought to include all zoos & butterfly park managed by Department of Forests under the ambit of ZAT for facilitating development and maintenance of all the zoos in a self-sustaining manner by receiving and utilizing funds from different Government and Non-Government sources.

As on 31.03.2018, Kurumbapatti Zoological Park is one of the nine recognized zoos functioning in the State of Tamil Nadu including zoos managed by NGO's and Civic bodies.

## Partial view of the Zoo & its Surrounds with Shevaroys Hills in the backdrop



# **VISION OF THE ZOO:**



"We envision to be one of the best regional zoos in the State providing enriching experiences on nature connectedness and passion for natural world conservation drawing inspiration from nature conservation activities and rooted beliefs in safeguarding nature across Peninsular India"



Portrayal animal cultural heritages in Salem district, Tamil Nadu.

#### **MISSION OF THE ZOO:**



Naturalistic Exhibit of Sambar Deer at the Zoo

"We shall strive to create nature immersive exhibits for our faunal collection and provide them with best health care and welfare possible. Our interpretative signages shall be based on living legacy of natural heritages found across Peninsular India fostering education on myriads of nature conservation set in the cultural context of Deccan region to impress upon the ethnic diversity of Salem Region"



Culture and Heritage of South India



Hills of boulders are a common feature of the landscape on Deccan Plateau

## **OBJECTIVES OF THE ZOO:**

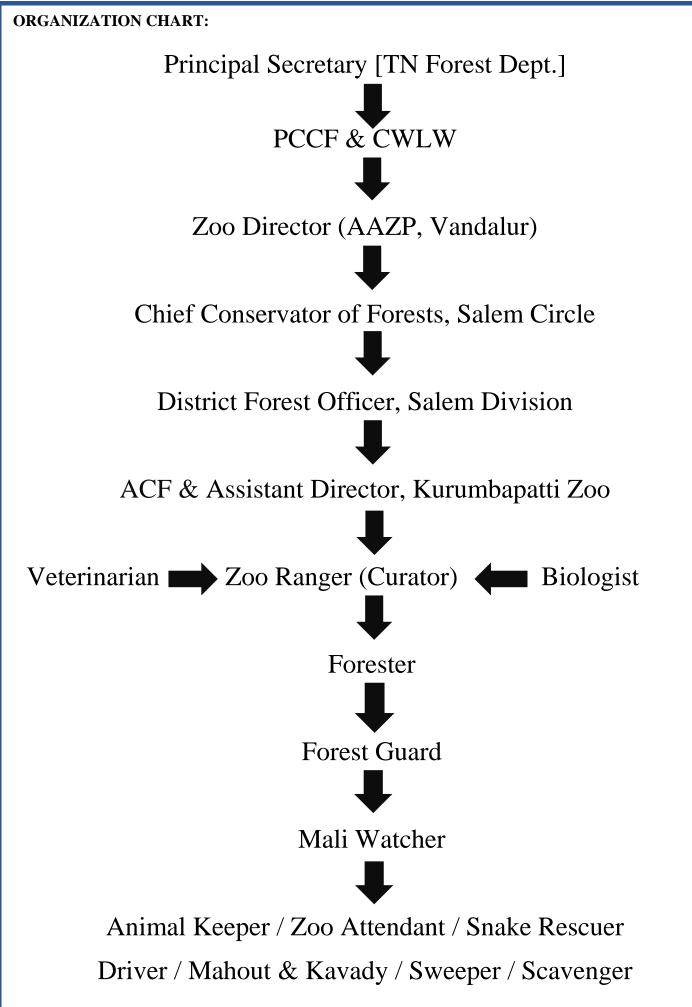
- 1. To create empathy for wildlife found in peninsular India and promote their conservation through good captive husbandry, breeding & veterinary care and imparting education about their conservation threats and actions across peninsular landscape of India.
- 2. To act as a Rescue & Rehabilitation Centre for distressed, abandoned and confiscated wildlife of Eastern Ghats system, Salem Region.
- 3. To streamline zoo management, upkeep & breeding of animals on scientific management practices and replicate best practices from other Zoos of the Country.
- 4. To promote awareness on natural world conservation and to act as a Centre for Nature Education.
- 5. To provide nature recreation for urbanites of "SALEM SMART CITY" and its surrounds.
- 6. To provide opportunity to augment income of forest dependent communities of the area by sale of certified eco-products through eco-shop outlets in Zoo premises.
- 7. To function as a satellite facility for and under the patronage of Arignar Anna Zoological Park, Vandalur to highlight conservation role played by Vandalur Zoo by acquiring & displaying its captive bred specimens, and also to act as its knowledge sharing platform on captive management of wildlife for western region of Tamil Nadu.



# **ABOUT US:**

S. NO	PARTICULARS	INFORMATION
Basic Iı	nformation about the Zoo	
1	Name of the Zoo	KURUMBAPATTI ZOOLOGICAL PARK
2	Year of Establishment	1981
3	Address of the Zoo	Kurumbapatti Zoological Park, Near Chettichavadi Village, Salem – 636 012.
4	State	Tamil Nadu
5	Telephone number	0427 - 2415097
6	Fax number	Nil
7	E-mail address	dfoslm@nic.in
8	Website	Nil
9	Distance from nearest	Airport : 25 km via NH 44
		Railway Junction: 13.7 km via Yercaud main Rd.
		Bus Stand: 11.8 km
10	Recognition Valid up to	05/05/2018
11	Category of Zoo	Small
12	Area (in Hectares)	31.73 ha.
13	Number of Visitors	Adult : 1,94,898
	(Financial Year – 2017-18)	Children : 47,212
		Total Indian Visitors: 2,42,110
		Total Foreigner Visitors: N/A
		Total Visitors : 2,42,110
14	Visitors Facilities available in Zoo	R.O Drinking water, Refreshment stalls, resting sheds & benches, Wash rooms, Signages, Lawn, Children Park, Circulation paths, Battery Operated Vehicle, etc.

15	Weekly closure day of the Zoo	Tuesday
Manag	ement Personnel of the Zoo	
16	Name with designation of the Officer-in- Charge	Shri. C. Kumar, Assistant Conservator of Forest & Assistant Director.
	Name of the Veterinary Officer	Visiting Vet from State Govt. Vet. Hospital
	Name of the Curator	Shri. M. Muralidharan (Forest Range Officer, Zoo)
	Name of the Biologist	Shri. P. Thirumalainathan, (M.Sc. Wildlife Biology)
	Name of the Education Officer	Nil
	Name of the Compounder/ Lab assistant	Nil
Owner	/ Operator of the Zoo	
17	Name of the Operator	Shri. Md. Nasimuddin, I.A.S.
18	Address of the Operator	Principal Secretary to Government, Environment and Forest Department, Government of Tamil Nadu, Secretariat, Chennai- 600009.
19	Contact details/ Phone number of Operator	Tel044+25671511 Fax No.044+25670040
20	E-mail address of Operator	forsec@tn.gov.in



# **HUMAN RESOURCES:**

S. No	Designation	No of sanctioned posts	Names of Incumbent
1	Assistant Director	1	Mr. C. Kumar
2	Forest Ranger	1	Mr. M. Muralidharan
3	Forester	2	Mr. S. Singaravelu Mr. K. Paneerselvam
4	Forest Guard	1	Mr. Sri Ganesh
5	Forest Watcher	1	Vacant
6	Animal Keeper	5	Mr. L. Gunasekaran Mr. Annadurai Mr. Sagayam (Two posts vacant)
7	Mali Watcher	3	Three vacant post
8	Super Numeric Watcher* (* Temporary deployment)	4	Mr. Rajaratnam Mrs. S.Krishnaveni Mrs. Rathnam Mrs. J. Ayyamal

S. No	Designation	No of temporary posts	Names of Incumbent
1	Biologist	1	Mr. P. Thirumalainathan
2	Temporary Animal Keeper	4	Mr. P. Ramachandran Mr. Kumar Mr. Raja Mr. Kannan
3	Snake Rescuer	1	Mr. Lara
4	Scavenger	2	Mrs. Gomathi Mr. Ambedkar
5	Playground Sweeper	2	Mrs. Pushpa Mrs. Sasikala
6	Fodder bank watcher	3	Mrs. Latha Mr. Selvaraj Mrs. Vijaya
7	Battery Car Operator	1	Mr. Murugesan
8	Driver	2	Mr. Murali Mr. Kumar
9	Mahout	1	Mr. Kaliappan
10	Kavady	1	Mr. Palani

# CAPACITY BUILDING OF THE ZOO PERSONNEL:

S. No	Name & designation of Zoo Personnel	Subject matter of training	Period of Training	Name of the institution where training was attended	
1	Mr. L. Gunasekaran,	Zoo Keepers	10 <sup>th</sup> February to	Arignar Anna	
	Animal Keeper	training on the	15 <sup>th</sup> February 2018	Zoological Park,	
		theme "CZA		Vandalur, Chennai	
		Vision 2030"		- 600 048.	

Forester-I from the Zoo has attended meeting on bird flu surveillance and preventive measures, at TANUVAS, Nammakal in Tamilnadu.

The field staffs in the zoo receive necessary inputs on animal handling and care from the visiting veterinary consultants.

Now, with the availability of Zoo Biologist, the animal keepers will be guided in record keeping, animal enrichments, courteous interaction with zoo visitors.

# ZOO ADVISORY COMMITTEE:

The Zoo does not have a specific advisory committee. While the development activities in the Zoo is overseen by Governing board of Zoo Authority of Tamil Nadu (ZAT), administration is looked after by Tamil Nadu Forest Department and maintenance of the zoo comes under the purview of Salem Forest Division as such. Hierarchical system is followed in management affairs of the Zoo.

In case, a zoo advisory committee is to be constituted it will be done on the model of Arignar Anna Zoological Park, Vandalur.

# HEALTH ADVISORY COMMITTEE:

Health Advisory Committee was not constituted so far.

But a District Level Captive Elephant Committee constituted on 31.03.18 exists with following members:

- 1. The District Forest Officer, Salem Forest Division
- 2. The Assistant Commissioner, HR & CE Department, Salem
- 3. One Ex-Officio member
- 4. The Wildlife Warden, Salem & Nammakal District.

## STATEMENT OF INCOME & EXPENDITURE OF THE ZOO

## FINANCIAL REPORT 2017-18:

Kurumbapatti Zoological Park receives funds from the State Government and also operates on the revenue generated from various sources. The Zoo received an amount of Rs. 29.97 lakhs from ticket collections and a grant of Rs. 157.6 lakhs from the State Government of Tamil Nadu.

#### Financial Report for the year 2017-18

Decumina	Budget Approved	Expenditure
Recurring	(in lakhs)	(in lakhs)
Feeding	24.24	24.20
Wages to Casual Labours	3.06	2.66
TOTAL	27.30	26.86

#### Expenditure Details under Non Plan (State Govt. Fund)

## **Expenditure Details (State Govt. Fund)**

Recurring	Budget Approved	Expenditure
Kecuiting	(in lakhs)	(in lakhs)
Rehabilitation Certification for curbing Monkey menace scheme	0.60	0.59
Special Health Camp for Elephant	1.38	1.38
TOTAL	1.98	1.98

# Expenditure Details under Zoo Authority of Tamil Nadu (Society) Fund for the Year 2017-18

Recurring	Budget Approved (in lakhs)	Expenditure (in lakhs)
Wages to Casual Labours	3.52	3.52
Construction of Outer fence, formation of concrete road, construction of stand-off barrier & visitor's path for water birds enclosure, bore-well electric connection, formation of car parking & 2-wheeler parking yard, veterinary facility improvement & purchase of battery operated vehicle	100.00	99.98
Construction of visitor's path & stand-off barrier in water bird enclosure, cattle proof trench, construction of white peacock enclosure & construction of small bird's enclosure	24.80	24.55
TOTAL	128.32	128.06

The amount spent by Kurumbapatti Zoological Park during 2017-18 is Rs. 128.06 lakhs for the maintenance of the Zoo.

# DAILY FEED SCHEDULE OF ANIMALS

S.no	Species name	Feed Item	Quantity Daily Feed Ration	Frequency of Feeding
1	Monkey	Groundnut	25g	Once daily
		Toor dal	15g	
		Cabbage	50g	
		Carrot	25g	
		bread	6g	
		Mosambi	125g	
		Rice	25g	
		Grapes	20g	
		Banana	3 nos	
		Egg	1 nos	On alternate days
2	Peafowl	Groundnut	50g	Once daily
		Cabbage	25g	
		Mixed grains	25g	
		Urad dal	50g	
		garlic	10g	
		green gram	25g	
		Paddy	100g	
3	Deer_ Spotted	Greens	250g	Once daily
		Cattle feed	500g	
		Wheat bran	500g	
		Bengal Gram	50g	
		Green fodder	2000g	
		Cabbage	100g	
		Oil Cake	50g	
		Salt	10g	
4	Deer_Sambar	Cabbage	100g	Once daily
		Oil Cake	100g	
		Bengal Gram	100g	
		Salt	20g	
		Greens	250g	
		Urad dal White	1500g	
		Cattle feed	1500g	
		Tree fodder	5000g	
5	Parrot	Paddy	10g	Once daily
~		Greens	100g	
		Groundnut	20g	
		Toor dal	10g	

Once daily
Once daily
Once daily
Once daily
Once daily
Once daily
8 times a year
4 times a year
Once daily

# VACCINATION SCHEDULE OF ANIMALS

Tentative vaccination schedule of animals as approved by District Veterinary Polyclinic, Salem

S.no	Species	Diseases vulnerable to /to be vaccinated for	Name of the Vaccine and dosage/ quantity to be used	Periodicity recommended	Remarks
1	Deer _ Spotted & Deer _ Sambar	Blue Tongue (endemic area) Anthrax (endemic area)	Tetanus Toxoid 1 ml I/M	At birth	Good handling and restraining facilities are essential during vaccination
2	Macaque_ Bonnet & Macaque_ Rhesus	Tetanus Rabies	Tetanus Toxoid/ Zoetic- equivac ® 1 ml I/M Anti-rabies vaccine	At 6 months of age/ repeated once in 6 months At 3 months	
				of age/ annual vaccination	
3	Fox_Bengal & Jackal _ Golden	Rabies	Anti-rabies vaccine	1 <sup>st</sup> vaccine at 3 months of age/ annual vaccination	Killed vaccine recommended
		Canine distemper & Parvo virus	Canine distemper vaccine		
4	Elephant_ Asian	Tetanus	Tetanus Toxoid 5 ml I/M	once in 6 months	
		Foot and Mouth disease	Foot and Mouth disease vaccine 2 ml I/M	once in 6 months. once in 4 months (in endemic area)	
		Anthrax	Anthrax vaccine 31 S/Q	(in endemic area)	
		Hemorrhagic septicemia	Hemorrhagic septicemia vaccine 2 ml	annual vaccination (in endemic area)	

S.no	Species	Diseases vulnerable to /to be vaccinated for	Name of the Vaccine and dosage/ quantity to be used	Periodicity recommended	Remarks
5	Peafowl _ Indian, Francolin_ Grey, Pelican _ Grey & Gull _ Brown headed	Newcastle disease	Newcastle disease vaccine	-	Handling may cause stress Vaccination is optional
6	Parrot, Pigeon, Budgieger, Love bird, finch	Avian PolyomaVirus (APV) disease	APV vaccine	1st vaccine at 3 months of age	Vaccination is optional
7	Crocodile	-	-		No routine vaccination recommended
8	Turtles & Tortoise	-	-		No routine vaccination recommended
9	Python _ Indian	-	-		No routine vaccination recommended
10	Lizard _ Monitor	-	_		No routine vaccination recommended

# DEWORMING SCHEDULE OF ANIMALS

Tentative deworming schedule of animals as approved by District Veterinary Polyclinic, Salem

S.no	Species	Recommended Drug	Remarks
1	Deer _ Spotted & Deer _ Sambar	Fenbendazole -7.5 mg/ kg body weight (through concentrate feed/ pellet feed)	Deworming be carried out based on faecal testing through routine parasitological examination. Same drug should not be used continuously.
2	Macaque_ Bonnet & Macaque_ Rhesus	Albendazole - 25 mg/kg body weight Fenbendazole - 20 mg/kg body weight Ivermectin - 0.2 mg/kg body weight Levamisole – 5 mg/ kg body weight Praziquantel – 15 - 20 mg/kg body weight	
3	Fox_Bengal & Jackal _ Golden	-	May follow the same basic principle of domestic dog medication
4	Elephant_ Asian	Albendazole – 2.5 mg/kg body weight P/o Fenbendazole - 20 mg/kg body weight P/o Ivermectin - 0.2 mg/kg body weight S/c or P/o Triclabendazole - 9 mg/kg body weight P/o (not exceeding 7200 mg/animal) Oxyclozanide – 7.5 mg/kg P/o (not exceeding 6.8 g/animal) Praziquantel - 2.5 mg/kg body weight P/o	Oral administration with regular feed is recommended
5	Peafowl _ Indian, Francolin_ Grey, Pelican _ Grey & Gull _ Brown headed	Fenbendazole (Panacur) - 22 mg/kg body weight P/o	-

S.no	Species	Recommended Drug	Remarks
6	Parrot, Pigeon, Budgieger, Love bird, finch	Albendazole Fenbendazole (Panacur) - 22 mg/kg body weight P/o Praziquantel – Piperazine – for round worms	Deworming be carried out based on faecal testing through routine parasitological examination.
7	Crocodile	Fenbendazole (Panacur) – 25 - 50 mg/kg body weight	Orally possible through freezing food/ pelleted diet Repeat in 15 days followed by once in 6 months
8	Turtles & Tortoise _ Star	Albendazole – 50 mg/kg body weight Levamisole – 5 to 10 mg/kg body weight SQ Fenbendazole – 25 - 50 mg/kg body weight P/O Metrinidzole (Flagyl) – 100 mg/ kg body weight P/O - For coccidia Praziquantel - 25 mg/kg body weight (TID for 1 day & repeated in 2 weeks) - For cestodes & trematodes	Oral administration (PO) repeat in 2 weeks for flukes & nematodes Intracoelmic – every 14 days for two treatments Deworm the animals with alternate drugs once in 3 or 6 months
9	Python	Fenbendazole – 25 - 50 mg/kg body weight P/O Ivermectin – 0.2 mg/kg body weight SQ or P/O, every 10 day for 2 to 4 times Levamisole – 5 to 10 mg/kg body weight SQ Metrinidzole (Flagyl) – 25 to 50 mg/ kg body weight P/O	Repeat in 15 days For ecto parasites and nematodes. Do not use for debilitated snakes. Intracoelmic – every 14 days for lung worms. Do not use for debilitated snakes. Repeat every 7 days for 2 to 3 treatments - For coccidian

		Praziquantel – 5 – 8 mg/kg body weight (repeated in 2 weeks) - For cestodes & trematodes	Deworm the animals with alternate drugs once in 3 or 6 months
10	Lizard _ Monitor	Albendazole – 50 mg/kg body weight (P/O) Fenbendazole – 50 - 100 mg/kg body weight P/O Ivermectin – 0.2 – 0.4 mg/kg body weight SQ or P/O Metrinidzole (Flagyl) – 50 to 100 mg/ kg body	Oral administration (PO)
		weight P/O for coccidian Praziquantel – 8 - 10 mg/kg body weight	

# **DISINFECTION SCHEDULE:**

Tentative disinfection schedule of animal housings as approved by District Veterinary Polyclinic, Salem

S.no	Species	Type of enclosure	Disinfectant to be used and Method	Remarks
1	Deer _ Spotted & Deer _ Sambar	Open-air Outdoor	Open enclosure: Bleaching powder Indoor housing: Sodium hypochloride (prepare for 2.5 – 3% application)	FMD – Sodium carbonate (washing soda) - (prepare for 4% application)
2	Macaque_ Bonnet & Macaque_ Rhesus	Indoor & Outdoor	Open enclosure: Bleaching powder Indoor housing: Sodium hypochloride (prepare for 2.5 – 3% application)	
3	Fox_Bengal & Jackal _ Golden	Open-air Outdoor	Indoor: Routine flaming once in 3 months Vicron-s – Viricidal agent Sodium hypochloride (prepare for 2.5 – 3% application) Open enclosure: Bleaching powder	
4	Elephant_ Asian	Open-air Outdoor	Sodium hypochloride (prepare for 2.5 – 3% application) Open enclosure: Bleaching powder	
5	Peafowl Indian, Francolin_ Grey, Pelican _ Grey & Gull _ Brown headed, Parrot, Pigeon, Budgieger, Love bird, finch	Indoor & Outdoor	Indoor: Routine flaming once in 3 months Vicron-s – Viricidal agent Sodium hypochloride (prepare for 2.5 – 3% application) Open enclosure: Bleaching powder	
6	Reptiles	Indoor & Outdoor	Indoor: Routine flaming once in 3 months	

# HEALTH CHECK-UP OF EMPLOYEES FOR ZOONOTIC DISEASES:

A system for health Check-up of employees for Zoonotic diseases will be developed in future.

# DEVELOPMENT WORKS CARRIED OUT IN THE ZOO

#### **INFRASTRUCTURES DEVELOPED DURING 2017-18**

# **Animal Housings: -**

Partial view of Black Buck enclosure



During the Year 2017-18, many new animal housings like enclosure for Indian antelope (Black Buck), enclosure for white peafowl and small bird gallery consisting of four compartments were constructed. Two quarantine wards were added to veterinary unit of the Zoo, which will serve as rescue holding facility for small animals. Durable stand-off barrier has been provided to all the exhibits, at animal viewing areas for the safety of visitors and animals. Concrete pavement has been extended to all new exhibits.



White Peafowl Aviary

Small Birds Gallery

#### Visitor Amenities: -

To cater to the needs of zoo visitors a spacious parking area for two & four wheelers is the biggest addition to the Zoo. The entire area is secured with a fence and entry & exit points are sealed with gate. Roofed sheds gives protection from weather. The access stairway to Children Park has been reshaped as user friendly for elders with stainless steel hand railings on its sides. A battery-operated-vehicle is another new addition in the list of services to visitors. Eco-souvenir stall & Snacks bars were of recent additions to the Zoo and provide valuable service for the Zoo Visitors.





Grand Parking Area for Visitors

Renovated access stairway to Children Park

# **Revamping of Zoo Entrance: -**

The Zoo's frontage has been revamped producing a whole new look. A robust crowd control queuing system with stainless steel hand railing has been implanted at ticket counter. Soiled floor area of the entrance has been converted to concrete carpet as all weather-proof floor.



Face-lift for the Zoo

Quarantine wards in the Vet Facility





Durable Stand-off barrier & tiled pavement at Crocodile exhibit

Durable Stand-off barrier & pavement at Macaque exhibit



## EDUCATION AND AWARENESS PROGRAMMES DURING THE YEAR

#### **ZOO EDUCATION**

The Zoo is a popular local attraction for people of Salem & its adjoining districts in Tamil Nadu. The City of Salem has rich historical, cultural and industrial significance. The city has adequate educational institutions which includes 2 universities, 2 medical colleges, 7 engineering colleges and many public schools, and acts as an educational hub for the region.

Educational visits to the Zoo are made by academic as well as vocational institutions from near and far, throughout the year. The Zoo is a much sought after place for family groups during weekends, local holidays and summer vacations. Students also get involved in volunteering activities such as cleanliness drives.

Large signage panels on zoo animals describing about each species appearance, behaviour, feed at the zoo and conservation status are put up before each animal exhibit. The signages are also bilingual/vernacular making it simple to understand for layman. Most of the signages carry picture of representative animal. The trees inside the zoo are also botanically labelled with some useful plant information. These signages helps in educating dour zoo visitors. Environmental awareness is raised through observing/celebrating environment related events at Zoo. During the visit of vocational institutions like Forest Academy, Forest Officials give talks on Zoo management and share experiences to give insights into real-life situations.

Presently, the services of the biologist are also utilized for educating zoo visitors, academic students & children. Programmes such like "Summer Camp", "Friend of the Zoo" are planned for launch in future as a part of Zoo education and Outreach.

S.No	College/ Institute	Date of Visit
1	Telangana Forest Academy, Hyderabad	10.06.17
2	Forest College & Research Institute, Mettupalayam	28.06.17
3	Tamil Nadu Forest Academy, Coimbatore	03.10.17
4	Karnataka State Forest Academy, Dharwad	08.03.18
5	Tamil Nadu Forest Academy, Coimbatore	28.03.18

## Notable Educational visits to the Zoo during the year 2017-18

# Glimpses of Educational activities & Signages















# IMPORTANT EVENTS AND HAPPENINGS IN THE ZOO:

The Zoo observes/ celebrates days of environmental importance such as wildlife week, nationalistic importance such as Independence and Republic Days.



Flag hoisting on Republic Day

# SEASONAL SPECIAL ARRANGEMENT FOR UPKEEP OF ANIMALS

# Annual Special Elephant Rejuvenation Camp: -

The Zoo hosted special Elephant Rejuvenation Camp for the rehabilitated elephant '*Andal*' from 09.02.18 to 28.03.18. During the annual rejuvenation camp conducted by the Tamil Nadu Government every year, *Andal*, received daily workout, treatment, nutritious diet, medicines in a manner as prescribed for rejuvenation camp. The veterinary doctors have regularly tested *Andal* during the 48-day camp period. The diet includes bio-boost tablets, liv 52, multivitamins, mineral mixture, protein powder, appetite boosters, salt, dates, turmeric and jaggery in addition to a stock of boiled rice, green gram, horse gram and 11 varieties of green fodder. Specified diet of the elephant is 20 sugarcanes, eight coconut tree branches, five bananas, eight tender banana stems, 12 kg of ragi, four kg of horse gram, two kg of rice, two coconuts, 100 gram of salt and 100 gram of jaggery for a day.



Rehabilitated Elephant at the Zoo and Elephant Rejuvenation Camp supplements

# **RESEARCH WORK CARRIED OUT AND PUBLICATIONS**



Amateur guide to birds and butterflies of Salem District.

No research works were carried out in the past.

Occasionally, amateur naturalists visit the Zoo to document birds and butterflies found in the Park.

One amateur study lists possible presence of 82 birds, inside the park and its vicinity.

# CONSERVATION BREEDING PROGRAMME OF THE ZOO

The Central Zoo Authority had not assigned any critically endangered species for the purpose of conservation breeding.

# ANIMAL ACQUISITION/ TRANSFER/ EXCHANGE DURING THE YEAR

Animal acquisition through exchange programme was nil for the year 2017-18.

## RESCUE AND REHABILITATION OF THE WILD ANIMALS CARRIED OUT BY THE ZOO

S. No	Date of Rescue	Specieswithnumberofanimalsrescuedwith their sex	Received from	DateofSubmissionofReporttoCWLW/CZA	Action Taken (date and place of rehabilitation)	Reasons for housing in the Zoo
1	22.02.18	Rhesus macaque (Female)	Sivagiri FR, Tiruelveli Forest Division		Housed in the collection	Exotic animal of the area. Captured due to nuisance. Site for release not available locally.
2	31.03.18	Monitor Lizard			Housed in the collection	For educating public

	ABSTRACT ON CAPTIVE ANIMAL COLLECTION									
		STOCK AS ON								
TAXA	01.04	<b>I</b> .17	31.03.18							
	SPECIES	SPECIMENS	SPECIES	SPECIMENS						
MAMMALS	3	37	4	34						
BIRDS	10	107	9	109						
REPTILES	3	20	4	14						
TOTAL	15	164	17	157						

# ANNUAL INVENTORY OF ANIMALS 2017-18

## PART-A

S.No	Species Name			x as o 04.17		During the Period							Stock as on 31.03.18			
		М	F	U	Т	BIRTHS	ACQ	UISIT	IONS	DEA	DEATHS		Μ	F	U	Т
						U	Μ	F	U	М	F	U				
		·			SC	CHEDULE	I & II									
	BIRDS															
1	Peafowl _ Indian Blue Pavo cristatus	2	7		9		3						5	7		12
	Peafowl _ White Pavo cristatus	3			3								3			3
TOTA	L SCHEDULE I & II BIRDS	5	7		12		3						8	7		15
	MAMMALS															
1	Macaque _ Bonnet Macaca radiata	1	1		2								1	1		2
2	Macaque_Rhesus Macaca mulatta				0			1						1		1
τοτ	<b>AL</b> SCHEDULE I & II MAMMALS	1	1		2			1					1	2		3

S.No	Species Name		Stock 01.0			DIDENC		ing the			-	~			k as o .03.18	n
		M F		U	Т	BIRTHS		UISITI			ATHS		М	F	U	Т
						U	М	F	U	Μ	F	U				
					SC	CHEDULE	I & II									
	REPTILES															
1	Monitor Lizard _ Common Varanus bengalensis				0				1						1	1
2	Crocodile _ Marsh/Mugger Crocodylus palustris	3	3	7	13							7			6	6
TOTA	L SCHEDULE I & II REPTILES	3	3	7	13				1			7			7	7
TOT	AL SCHEDULE I & II	9	11	7	27		3	1	1	0	0	7	9	9	10	25
			SC	HE	DUL	PART - I E III & IV		<b>VOTI</b>	<b>CS</b>							
			SC	HE	DUL			KOTI(	CS	r	r	r			1	Ţ
	BIRDS		SC	HE				KOTI(	CS							
1	Pelican_Grey	1							CS			1			2	,
1 2	Pelican_Grey Pelecanus philippensis Partridge_Grey	1	2		3				CS			1			2 4	2
1 2 3	Pelican_Grey Pelecanus philippensis	1 2 2										1			2 4 4	2 4 4
2	Pelican_GreyPelecanus philippensisPartridge_GreyFracolinus pondicerianusCokatielNymphicus hollandicusParakeet_Rose-ringedPsittacula krameri	2	2		3 4							1	13	14	4	4
2 3	Pelican_GreyPelecanus philippensisPartridge_GreyFracolinus pondicerianusCokatielNymphicus hollandicusParakeet_Rose-ringedPsittacula krameriParakeet_AlexandrinePsittacula eupatria	2	2 2 2		3 4 4							1	13	14	4	4
2 3 4	Pelican_GreyPelecanus philippensisPartridge_GreyFracolinus pondicerianusCokatielNymphicus hollandicusParakeet_Rose-ringedPsittacula krameriParakeet_AlexandrinePsittacula eupatriaParakeet_Plum-headedPsittacula cyanocephala	2 2 13	2 2 2 14		3 4 4 27							1			4	4 4 27
2 3 4 5	Pelican_Grey Pelecanus philippensisPartridge_Grey Fracolinus pondicerianusCokatiel Nymphicus hollandicusParakeet_Rose-ringed Psittacula krameriParakeet_Alexandrine Psittacula eupatriaParakeet_Plum-headed Psittacula cyanocephalaPigeon_Rock Columba livia	2 2 13 1	2 2 2 14		3 4 4 27 2							1			4	4 4 27 2 2
2 3 4 5 6	Pelican_GreyPelecanus philippensisPartridge_GreyFracolinus pondicerianusCokatielNymphicus hollandicusParakeet_Rose-ringedPsittacula krameriParakeet_AlexandrinePsittacula eupatriaParakeet_Plum-headedPsittacula cyanocephalaPigeon_Rock	2 2 13 1 2	2 2 2 14 1		3 4 4 27 2 2								1	1	4	4 4 27 2

S.No	Species Name	Stock as on 01.04.17			During the Period								k as o .03.18			
		М	F	U	Т	BIRTHS	ACQUISITIONS			DEATHS			М	F	U	Т
						U	М	F	U	М	F	U			Ū	
			SC	CHE	DULI	E III & IV	and EX	KOTIO	CS							
	MAMMALS															
1	Deer_ Spotted Axis axis	15	6		21	1				2	2		14	4		1
2	Deer_Sambar Cervus unicolor	4	10		14	1				2			3	10		1
SCI	IEDULE III & IV MAMMALS TOTAL	19	16		35	2				4	2		17	14		3
	REPTILES															
1	Tortoise_Star Geochelone elegans			1	1										1	1
2	Turtle_ Unidentified	2	4		6										6	6
SCHE	REPTILES DULE III & IV and EXOTICS TOTAL	2	4	1	7										7	7
	TOTAL	69	67	1	137					4	2	1	60	55	17	1.
SCHEDULE III & IV and EXOTICS																
GRAND TOTAL         78         78         8         164				164		3	1	1	4	2	8	69	64	42	1	

M- Male; F- Female; U- Unsexed; T – Total

## MORTALITY OF ANIMALS:

S. No	Animal Name	Scientific Name	Sex	Date of Death	Reason of death as per post mortem
1	Grey Pelican	Pelecanus philippensis		06.02.18	N/a
2	Spotted deer	Axis axis	Male	23.07.17	Anemia due to severe tick infestation
3	Sambar deer	Cervus unicolor	Male	29.07.17	Infighting – injury on thoracic cavity
4	Spotter deer	Axis axis	Female	11.08.17	Inappetance, watery diarrhea
5	Spotted deer	Axis axis	Male	10.09.17	Infighting wound on right chest
6	Spotter deer	Axis axis	Female	27.09.17	Hypothermic & hypovolumic shock
7	Sambar deer	Cervus unicolor	Male	15.03.18	Haemorrhaegic shock
8	Marsh Crocodile	Crocodylus palustris	unsexed	11.02.18	Cannibalism
9	Marsh Crocodile	Crocodylus palustris	unsexed	11.02.18	Cannibalism
10	Marsh Crocodile	Crocodylus palustris	unsexed	11.02.18	Cannibalism
11	Marsh Crocodile	Crocodylus palustris	unsexed	11.02.18	Cannibalism
12	Marsh Crocodile	Crocodylus palustris	unsexed	17.02.18	Cannibalism
13	Marsh Crocodile	Crocodylus palustris	unsexed	11.02.18	Cannibalism
14	Marsh Crocodile	Crocodylus palustris	unsexed	11.02.18	Cannibalism

COMP	LIANCE V	WITH CONDITIONS STIPULATEI	) BY THE C	CENTRAL ZO	OO AUTHORITY
S.No	Norm No. Under RZR, 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regard to compliance of the conditions
	1. Genera	l Requirements	I	I	
1	10.1(2)	Landscaping around pea-fowl and water birds enclosures, planting of flower plants should be done. Lawns, footpaths to reach these enclosures be provided. Hedge planting with <i>Duranta</i> cutting or <i>Casuarina</i> be provided. Trimming of <i>Casuarina</i> seedlings at the height of barricading level at later stage should be done.	Three months	Complied	Pea-fowl and water bird aviary are landscaped with lawns and foot-paths provided. Live hedges with some species of croton family has been maintained at barricading level in the exhibits.
2	10.1(3)	Barricading as per CZA norms all round Children Park, railing to either side of footpaths from Children Park to downwards and also reducing the height of the steps for easy walk for children and elderly persons should be done.	Three months	Complied	Children Park is isolated. Durable stainless steel hand railing has been provided at the access stairway downwards. Steps have been re- shaped as user friendly for elders.
	2. Admini	istrative and Staffing Pattern	I	L	
3	10.2 (2)	As prescribed for small category zoo, the personnel like curator, Veterinarian and a Biologist should be posted	With immediate effect	23.08.2007, 26.02.2010 & 09.06.2016	Zoo Ranger is a full- time field-in-Charge of the Zoo and acts as a Curator aided by two Foresters. Presently, the Zoo functions with a visiting Forest Veterinarian. As the Zoo does not have a full-time veterinarian necessary proposal has been sent to the Department for the sanction of the post.

					A qualified biologist has been engaged on ad-hoc basis. Necessary proposal has been sent for sanction of permanent post of Biologist through regular recruitment process.
	3.Animal	housing, display of animals and an	imal enclos	ure	
4	10.4(6)	<ol> <li>The female elephant maintained in the zoo premises (as per court order) be provided with proper upkeep like raised stone platform with proper drainage all-round and shade pandal even it is for temporary period be provided and also footpath from main zoo to reach the elephant site be made walkable for the visitors.</li> <li>The Crocodile pond should be modified as per the standard and norms prescribed by the CZA. The enclosure should also provide sufficient basking space with sand substrate and sufficient depth of water to meet their biological and behavioral requirements.</li> </ol>	With immediate effect	-	<ul> <li>1.Foot path for the elephant viewing site has been created.</li> <li>Temporary arrangements for the upkeep of elephant has been done.</li> <li>Crocodile exhibit has been revamped. Sand beds were created during last nesting seasons.</li> </ul>
	4. Upkeep	and health care of animals			
5	10.5(9)	The staff involved with upkeep of animals should be screened against zoonotic disease once every year and treated properly till they cured completely and these employees should not be allowed to work in the close proximity of animals.	With immediate effect	09.06.2016	Sick employees are relived from working with animals till their recovery and their services are used for tasks other than animal keeping.
	5. Veterii	nary & Infrastructure facilities			
6	10.6(6)	Zoo should have linkages with the eminent institutions and organizations working in the field of wild animals healthcare. They can assist when scientific diagnosis of disease of serious nature and advise for treatment and can also	With immediate effect	09.06.2016	The Zoo utilizes services of veterinary professionals from Veterinary College & Research Institute, Nammakal under Tamil Nadu Veterinary
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	assist training and upgrading technical skills of zoo staff.			and Animal Sciences University (TANUVAS).
6. Acquis	ition and breeding of animals			
10.9(2)	To safeguard against ill effects of inbreeding on the zoo population, the zoo should introduce unrelated animals through exchange from other zoos.	With immediate effect	09.06.2016	New animals are added through rescues and efforts will be made to introduce new bloodline through animal exchange programme.
7. Educat	tion and Outreach activities			
10.11(1)	Zoo should organize various competitions for school children during wildlife week by which the young minds will have love towards wild animals and their conservation and know about the importance of zoo and their role in conservation of flora and fauna.	With immediate effect	Complied	The Zoo observes/celebrates days of environmental importance. Local NGO's & Forest department also partner with Zoo during such events and distribute prizes to winners.
8. Visitor	rs facilities			
10.12(2)	First aid facilities, anti-venom and life-saving drugs should be made available.	With immediate effect	Complied	First-aid facility and anti-venom is available. Action being taken to facilitate availability of life- saving drugs.

#### LIST OF FREE LIVING WILD ANIMALS WITHIN THE ZOO PREMISES

# A. MAMMALS

S.NO	COMMON NAME	SCIENTIFIC NAME
1	Mongoose _ Indian Grey	Herpestes edwardsii
2	Macaque _ Bonnet	Macaca radiata
3	Rat _ Bandicoot	Bandicota sp.
4	Squirrel _ Indian Palm	Funambulus palmarum
5	Deer _ Spotted	Axis axis
6	Indian Flying Fox	Pteropus giganteus

### **B. BIRDS**

S.NO	COMMON NAME	SCIENTIFIC NAME
1	Tailor bird _ Common	Orthotomus sutorius
2	Sunbird _ Purple	Cinnyris asiaticus
3	Sunbird _ Purple-rumped	Leptocoma zeylonica
4	Robin _ Indian	Copsychus fulicatus
5	Bulbul _ Red-vented	Pycnonotus cafer
6	Bulbul _ Red-whiskered	Pycnonotus jocosus

S.NO	COMMON NAME	SCIENTIFIC NAME
7	Babbler _ Yellow billed	Turdoides affinis
8	Koel _ Asian	Eudynamys scolopaceus
9	Shama _ White-rumped	Copsychus malabaricus
10	Drongo _ Greater-racket tailed	Dicrurus paradiseus
11	Owlet _ Jungle	Glaucidium radiatum
12	Crow _ House	Corvus splendens
13	Flameback _ Black-rumped	Dinopium benghalense
14	Waterhen _ White-breasted	Amaurornis phoenicurus
15	Heron _ Indian Pond	Ardeola grayii
16	Swift _ Asian Palm	Cypsiurus balasiensis
17	Bee-eater _ Green	Merops orientalis
18	Francolin _ Grey	Francolinus pondicerianus
19	Peafowl _ Indian	Pavo cristatus
20	Egret _ Cattle	Bubulcus ibis
21	Lapwing _ Red-wattled	Vanellus indicus
22	Nightjar _ Indian	Caprimulgus asiaticus

S.NO	COMMON NAME	SCIENTIFIC NAME
23	Roller _ Indian	Coracias benghalensis
24	Drongo _ Black	Dicrurus macrocercus
25	Kingfisher_ White-throated	Halcyon smyrnensis
26	Flycatcher _ Tickell's blue	Cyornis tickelliae
27	Robin _ Magpie	Copsychus saularis
28	Flowerpecker _ Pale-billed	Dicaeum erythrorhynchos
29	Flycatcher _ Indian Paradise	Terpsiphone paradise
30	Crow _ Large- billed	Corvus macrorhynchos
31	Myna _ Common	Acridotheres tristis
32	Dove _ Spotted	Spilopelia chinensis
33	Coucal	Centropus sp.
34	Leafbird _ Golden-fronted	Chloropsis aurifrons
35	Myna _ Common	Acridotheres tristis
36	Treepie _ Rufous	Dendrocitta vagabunda

### **C. REPTILES**

S.NO	COMMON NAME	SCIENTIFIC NAME
1	Lizard _ Fan-throated	Sitana ponticeriana
2	Bronze Grass Skink	Eutropis macularia
3	Common Wolf Snake	Lycodon aulicus
4	Agama _ Peninsular Rock	Psammophilus dorsalis
5	Gecko _ House	Hemidactylus frenatus
6	Lizard _ Oriental Garden	Calotes versicolor
7	Lizard _ Bengal Monitor	Varanus bengalensis
8	Gecko _ Bark	Hemidactylus leschenaultii
9	Gecko _ Termite Hill	Hemidactylus triedrus

