

# **ARIGNAR ANNA ZOOLOGICAL PARK**



# **ANNUAL REPORT**

2019-2020



Arignar Anna Zoological Park
Tamilnadu Forest Department
Vandalur, Chennai
website: www.aazp.in

Email: directoraazp1@gmail.com







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### MESSAGE FROM DIRECTOR'S DESK

I am pleased to present the Annual Report of the Arignar Anna Zoological Park, Vandalur Chennai for the financial year (2019 -2020). Arignar Anna Zoological Park is one of the largest ex-situ conservation centres in the country that caters to the needs of conservation of wild animals in particular to the conservation of threatened and endangered species of Western and Eastern Ghats. Arignar Anna Zoological Park acts as home to the abandoned and rescued animals from the wild. The zoo has successful breeding of many endangered wild animals in captivity. Every effort has been made to provide required housing, feed and health care to all the animals in the zoo and rescue center.

The number of visitors visiting the Arignar Anna Zoological Park has been increasing year after year. This year more than 20 lakh visitor footfall was recorded. Continuous measures are being taken to provide the required facilities to the visitors. The Education Wing of the zoo has imparted training and had conducted awareness programmes to animal keepers, students and teachers. More than 1200 students were trained and entitled as Zoo Ambassadors. This programme had an overwhelming response from the students, parents and teachers. This programme was planned to reach a wide range of students in the upcoming year. In addition to it, Certificate courses, Zoo outreach programme, special themed workshops, Zoo orientation programme for visiting schools, Zoo Inhouse training, Zoo club activity were regularly organized in the Zoo School. Tamilnadu Environment Department awarded "Arignar Anna Award" for the educational programme.

The salient highlights of this year were that Arignar Anna Zoological Park received a pair of Great Indian one-horned Rhinoceros after three decades through an animal exchange programme. Arignar Anna Zoological Park is now proud to be an institutional member of WAZA (World Association for Zoos and aquarium). A silent run was organized during the wildlife week celebration and the run has been recorded in the Asian Book of Records.

180 CCTV surveillance cameras were installed to monitor the animal enclosures and visitors area. 24x7 Animal Live Streaming of 16 Zoo animals which were introduced last year has crossed 3.8 crore views. During this year, glass viewpoints were made in some animal enclosures for a clear and enhanced view for the visitors.

Animal health care is given more importance in our zoo. We strive to ensure that the animals are screened regularly for the prevalence of any diseases; timely prophylactic measures are taken. Animal sanitation and hygiene are also maintained well. During the pandemic period, COVID 19 precautionary measures are strictly followed as per the guidance of WHO. The zoo staff work with sincerity and devotion to their job which has helped the zoo to run successfully all these years. I appreciate everyone in the Zoo for having made it a successful year in the maintenance of the zoo and proving again that Arignar Anna Zoological Park, Vandalur is one of the best-managed zoos in our country.

Thiru. Yogesh Singh, IFS

Additional Principal Chief Conservator of Forests & Director

### HISTORY OF ARIGNAR ANNA ZOOLOGICAL PARK



The history of Chennai Zoo (formerly known as Madras Zoo) dates back to the year 1855. This was the first Zoo to be formed in India. The idea of collection of animals and maintaining at one place was mooted in 1855 by Dr. Edward Belford of the Madras Museum. He kept a small collection of animals near the Madras museum. The menagerie was later transferred to the Madras Corporation. The animals were housed in a Zoo over an area of 12.03 acres behind the then Moore Market Complex near Central Station for about 125 years. The Corporation Zoo was visited and appreciated by many distinguished visitors in those days. Jawaharlal Nehru the Prime Minister once visited the Zoo and praised the standard of maintenance, care and effort taken by the

then Curator Thiru. Ramanunjalu. As the Zoo was quite cramped and did not meet the biological and behavioral needs of the animals, decision was taken to shift the zoo to an alternative site where adequate land to develop the required infrastructure for a modern zoo was available. After detailed investigation the Vandalur Reserve Forest was selected for this purpose.

This place, sprawling over an area of about 510 ha (in its initial stages), provided an environment similar to natural wilderness which helped to meet the biological and behavioral need of the animals and birds. The present area of the zoo has the requisite natural vegetation for creating the naturalistic environment at the zoo. Arignar Anna Zoological Park is one of the largest zoos in South East Asia extending over an area of 602 ha. The estimated initial cost of the



project was about Rs. 7.30 crores. The zoo was opened to public during the year 1985. The existing landscape was utilized as it is and all the animals were exhibited in large open moated island type of immersive enclosure with simulated environment. The entire area was clothed with vegetation using natural and some artificial regeneration.

Arignar Anna Zoological Park is one of the modern and scientifically managed zoos of the Country with 259 full time staff and additional contractual workers. This Zoological Park is the pride of the Tamil Nadu. It has attained excellence in the Captive Breeding Programme for endangered species and also in the field of zoo education by creating awareness about the conservation of natural resources. The functions carried out in the zoo include Animal welfare, Animal husbandry, Commissary (Store), Transport, Research, Education and Awareness, Veterinary, Horticulture, Security and Sanitation and Zoo administration. The zoo has a well-equipped zoo kitchen, zoo hospital and quarantine facility.

#### **VISION**

The Vision of AAZP is to have environmentally sensitive people who care for the wild fauna and flora and conserve it for long term welfare of mankind.

#### **MISSION**

- Conservation of the fauna of Eastern and Western Ghats with special reference to LTM,
   Nilgiri Langur, Gaur and small mammals.
- To provide to all the animals housed in the zoo highest standards of housing, upkeep and health care.
- To provide the zoo visitors opportunities for getting an uninterrupted view of wild animals to develop an empathy towards them.
- To carry out research on different aspects of biology, behaviour and genetic makeup of endangered species of wild animals and facilitate their breeding.
- To provide requisite housing, upkeep and health care to the distressed animals rescued from various sources.

#### **OBJECTIVES**

- To maintain viable population of various species housed at the zoo through appropriate nutrition, housing, health care and behavioral management.
- Thematic display of healthy and active animals in naturalistic enclosures and facilitate
  the visitors to appreciate and understand the ecological linkages of nature though use of
  appropriate signage and interpretation facilities.
- To provide the zoo visitors a hassle free stay in secure environment and conduct them in the zoo in such a manner that their visit to the Zoo becomes rewarding
- To upgrade the technical knowhow and the professional efficiency of the zoo personnel at all levels to implement the aforesaid strategy successfully.

### LAYOUT MAP OF ARIGNAR ANNA ZOOLOGICAL PARK



# ABOUT ARIGNAR ANNA ZOOLOGICAL PARK

Particulars	Information
Name of the Zoo	Arignar Anna Zoological Park
Year of Establishment	1985
Address of the Zoo	Vandalur, Chennai -48
State	Tamil Nadu
Telephone Number	044-22751089
Fax Number	044-22750741
E-mail address	directoraazp1@gmail.com
Website	www.aazp.in
Distance from nearest	Airport: 15 Km , Railway Station: 1 Km, Bus Stand: 100 mtrs
Recognition Valid up to	August 2023
Category of zoo	Large Zoo
Area (in Hectares)	602
No of Animal house	90 nos
Number of Visitors	Total Visitors:1924513 (Adult :1307120, Children :617393)
(Financial Year 2019-20)	Total Indian: 1922449; Total Foreigners: 2064;
Visitors' Facilities Available in Zoo	Battery operated Vehicle, Lion and Deer Safari, Interpretation Centre, Wheel Chair Facility, Bicycle & Electronic cycle facility, RO- Drinking Water Points, Toilets, Rest Sheds, Food Eatery Outlets etc.,
Weekly Closure Day	Tuesday

# **Management Personnel**

Name with designation of the Officer in-charge	Thiru . Yogesh Singh, IFS., Addl. Principal chief Conservator of Forest and Director
Name of the Curator / Deputy Director	Tmt.S. Sudha, IFS., Deputy Director
Name of the Assistant Director/PRO	Thiru. K. Sekar Assistant Director / Public Relation Officer
Name of the Veterinary Officer (i/c)	Dr. K. Sridhar, Veterinary Assistant Surgeon Dr.A.Nalini, Veterinary Assistant Surgeon
Name of the Biologist	Dr. A. Manimozhi, Dr. M. Sekar, Thiru. G. Kamaraj

# Operator of the Zoo

Name of the Operator	Tamil Nadu Forest Department, Government of Tamil Nadu
Address of the Operator	Arignar Anna Zoological Park, Vandalur, Chennai, Tamil Nadu
Phone number of Operator	044-22751089
E-mail address	directoraazp1@gmail.com

### **ORGANIZATION CHART**

- Sweeper cum Scavenger, • Electrician,
- Plumber,
- Pump Operator,
- Drivers

Maintenance staff

- **Biologist**
- Animal keepers
- Mali
- Feed Distribution helper
- Night watchman

Anima. **Care Staff** 

- Personal Assistant
- Superintendents
- Junior Engineer
- Assistants
- Draughting Officers
- Junior Assistant
- Office Assistant

Veterinary care staff

- Veterinary officer
- Veterinary Assistant Surgeon
- Lab Technician
  - Director
  - Deputy Director
  - Assistant Director
  - Range officers
  - Foresters
  - Forest Guard
  - Forest Watcher

Management Staff

Administra -tion Staff

# TARIFF DETAILS

Children above 5 years and below 12 years	Rs 35.00	
Adult	Rs 75.00	
School Children (5-12 years) from Government Schools and Aided schools	Rs 10.00	
Battery operated and other Zoo round vehicles for adults	Rs 100.00	
Battery operated and other Zoo round vehicles for Children	Rs 50.00	
Lion safari for adults	Rs 100.00	
Lion safari for children	Rs 60.00	
Camera Cellphone, I-Pad, TAB	Rs 25.00	
Foreigners -Handy Camera	Rs 250.00	
Foreigner -Video Camera	Rs 500.00	
Foreigners - Adult /Children	Rs 500/250	
Foreigners - Handy Camera/Video Camera	Rs 500/1000	
Wheel Chair	Rs 25	
**Entry free for Differently abled person & Children below 5 years of age.		

Zoo Timing - 9.00 am to 6.00 pm : Zoo Holiday - Every Tuesday

# **HUMAN RESOURCES**

S. No	Name of the post	Post sanctioned	Post filled	S. No	Name of the post	Post sanctioned	Post filled
1	APCCF & Director	1	1	24	Electrician	1	0
2	Deputy Director	1	1	25	Plumber	4	2
3	Asst. Conservator of Forests	1	1	26	Forest Range Officer	6	5
4	Personal Assistant	1	1	27	Forester	6	6
5	Superintendent	2	1	28	Forest Guard	9	9
6	Assistant	6	5	29	Forest Guard (knowing driving)	5	3
7	Junior Accountant	1	1	30	Forest Watcher	2	2
8	Junior Assistant	3	2	31	Driver	16	8
9	Steno Typist Grade II	1	1	32	Mali	30	23
10	Typist	2	1	33	Night Watchman	11	5
11	Assistant Executive Engineer	1	0	34	Night Watchman (Forest Subordinate Service)	3	2
12	Junior Engineer	1	1	35	Mahout	1	0
13	Senior Draughting Officer (RD from Thanjavur Circle to this office)	1	1	36	Bungalow Watcher	1	1
14	Draughting Officer	1	1	37	Animal Keeper	45	26
15	Assistant Draughts Man	2	0	38	Sweeper cum Scavenger	32	15
16	Veterinary Officer	1	1	39	Gate Watchman	13	9
17	Veterinary Assistant Surgeon	2	2	40	Feed Distribution Helper	6	4
18	Biologist	3	3	41	Pump operator	10	2
19	Live Stock Inspector	1	0	42	Asst. Agriculture Officer	1	0
20	Lab Technician	1	1	43	Gardener	4	3
21	Office Assistant	7	3	44	Electrician	1	1
22	Office Watchman	1	1	45	Asst. Electrician	1	1
23	Sweeper	1	1	46	Driving - Garbage Collection Worker	2	0

### ZOO AUTHORITY OF TAMIL NADU

In accordance with the guidelines of the CZA and with an objective to facilitate supervision, control and management of AAZP and for easy flow of funds for the development and better management of the zoo, the Government of Tamil Nadu approved the formation of Zoo Authority of Tamil Nadu vide G.O.Ms.No.314 E & F (FR-V) Department dated: 03.12.2004. The 21st Governing Board Meeting of the Zoo Authority of Tamilnadu is yet to be scheduled, Government orders being awaited.

### ZOO TECHNICAL ADVISORY COMMITTEE

### a. Date of constitution - 28.04.2011

### b. Members

- I. Thiru. S. Subarayalu Naidu, IFS, Principal Chief Conservator of Forests (Retired)
- II. Thiru. R. Sundararaju, IFS, Principal Chief Conservator of Forests and Chief Wildlife Warden (Retired)
- III. Dr. N. Krishna kumar, IFS, Principal Chief Conservator of Forests (Retired)
- IV. Thiru. Yogesh Singh, IFS, Additional Principal Chief Conservator of Forests & Director, AAZP
- V. Dr. S. Paulraj, IFS, Conservator of Forests, (Retired)
- VI. Dr. C. Sreekumar Professor & Head, Wildlife science, Madras Veterinary College, Chennai
- VII. Tmt. Sudha. S IFS Deputy Director, AAZP

### c. Dates on which Meetings held during this financial year - 19.07.2019

Arignar Anna Zoological Park's 3<sup>rd</sup> Zoo Technical Advisory Committee meeting was held on 19th July 2019. Technical Committee members and other zoo officials were present during the discussion. Deputy Director AAZP, Tmt. S. Sudha I.F.S. briefed about the follow up action taken on the minutes of the 2<sup>nd</sup> Technical Advisory Committee meeting held on 08.03.2018. The following agenda were discussed during the 3<sup>rd</sup> Technical Advisory Committee meeting.

The committee recommended MoU with TANUVAS and A.I.W.C. The committee suggested the concept of 'Green Zoo', in which an energy audit and water audit were supposed to be taken with respect to present timeline. The committee welcomed the proposed expansion of safari in addition to present Lion and Deer safari, by introducing Indian Gaur and Tiger Safari. The committee welcomed the idea of solar fencing in the pre-existing enclosures. The committee also approved the execution of innovative upcoming projects. The members were happy about the present zoo publications, periodic newsletters and collaborative Zoo School activities.





# CAPACITY BUILDING OF ZOO PERSONNEL

### TRAININGS ATTENDED BY AAZP STAFF

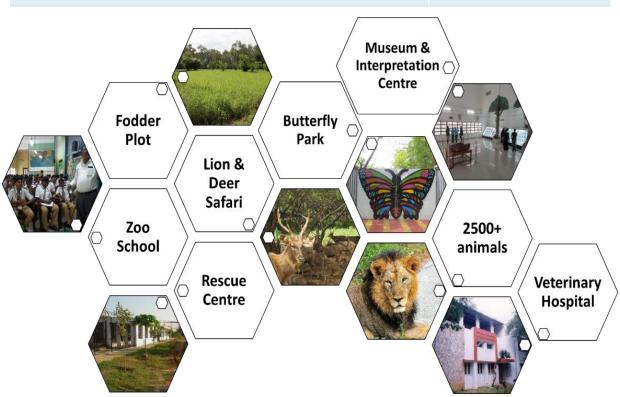
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Sl. No.			Period	
		Training workshop on "Role of Forestry in		
			Sustainable Development of People" at State	
			Forest Research & Training Institute (SFRTI),	
1	S.Sudha	Deputy Director	Raipur	14.10.2019 to 15.10.2019
		Forest Range	Tamil Nadu Forest Academy, Coimbatore	
2	A.Gobakumar	Officer	induction Training study Tour of 2018-20	09.12.2019 to 11.01.2020
		Forest Range	Tamil Nadu Forest Academy, Coimbatore	
3	Pon. Senthil	Officer	induction Training study Tour of 2018-20	20.01.2020 to 22.02.2020
		Forest Range		
4	B. Uma	Officer	Fire Management Training for one month	20.01.2020 to 22.02.2020
		<b>5</b> 55.	Compulsory Head of Department and District	
			Training Programmes for Section Officers of	
5	Dr. K. Sridhar	Veterinary Surgeon		30.12.2019
		, 5	Compulsory Head of Department and District	
			Training Programmes for Section Officers of	
6	Dr. A. Manimozhi	Biologist	Secretariat with effect from 30.12.2019	30.12.2019
7	7 R. Venkatrajan			
	P. Ramesh Kumari			05.03.2019 - 09.03.2019
9	K. Gopal			
	K. Jothi	Favort Coard	Training on "Forest Fire Management" to be	11.03.2019 – 15.03.2019
11	S. Devanbu	Forest Guard	held at Tamil Nadu Forest Academy	
12	T. Mohan			18.03.2019 – 22.03.2019
13	G. Udhayan			
14	N. Babu			25.03.2019 – 29.03.2019
			Forest Fire Management to be held	
15	S. Kannan	Forest Guard	at Tamil Nadu Forest Academy	02.12.2019 – 06.12.2019
			Forest Fire Management to be held	
16	S. Balasubramania	Forest Guard	at Tamil Nadu Forest Academy	25.11.2019 – 29.11.2019
			Forest Fire Management to be held	
17	R. Balamurugan	Forest Watcher	at Tamil Nadu Forest Academy	25.11.2019 – 29.11.2019

# STATEMENT OF INCOME AND EXPENDITURE

Particulars and Work	Expenditure 2019-2020
Feed	598
Wages to casual labour	209.78
Office Maintenance	8.68
Creation and maintenance of animal enclosures, lawns, roads, fodder plots, drainage, water supply lines, Compound walls, Electricity charges etc.,	419.86
Creation and maintenance of visitor amenities	97.36
Zoo school programmes, awareness programmes, signage's, maintenance of buildings, staff amenities etc.,	84.82
Purchase of Machinery and equipment - *purchase of Battery Operated Vehicles & Accessories	1.51
Maintenance of vehicles	29.71
Medicines & Veterinary care	58.74
Printing tickets, brochures, Entry Management System, etc.,	17.74
Animal Exchange programmes and transportation	9.86
Capital works - *black topping damaged roads due to desilting of water bodies, providing additional protection for boundary walls etc.,	94.04
Total	1469.55

# **DETAILS OF REVENUE GENERATED DURING 2018-19**

Particulars	Receipt
Revenue from Entrance Ticket	142875850
Sale of tender form, Calender, Scrap & waste bone	288739
By rent receipt & electricity charges (Rest house,	6826275
Zoo school, Zoo shop, hotel TN, MPDA, Poompugar,	
TANTEA, Aavin, Toilet)	
By Misc. Receipt ( Zoo school programmes,	3695297
Research fees, Contract Registration, Parking fees,	
Water charges, VR show, Fine amount	
By Animal Adoption	1379575
Total	155005136



### DAILY FEEDING SCHEDULE OF ANIMALS

There are about 2704 animals belonging to 175 species housed in 120 enclosures. They are fed regularly as per the feed schedule prescribed by the Nutrition Department of TANUVAS. The animals are regularly monitored by Veterinary Doctors & Biologists. Based on the prevailing body condition, height, weight, and other biological parameters, the feed of the animal is calculated and provided in adequate quantity and with good quality. Feed quality checking, Animal health, feed supplement, and animal feed intake and behavior are regularly monitored by a dedicated Veterinary Doctor & Biologist. Special feed is provided to the animals during summer. The feed chart is prepared based on the energy requirement, biological variation and demand.

Species	Feed item	Quantity
Lion Tailed Macaque	Rice	25 gms
Rhesus Macaque	Groundnut (without shell)	25 gms
Bonnet Macaque	Banana	3nos.
	Sweet orange/Orange/ Mango	1no
	Guava	1 no.
	Bengal gram	15 gms
	Cabbage	50 gms
	Greens(different)	100 gms
	Bread slice	3 nos.
	Boiled egg	1 no (alternate days)
	Soyabex	20 gms
	Carrot	25 gms.
	Grapes	20 gms
	Honey	12 ml
	Seasonal fruits	
	Custard apple/Sitaphal	50 gms
	Nelli	20 gms
	Naaval	20 gms
	Ilandhai	20 gms
	Cucumber	50 gms
	Watermelon	30 gms
	Jack fruit	15 gms
Nilgiri Langur	Rice	30 gms
Common Langur	Groundnut (w.o.s)	15 gms
	Banana	4 nos.

	Sathukudi/Orange/Mango	1 No
	Guava	1 No
	Bengalgram	15 gms
	Cabbage	30
	Greens	100 gms
	Bread slices	3
	Boiled egg	1 no (alternate days).
	Soya bean bex	20 gms
	Carrot	25 gms
	Grapes	20 gms
	Honey	10 ml
	Seasonal fruits	
	Sitaphal	100 gms
	Nelli	30 gms
	Naaval	30 gms
	Ilandhai	30 gms
	Cucumber	50 gms
	Watermelon	100 gms
	Jack fruit	50 gms
Capuchin Monkey	Rice	25 gms
	Bengal gram	10 gms
	Banana	2 Nos
	Groundnut (w.o.s)	25 gms
	Sathukudi/Orange/Mango	1 no
	Guava	2 nos.
	Grapes	50 gms
	Cabbage	25 gms
	Boiled egg	1 no
		(alternate days)
	Apple	½ no
	Carrot	25 gms
	Bread slice	1 No
	Greens	50 gms
	Soyabex	20 gms
	Honey	10 ml
	Seasonal fruits	
	Sitapal	50 gms
	Nelli	20 gms
		-

	Naaval	20 gms
	Ilandhai	20 gms
	Cucumber	50 gms
	Watermelon	100 gms
	Jack fruit	50 gms
Savanna Baboon	Rice	50 gms
	Groundnut (w.o.s)	50 gms
	White Bengal gram	50 gms
	Cabbage	50 gms
	Carrot	100 gms
	Soyabex	20 gms
	Banana	4 Nos
	Sathukudi/Orange/ Mango	2 Nos
	Guava	2 Nos
	Boiled egg	1No
		(alternate days)
	Bread slices	4 Nos
	Grapes	20 gms
	Greens	100 gms
	Honey	10 ml
	Beef without bone	100gms <u>(Mondays &amp;</u> <u>Thursdays)</u>
	Seasonal Fruits	
	Sitapal	100 gms
	Nelli	50 gms
	Naaval	50 gms
	Ilandhai	50 gms
	Cucumber	50 gms
	Watermelon	100 gms
	Jack fruit	50 gms
Chimpanzee	Rice	100 gms
	Boiled horsegram	25 gms
	Sprouted green gram	50 gms
	Bread slices	8 Nos
	Sathukudi/ Orange/Mango	4 Nos
	Guava	8 Nos
	Banana	10 Nos
	Apple	5 Nos
	Papaya	300 gms

	Groundnut (w.o.s)	25 gms
	Cabbage	100 gms
	Carrot	100 gms
	Grapes	100 gms
	Greens	100 gms
	Bengal gram	50 gms
	Boiled egg	1No
	Milk	1 lt.
	Seasonal fruits	
	Sitapal	150 gms
	Nelli	100 gms
	Naaval	100 gms
	Ilandhai	100 gms
	Water melon	1 kg
	Jack fruit	100 gms
	Cucumber	100 gms
	CARNIVORES	100 gills
Lion	Beef with bone	7 Kgs
	Liver	150 gms
Tiger	Beef with bone	7 Kgs
	liver	150 gms
Leopard	Beef with bone	4 kgs
	liver	100 gms
Wild dog	Beef with bone	3 kgs
	liver	100 gms
Jackal	Beef with bone	2 kg
	liver	100 gms
Hyena	Beef with bone	3.5 kgs
Wolf	liver	100 gms
Jungle cat	Beef with bone	500 gms
	liver	50 gms
	Milk	100 ml
Palm civet cat	Beef	500 gms
	Banana	1 No
	Milk	50 ml
	Bread slice	1 No
Sloth bear	Ragi (cooked)	300 gms
Himalayan black bear	Rice gruel with black gram	250+50 gms
<b>,</b>	5 5. 4111	50 50

	Sathukudi/orange/mango	2 Nos.,
	guava	4 Nos.,
	Tapioca/sweet potato	100 gms
	jaggery	200 gms
	banana	4 Nos
	Groundnut (w.o.s)	100 gms
	Honey	100 gms ( Bi-weekly)
	Milk	500 ml
	Bread slices	2 Nos.,
	Carrot	200 gms
	Boiled egg	1 No
	Cucumber	250 gms
	Water melon	500 gms
Otter	Fish	1.5 kg
	HERBIVORES	
Indian elephant (Adult)	Ragi	6 kgs
	Horse gram	4 kgs
	Rise	1 kg
	Salt	200 gms
	Jaggery	250 gms
	Grass	200 kgs
	Sugarcane	8 Nos.,
	Green tree leaves-bamboo	100 kgs
	coconut	1 kg
	banana	20 Nos
	Banana stem	1 No
	(Weekly once)	
	Wood apple	250 gms
	Watermelon	500 gms
Indian elephant (Sub- Adult)	Ragi	3 kgs
	Horse gram	1 kg
	Jiggery	250 gms
	Salt	50 gms
	Banana	15 Nos
	Grass	75 kgs
	Sugarcane	3 Nos.,
	Green tree leaves- bamboo/stylo	<u>25 kgs</u>

	Coconut	500 gms
	Banana stem	1/2 No
	Wood apple	250 gms
	Water melon	500 gms
Indian giant squirrel	White Bengal gram	25 gms
Grizzled giant squirrel	Apple	½ <b>No</b>
	grapes	50 gms
	Bread slices	1 no
	Banana	1 no
	Groundnut (w.o.s)	25 gms
	Carrot	25 gms
	Cabbage	25 gms
	Sathukudi/orange/mango	½ <b>no</b>
	Guava	1 no
	Coconut with shell	75 gms
	Tree leaves	100 gms
	papaya	50 gms
	Greens	50 gms
Porcupine	Rice	100 gms
	Carrot	100 gms
	Cabbage	100 gms
	Tapioca or sweet potato	100 gms
	Soya bex	20 gms
	Groundnut (w.o.s)	25 gms
	Banana	1 No.
Wild Ass	Wheat bran	5 kg
	White Bengal gram	100 gms
	Horse gram	100 gms
	Banana	5 Nos
	Carrot	500 gms
	Cabbage	500 gms
	Mineral mixture	50 gms
	Green leaves	5 Kgs
	Grass	20 kgs
	Greens	250 gms
Zebra	Wheat bran	3 kgs
	Horse gram	500 gms
	White Bengal Gram	500 gms
	Grass & Leaves	30 kgs

	Carrot	500 gms
	Cabbage	500 gms
	Mineral Mixture	50 gms
	Banana	10 Nos
Hippopotamus	Wheat bran	10 kgs
	White Bengal gram	250 gms
	Salt	250 gms
	Apple	2 Nos
	Potato	500 gms
	Carrot	2 kgs
	Cabbage	1 kg
	Onion	250 gms
	Banana	10 Nos
	Grass	100 kgs
	Greens	1 kgs
	Bread	2 loaves ( 800 gms)
	Multivitamin Mixture	50 gms
Indian Gaur	Leaf bran	3 kgs
	Wheat bran	2 kgs
	Cattle feed	3 kgs
	Horse gram (Boiled)	750 gms
	Groundnut oil cake	750 gms
	Banana	5 Nos
	White Bengal gram	500 gms
	Green gram sprouted	300 gms
	Salt	100 gms
	Green grass	25 kgs
	Straw	3 kgs
	Tree leaves	10 Kgs
	Greens	500 gms
Swamp deer	Wheat leaf bran	1.5 kgs
	Cattle feed	750 gms
	Horse gram boiled	500 gms
	Bengal gram	250 gms
	Groundnut oil cake	250 gms
	Cabbage	250 gms
	Salt	25 gms
	Grass	10 kgs
	Green Leaves	3 kgs

	Greens	500 gms
Blackbuck	Wheat Bran	500 gms
Hog deer	Cattle feed	500 gms
Spotted deer	White Bengal Gram	50 gms
	Groundnut oil cake	50 gms
	Cabbage	100 gms
	Salt	10 gms
	Grass	3 kgs
	Green Leaves	2 kgs
	Greens	250 gms
Barking deer	Wheat Bran	500 gms
barking deer	Cattle feed	500 gms
	White Bengal Gram	50 gms
	Groundnut oil cake	50 gms
	Cabbage	100 gms
	Salt	10 gms
	Grass	3 kgs
	Green leaves	2 kgs
		250 gms
Sambar	greens Wheat Bran	1.5 kgs
Sallibal	Cattle feed	1.5 kgs
	Groundnut oil cake	1.0 gms
	White Bengal Gram	100 gms
	Cabbage	100 gms
	Greens	250 gms
	Salt	
	Grass	20 gms
		15 kgs
Nilasi	Tree branches (with bark)	5 kgs
Nilgai	Wheat Bran Cattle feed	1.5 kgs
		1.5 kgs
	White Bengal Gram	500 gms
	Green gram	500 gms
	Groundnut oil cake	100 gms
	Salt	20 gms
	Carrot	1 kg
	Cabbage	250 gms
	Greens	500 gms
	Grass	20 kgs
	Green Leaves	5 kgs

Wild boar	Wheat bran	500 gms
	Boiled rice	500 gms
	Bengal gram	100 gms
	Sweet potato / Tapioca	200 gms
	Bread slices	5 Nos
	Potato	250 gms
	Banana	5 Nos
	Salt	10 gms
	Greens	100 gms
Giraffe	wheat leaf bran	3 kgs
	Crushed barley	1 kg
	Crushed oats	500 gms
	Crushed maize	750 gms
	Carrot	2 kgs
	Onion	2.5 kgs
	Banana	4.00 kgs (60 Nos.,)
	Apple	1.25 kgs (7 Nos.,)
	Orange/sathukudi	1.75 kgs ( 10 Nos.,)
	Guava	500 gms ( 4 Nos.,)
	jaggery	125 gms
	Groundnut oil cake	500 gms
	Black salt	25 gms
	Beans	2 kgs
	Mixed pulses	1 kg
	Tree leaves	25 kgs
	Greens	1 kg
	BIRDS	
Silver Pheasant	White Bengal Gram	15 gms
Khalij Pheasant	Mixed Grains	25 gms
Golden Pheasant	Onion	25 gms
Lady Amherst pheasant	Greens	50 gms
	Shell grit	10 gms
	Sunflower seeds	10 gms
	Green gram	25 gms
Love Bird ( Peach faced & Sky	Apple	30 gms
blue)	Banana	1 No.
	Thinai	10 gms
	Mixed Grains	10 gms

	White Bengal Gram	5 gms
	Onion	10 gms
	Greens	10 gms
	Shell grit	2 gms.
	Jilett grit	Z gills.
Grey Cockatiel	Green Grams	10 gms
White Cockatiel	Mixed Grains	10 gms
Pearl Cockatiel	Thinai	10 gms
,	White Bengal gram	10 gms
	Greens	10 gms
	Onion	10 gms
!	Shell Grit	2 gms
Macaw ( Blue and yellow)	Bread slice	1 No.,
	Green banana	2 Nos.,
,	White Bengal Gram	25 gms
,	Apple	½ <b>No</b>
!	Sathukudi / Orange /	
ı	Mango	½ No.
	Guava	1 No.
	Groundnut ( w.o.s.)	50 gms
	Chilly fruit	25 gms
	Garlic	10 gms
	Cucumber	50 gms
	Greens	20 gms
Rose Ringed Parakeet	Bread Slice	1/2 No
Alexandrian Parakeet	Apple	1/4 No
Blossom Headed Parakeet	Sathukudi / orange /	
ı	Mango	1⁄4 No
	Guava	1/2 No
	Groundnut ( w.o.s)	20 gms
	Mixed Grains	10 gms
	Paddy	10 gms
	Garlic	5 gms
	Bengal gram	10 gms
	Green Gram	10 gms
,	Sun flower seeds	10 gms
	Greens	10 gms
	Chilly fruit	5 gms

Bar headed Goose	Paddy	100 gms
White Goose	Wheat Bran	100 gms
Grey Goose	White Bengal Gram	25 gms
	Carrot	25 gms
	Cabbage	25 gms
Indian Peafowl	Cabbage	25 gms
White Peafowl	Mixed Grains	25 gms
	Paddy	100 gms
	White Bengal Gram	50 gms
	Greens	100 gms
	Garlic	10 gms
	GroundNut (w.o.s)	50 gms
	Shell Grit	10 gms
	Green gram	25 gms
Blue Rock Pigeon	Mixed grains	25 gms
Silver Diamond Dove	White Bengal Gram	25 gms
White Dove	Green gram	25 gms
Spotted Dove	Shell grit	1 gm
	Bread Slice	1 No.,
	Mixed Grains	25 gms
	White Bengal Gram	20 gms
	Shell Grit	1 gm
Flamingo	Thinai	150 gms
	Wheat Bran	50 gms
	Mixed Grains	50 gms
Black Swan	Cabbage	25 gms
	Wheat	50 gms
	Paddy	50 gms
	Cucumber	100 gms
	White Bengal Gram	25 gms
	Bread slice	1 No
	Carrot	25 gms
	Shell grit	5 gms
Demoiselle Crane	Mixed Grain	75 gms
	Wheat Bran	25 gms
	Shell Grit	5 gms
	Thinai	25 gms
	Fish ( daily)	50 gms

Brahmini Kite	Beef with bone	500 gms
Pariah Kite	Chick	2 nos(weekly once)
	Rat	2 nos(weekly once)
	Fish	200 gms (Tuesday)
Bengal Vulture	Chick	5 nos(weekly once)
-	Beef with bone	1 kg
	Rat	2 nos(weekly once)
	Fish	500 gms (Tuesday)
Barn owl	Beef with bone(or)	250 gms
Horn Owl	Rat (100 to 150 gms)	2 nos
	Chicks	2 nos (weekly once)
White Bellied	Beef with bone	1 kg
Sea Eagle	Fish	500 gms
A) Painted Stork		
B) Adjutant Stork		
C) Sarus Crane	Fish	500 gms
D)White Stork		
HERON & EGRETS		
A) Spoon Bill		
B) Cormorants		
C) White Ibis	Fish	200
D) Cattle Egret	Fish	200 gms
E) Little Egret		
F) Night Heron		
G) Grey Heron H) Darter		
I) Pond Heron		
J) Purple Heron		
PELICANS (Spot billed & Rosy)	Fish	1 kg
COCKATOO	Apple	½ No
(Sulphur crested & White crested)	Sathukudi/ Orange Mango	1 no
	Guava	1 Nos.,
	Tomato	50 gms
	Groundnut ( w.o.s)	50 gms
	Tapioca / Sweet Potato	50 gms
	Bread Slice	1 No
	Egg ( Boiled)	1 No
	Green Banana	1 No

	Rat (size-100 to 150 gms)	2 nos (weekly twice)
Grey Partridge Koel	Mixed Grains	50 gms
	REPTILES	
Marsh Crocodile	Fish (Weekly once)	50 gms
	Beef with bone	500 gms Weekly twice
Gharial crocodile	Fish ( Weekly once)	1 kg
Salt Water Crocodile	Fish (Weekly once)	1 kg
	Beef with bone	4 kgs weekly twice
Caiman	Fish (Weekly once)	250 gms
	Beef with bone	750 gms Weekly twice
Morelet crocodile	Fish (Weekly once)	250 gms
Nile Crocodile	Fish (Weekly once)	1 kgs
	Beef with bone	3 kgsWeekly twice
Siamese crocodile	Fish ( Weekly once)	250 gms
	Beef with bone	750 gmsWeekly twice
Python	x Chicken	1 kgs (MonthlyTwice)
	Rat (Size-150 gms)	8 Nos (MonthlyTwice)
Python Sub-adult	Chicken	1/2kgs(MonthlyTwice)
	Rat (Size-150 gms)	4 nos (Monthly Twice)
Green snake	Frog 25 to 50 gms	3 Nos ( weekly Once)
	Garden lizard	3Nos (Weekly once)
	Mice	3Nos (Weekly once)
Bronze back tree snake	Garden lizard	3 Nos (Weekly once)
	Frogs & Some Insects	5 Nos (Weekly once)
	Mice	3 Nos (Weekly once)
Russel's Viper	Chicks	3 Nos (Weekly once)
	Rats 100 to 150 gms )	4 Nos (Weekly once)
Common Krait	Water snake Young ones	2 Nos (Weekly once)
	Rats( 100 to 150 gms )	4 Nos (Weekly once)
Cobra	Chicks	3 Nos (Weekly once)
	Rats (100 to 150 gms)	4Nos (Weekly once)
Rat snake	Rat ( 100 -150 gms)	4Nos (Weekly once)

	Frogs	5 Nos (Weekly once)
Red sand Boa / Whitaker's Boa	Rat ( 10-15 gms)	4 Nos (Weekly once)
Common Sand Boa	Day old chick	1 Nos (Weekly once)
Beauty snake	Rat ( 10- 15 gms)	42Nos (Weekly once)
Saw Scaled Viper	Day old Mice	4 Nos (Weekly once)
	Fan throated lizard	3Nos (Weekly once)
Iguana	Carrot	50 gms
	Cabbage	50 gms
	Tomato	50 gms
	Greens	100 gms
Common Monitor Lizard	Rats	1 Nos (Weekly once)
	Chick	2 Nos (Weekly once)
	Chopped Beef	100 gms (except Tuesday)
Checkered Keel Back	Small Frogs	5 Nos (Weekly once)
Buff Striped Keel Back	Rats (10-15 gms)	4 Nos (Weekly once)
Star Tortoise	Carrot	30 gms
Flap shelled turtle	Cabbage	30 gms
Pond Terrapin	Tomato	30 gms
Red eared slider	Greens	50 gms
Water Monitor Lizard	Rat (10-15 gm. Size)	4 Nos (Weekly once)
	Chicks	3 Nos (Weekly once)
	Big frogs	5 Nos (Weekly once)
	Chopped beef	200 gms
Chameleon	Grasshopper	10 nos
Aquarium	Rice	1 kg/day
( For the fishes in the moat)	Ragi	1kg/ day
	Soyabex	100 gms/ day
Note:		
1. Whenever salt is provided, loc	lized salt should be given.	
2. For all carnivores beef is supp	olied for six days in a week. Tue	sday will be a fasting day.
3. Composition of Mixed Grains		
	Paddy -20%]	
	Jowar-20% ] supplied to brans -20%	
	Kambu-20%	
	Ragi-20%	

Wheat -20%



Cleaning of feed articles in hot water and potassium permanganate solution

Distribution of perishable feed articles in the respective boxes as per the Diet chart



Checking of the quality by the Zoo Biologist and Veterinary Doctors

Screening of meat done by Veterinary Doctors in the presence of the Zoo Staff and Zoo Biologist



# VACCINATION SCHEDULE OF ANIMALS

FELIDS							
ANIMALS	VACCINES	BOOSTER					
Royal Bengal Tiger	IRT, FPV,FCV,RABIES	Annual					
( including White Tigers)							
Lion	IRT, FPV,FCV,RABIES	Annual					
Leopard	IRT, FPV,FCV,RABIES	Annual					
Jaguar	IRT, FPV,FCV,RABIES	Annual					
	CANIDS						
ANIMALS	VACCINES	BOOSTER					
Stripped hyena	DHLPPi ,RABIES	Annual					
Wild dog	DHLPPi ,RABIES	Annual					
Jackal	DHLPPi ,RABIES	Annual					
Wolf	DHLPPi ,RABIES	Annual					
	HERBIVORES						
ANIMALS	VACCINES	BOOSTER					
Elephants	HS,ANTHRAX , TETANUS	Annual					
Zebra	HS, TETANUS	Annual					
Giraffe	HS,TETANUS	Annual					
Wild ass	HS,TETANUS	Annual					
Nilgai	FMD, BQ, HS	Annual,Pre Monsoon					

An active immunisation of big cats against feline panleucopaenia virus (FPLV), feline herpes virus (FHV) and feline calicivirus (FCV) is being carried. A lion being vaccinated at our facility



### DE- WORMING SCHEDULE OF ANIMALS

The Zoo Veterinary Hospital generally follows a specific and strategic deworming Protocol. This method of deworming is based on the type of animals and how they are placed at the enclosures, environment, density, rotation schedule, housing type, factors like Immune suppression, species variation and viability. We have an evaluation protocol based on the egg occurrences per field. The deworming schedule of animals at AAZP follows.

	DEWORM	ING	SCHI	EDUL	E OF	ANI	MAI	LS A	AZP	2019	9-20	20	
S.NO	Species to be dewormed	2019							2020				
	aewormea	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
1	Bears	***			***			***			***		
2	Lion (Zoo & Rescue)	***			***			***			***		
3	Panther & Jaguar			***			***			***			***
4	Tiger (Zoo& Rescue)		***			***			***			***	
5	Hippopotamus			***			***			***			
6	Elephant			***			***			***			***
7	Indian Gaur	***			***			***			***		
8	Deer, Otter		***			***			***			***	
9	Crocodiles, Tortoises			***			***			***			***
10	Monkeys	***			***			***			***		
11	Jackal, Terrestrial birds, Aquatic birds		***			***			***			***	
12	Ostrich, birds of prey		***			***			***			***	
13	Nocturnal animals	***			***			***			***		
14	Snakes	***			***			***			***		
15	Wild dog	***			***			***			***		
16	Wild boar	***			***			***			***		
17	Wild ass		***			***			***			***	
18	Zebra, Giraffe	***			***			***			***		
19	Hyena			***			***			***			***

### DISINFECTION SCHEDULE

#### **WEEKLY SCHEDULE**

- Regular Preventive disinfection (Kohrsolin)
- Specific disinfection for Bactericidal and Fungal infection, Vaccination covered virus, Vaccination uncovered virus, for Tuberculosis.
- In house spray- Proper cleaning of exhibits/ housing areas
- · Cleaning of feed/ water troughs
- Application of turmeric powder inside (floor and walls) and around enclosures.
- Providing adequate disinfection with 1% Potassium permanganate both as dips and rinses.
- · Removal of left-over feed in the exhibit
- Disinfection of vehicles used inside the zoo, especially vehicles having everyday access to the feed store (feed / beef/ fish supply vehicle/ tractors)
- Cleaning and disinfection of equipment with 1% Potassium permanganate before and after use.
- Rodent control by proofing / physical barriers

#### MONTHLY SCHEDULE

- For specific disinfection
- Spraying of Butox / Clinar inside enclosures
- Applying calcium carbonate during onset of rainy seasons at the enclosures ( mud / swampy) as a disinfection protocol

#### **QUATERLY SCHEDULE**

- Clearing of weeds / vegetation
- Scraping of top soil substrate.
- Testing the pH of the water in avian enclosures (marine) recycling/ refilling if found acidic.

#### ANNUAL SCHEDULE

- Fumigation
- White washing
- Painting
- Change of sand/ Fumigation of old sand substrate





### HEALTH CHECK-UP OF EMPLOYEES FOR ZOONOTIC DISEASES

S.No	Name	Category	Date of Health Check up	Findings
1	Bone density	Zoo staff	04/07/2019 &05/07/2019	No major specific findings
2	Diabetic Screening	Zoo staff	05/07/2018	No major specific findings
3	Zoonotic disease	Zoo staff	15.4.2020	No major specific findings

## Development works carried out in the Zoo (2019 -2020)



Installation of thickened hard glasses for better view



Construction of Kingcobra



Construction of night shelter house



Cloak room with safety lockers



Formation of road that connects to Zoo Veterinary hospital



Purchase of new BOV

# DEVELOPMENT WORKS CARRIED OUT IN THE ZOO (2019 -2020)

1.	Installation of Glass View Points at Royal Bengal Tiger, Great Indian One- horned Rhinoceros, Scarlet Macaw, Peacock, White Peacock, Venomous Snake House, Water Monitor Lizard and Iguanas.
2.	Development of Lawns and Parks near Lion and Tiger Enclosures, Zoo entrance, BOV area, Rhino enclosure
3.	Construction and renovation of animal enclosure and night shelter house of Great Indian one horned Rhinoceros and Pair of King cobra
4.	Purchase of neonatal incubator for providing intensive care to neonatal and endangered species
5.	Installation of plastic bottle vending machine for the purpose of reverse disposal of plastic waste
6.	Installation of safety lockers for carnivores and herbivores animals
7.	Construction of new Cloak Room with specialized locker system.
8.	Plantation of 10000 taller seedlings in and around the zoo premises and provision of tree guard for proper protection from animal grazing.
9.	Strengthening the wall of animal enclosures of Hippopotamus and Rhinoceros
10.	Procurement of Electro Ejaculator for conservation breeding and semen collection.
11.	Establishment of solar fencing in Grey Wolf enclosure
12.	Formation of road from Rest House to Veterinary Hospital
13.	Renovation and enrichment of Zoo School Auditorium with air conditioners, computers and digital projectors, purchase of conference tables and chairs
14.	Installation of new signage boards
15.	Renovation and replacement of the existing signages with eco-friendly signage boards
16.	Purchase of Battery-Operated Vehicle for visitor zoo round.
17.	Desilting of percolation pond and drainage channels.
18.	Installation of barbed wire fencing above the compound wall next to Otteri Lake
19.	Renovation of Rescue and Rehabilitation Centre and leveling of ground in additional car parking area

### EDUCATION AND AWARENESS PROGRAMME

Arignar Anna Zoological Park established Zoo School in the year 1998, with the mission to educate the public about the importance of living in harmony with nature and wildlife conservation. It aims to promote awareness for the conservation of biodiversity and natural resources and encourages action for a sustainable future.

Arignar Anna Zoological Park, Zoo school organizes various lecture series, field-based education sessions, online sessions, awareness, and educational events and contests throughout the year. The programmes are aimed to impart zoo education and create awareness among the public about the importance of wildlife and its conservation.

### **ZOO OUTREACH PROGRAMME**



Zoo outreach programme aims to impart zoo education to the people in rural, suburban and distant areas. Several educational awareness programmes like lecture series, dedicated camps, and workshops were organized. Subject matter experts actively involved themselves in conducting the Zoo outreach programme by talking about the importance of Zoo to a wide range of people. **Zoo outreach programme** was conducted

exclusively for government schools in the rural areas. More than 1000 Government school students were educated on the importance of wildlife conservation through outreach.

### **ZOO AMBASSADOR PROGRAMME**

Zoo Ambassador is a first of its kind programme initiated at AAZP in the year 2018. It is one of the most favorite camps amongst the children. It was conducted as a summer camp (April and May month) and winter camp (December month). A Special One Day Zoo Ambassador programme was also conducted for Government School students at free of charge. This year 500 students were trained in this programme. So far 1200 have been trained



under this programme and were titled as "Zoo Ambassador of Vandalur Zoo". They were provided with certificate, badge and Zoo passport to have 10 free Zoo visits. The Zoo

Ambassadors will involve themselves by sharing the knowledge gained through this programme with their family and friends; they will carry the message of conservation.





### **Orientation at Zoo during School excursions**



Arignar Anna Zoological Park is one of the most famous destinations for an educational field trip in Tamil Nadu. Zoo orientation session is conducted regularly for the school children who come on excursion. Schools can book the session in advance or at the time of entry or can write to aazpzooschool@gmail.com to get benefited by this session.

In this session students along with the teachers are told about the importance and role of the zoo as a conservation center. They are also briefed on the animal kingdom diversity and the role of animals in the ecosystem. In the year 2019-2020 over 20,000 students participated in the zoo orientation session. They have expressed that this session has given them a clear understanding of the role and functioning of zoos.

### **ZOO IN-HOUSE TRAINING**

For a better understanding of the functions of Zoos, the new recruits of the Forest Department, probationary officer trainees of line Departments, professionals, Forest department officials & staff from Tamil Nadu and other states including animal keepers and other zoo staff are given this training. Attendees get trained based on their line of work related to the zoo, ex-situ conservation, enrichments, animal care and other allied topics.

Designation of the trainees	Date	No of trainees	Batches
Forest Guard- Tamil Nadu Forest	7.7.2019 to	Male 391	12
Department	21.9.2019	Female 171	
Forest Range Officer- Karnataka Forest	21.9.2019	45	1
Department			
Civil Judge – Tamil Nadu Judicial Academy	July to	213	4
	November		
Forest Range officer- Tamil Nadu Forest	1.10.2019	43	1
Department			
International trainees from Wildlife	13.1.2020	25	1
Institute Of India			
Eco club teachers	6.3.2020	200	1



Central academy of Forests – Assam Forest Range officer trainees





International trainees from Wildlife institute of India



Civil Judge Trainees from TNJA



### SPECIAL THEMED WORKSHOP





Workshops on special themes focusing on wildlife and conservation of natural resources are organized regularly. Workshops are mentored by the professional field experts. Workshops on Birds and Bird identification was conducted on April 26th, 2019. Participants were taught to identify the birds.

### **ZOO CLUB**

Zoo club encourages voluntary service activities by school & college students, corporates and

employees to take part in activities like cleaning the campus, assisting the Zoo visitors, screening for plastics. Volunteers regularly render their service during the weekends and holidays. Cognizant outreach team was involved in planting hedge plants at identified animal enclosures. More than 8000 students from various colleges, schools, NSS, CSS, SPC participated in zoo club activities during the year 2019







Anna University Rotary club students – Plastic screening

CTS OUTREACH team volunteer for hedge plantation

# **GLIMPSE OF ZOO AMBASSADOR PROGRAMME 2019-2020**



### CELEBRATION OF IMPORTANT FOREST DAYS



120 ft cloth banner write up campaign on International day of biological diversity



Native tree sapling distribution along with Rana group of companies on World Environment Day



Over 2000 + Visitors join World Ocean Day campaign



Zoo Staff yoga meet on International Yoga Day



Over 150 Government school students joined the International Tiger Day awareness programme



Painting and Oratorical competition conducted to commemorate World Lion & Elephant Day



Slogan writing , Quiz , content writing , photography contest was conducted on World Rhino day. The Winners were awarded with exciting prizes.



Hon'ble Forest Minister appreciated the winners of the wildlife week contest during the wildlife week valedictory function @GNP, Chennai



Poster making contest was conducted on International day of climate action. 250 students from 20+ schools participated. The Winners were awarded with prizes.



Special documentary on wetland ecosystem was screened at Zooschool auditorium and an exclusive awareness talk session was conducted for school children on World Wetland day



Poster Making contest Prize distribution



Swachh bharat awareness Campaign

### IMPORTANT EVENTS & HAPPENINGS

### Naming of Lion & Tiger cub by Hon'ble Chief Minister



Hon'ble Chief Minister of Tamilnadu, Thiru. K. Edappadi Palaniswamy who is also the Chairperson of the Zoo Authority of Tamilnadu, named 3 lion cubs and 4 tiger cubs which were born in the Zoo. Three lion cubs born to lion 'Siva' and lioness 'Neela' were named as Pradeep, Dhakshana and Niranjana (1

Male and 2 female respectively). Similarly the tiger cubs born to Vijay & Uthra were named Rithvik (male). The tiger cub born from Nagula & Namrutha was named as Yuga, Mithran and Venmathi (1 male and 2 female respectively).





# Inauguration of Rhino enclosure by Hon'ble Chief Minister

After three decades, Arignar Anna Zoological Park got a pair of Great Indian one- horned Rhinoceros through animal exchange programmes. The 4 year old male rhino 'Ramu' was brought from Nehru Zoological Park - Hyderabad. 2 year old 'Rhine' was brought from Sanjay Gandhi Biological Park – Patna. The enriched Rhinoceros enclosure was opened for public display by the Hon'ble Chief Minister of Tamil Nadu on August 10, 201



### **AWARDS & RECOGNITION**



AAZP Team were appreciated by the Hon'ble Forest Minister and Fishery Minister of TamilNadu for carrying out herculean and historic Rhino exchange programme. During the Wildlife week valedictory celebration on Oct 8th, 2019 @ Guindy National Park.



Vandalur Zoo's silent Wildrun conducted on October 5th 2019 was recorded in Asian book of records as the largest and first run in the Zoo with the record of 1029 maximum numbers of participants



Two female Animal keepers of our Zoo who take care of Nile Hippopotamus and nocturnal animals were recognized with 'Women Achievers Award' by the Rotary Club Chennai.



### SEASONAL SPECIAL ARRANGEMENT FOR ANIMALS







Usually the animals are under severe stress during the summers. In order to improve their comfort level, heat relief measures were undertaken.

- ❖ All deer enclosures were provided with new thatched sheds.
- ❖ All elephants in the zoo were given shower and allowed to wallow twice every day to provide relief from heat.
- Spraying of water was arranged in enclosures housing ostrich, terrestrial birds, zebra and giraffe and also in the walk through aviary for birds.
- Serpentarium was provided with mud mounds and mud pots in multiple tiers to ensure differential temperature for facilitating their different physiological functions. Snakes require variable temperatures for digestion, moulting and reproduction.
- Special dietary arrangements were made for primates, bears, elephants and birds to keep them at ease.
- Shade nets, cutting off sunlight were provided at aviaries, ostrich and white tiger enclosures.
- Fluid supplements were also provided as per requirement.







### **ELEPHANT REJUVENTATION CAMP**



Elephants are one of the most intelligent animals. To provide a change from the monotonous feed practices and to cater to their minute behavioral needs, the zoo conducts an annual rejuvenation camp for a period of 48 days. Our zoo houses 2 elephants; these mega herbivores were hand reared.

During the camp, enriched feed, feed supplements, medicated baths and wallowing pools are provided to the elephants to enhance their central and peripheral instinct orientations. These camps are aimed to provide cognition, analysis in new environment and a comprehensive problem solving capacity. This camp was conducted for the two elephant calves housed in Arignar Anna Zoological Park from 08.02.2019 to 27.03.2019.





# RESEARCH WORK CARRIED OUT AND PUBLICATION

### RESEARCH PROJECTS

S.No	Name	Name of College/University	Title/Project	Duration
1	Zoo Veterinary Hospital	Arignar Anna Zoological Park	Clinical Evaluation of Xylazine/ketamine in captive felids	3 years
2	Zoo Veterinary Hospital	Arignar Anna Zoological Park	Hematological and serum biochemical indices of Captive Royal Bengal Tigers	2 years
3	Zoo Veterinary Hospital	Arignar Anna Zoological Park	Captive Cervid & Bovid anesthetic protocol	1 year
4	Zoo Veterinary Hospital	Arignar Anna Zoological Park	Hierarchy dominance establishment in Lion Tailed Macaque	6 months
5	Ruchika lakshmanan	Dept of Wildlife science - TANUVAS	Assessment of behavior and the influence of enrichment on fecal steroids in Captive tiger	1years(2018- 2019)
6	Moulidharan	Dept of Wildlife science - TANUVAS	Effects of environmental enrichment on behavioural welfare and fecal cortisol levels in captive Lion Tailed Macaques	6 months

### INTERNSHIP TRAINING - COLLEGE

S.No	Name	Name of the college/University	Title/Project	Duration
1	2 student 1-Resident	Georgia University	Externship captive clinical therapeutics	7.2.2020
2	9 Students	Oklahoma State University	Projectiles and use of 12.2.3 remote delivery system	
3	11 Students	Washington State University	Projectiles and use of remote delivery system	13.2.2020
4	BVSC, final year students	Madras Veterinary College	Exposure visit on various management protocols, health care, nutrition and neonatal care – 120 Students	11.11.2019

### **ANNUAL REPORT 2019-2020**

5	Internship BVSC students (9 Nos)	TANUVAS	Advance tracking program - 9 Students	29.11.2019
6	Internship BVSC students (480 Nos)	TANUVAS	Wildlife care, Reptile medicine, health assessment of captive wild animals, projectile and dart loading training.	5-day module for a period of 6 months
7	BVSC II year (110Nos)	TANUVAS	Wildlife Nutrition	22.11.2019
8	Dr. Ramkumar 70 Nos	Rajiv Gandhi Institute of Veterinary Education and Research,Puducherry	Exposure of Wildlife Sanctuary/Zoo for Veterinary Science and Animal Husbandry students-70 students	4.12.2019
9	Ph. D internship students 3 Nos	TANUVAS	Zoo clinical medicine	18.12.2019
10	Internship students	Advanced Institute for Wildlife Conservation (Research, Training & Education), Vandalur	Practical approach to wildlife forensic	20.1.2020
10	PG Diploma in Wildlife Disease Management	TANUVAS	Zoo Exposure visit	13.1.2020



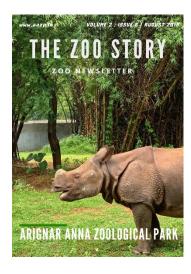




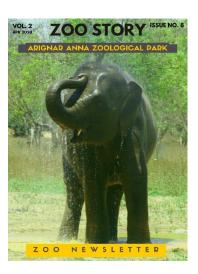


Veterinary internship training at AAZP

### **ZOO PUBLICATION - NEWSLETTER**







### CONSERVATION BREEDING PROGRAMME OF THE ZOO

Arignar Anna Zoological Park is the conservation breeding centre for Nilgiri Langur, Lion Tailed Macaque and Nilgiri tahr. The conservation breeding centre for Lion tailed macaque was established with the support of Central Zoo Authority. It was constructed behind Reptile area as approved in the master (layout) plan.

The conservation breeding programme was started in the year 2002, with 12 (7: 5) Lion tailed macaque. The total population at the end of the financial year 2019-2020 was 24 (5 Male, 14 females and 5 unsexed). In total 51 births were recorded in 18 years.

#### **Lion Tailed Macaque**

The magnificent Lion-tailed macaque is an Old World monkey, named due to its lion-like, long, thin and tufted tail. It is endemic and native exclusively to Western Ghats (India). This adorable primate is one of the most endangered macaque species around the globe. It is a living proof of the amazing diversity of its mountain rainforest habitat. This highly social animal lives in a group of 10 to 20. The dominant male of the group controls the breeding. An omnivorous animal that feeds on wide variety of food these macaques are arboreal and diurnal creatures; they sleep at night in trees (typically, high in the canopy of rainforest). These macaques are territorial and very communicative animals. Overall, their communication system contains as many as 17 vocalizations. They are polygynous. The infant is cared for by its mother for a long period of time as it grows and learns various skills. Nursing period lasts for about one year. The species is endangered due to its habitat destruction. Arignar Anna Zoological Park is a coordinating zoo in conservation breeding of Lion Tailed Macaque. The Zoo has two half exhibit

dry moated enclosures away from visitors area to promote natural behavior and is fit for reintroduction programme. The Zoo has 24 animals in its collection.

ACCOUNT OF CAPTIVE BREEDING AT AAZP (2019-2020)			
Indian Gaur	5		
Bengal Tiger	2		
Lion tailed Macaque	6		
Nilgiri Langur	4		
Barking Deer	1		
Grey wolf	7		
Swamp deer	3		
Nilgai	4		
Ostrich	22		
Peafowl	5		
Painted stork	20		
Night Heron	70		
Gharial	9		



### CAPTIVE BREEDING

The ever increasing threats to natural ecosystems has caused several habitats to be degraded and thereby species to become severely threatened with extinction. Faced with this extinction crisis, the ex-situ conservation of threatened species is a viable alternative to conserve these species. Zoos today function not only as venues for exhibition of animals and education of the visiting public but also as centers of conservation and research. The Captive Breeding programme has been

instrumental in developing capacities of personnel involved in captive management. Several training programs have been organized with the support of the Central Zoo Authority.





### ANIMAL ACQUISITION/TRANSFER/EXCHANGE

Arignar Anna Zoological Park, Vandalur has a well-established animal collection plan. The Zoo has viable collections of endemic and endangered species representing India and other countries. This has been made possible mostly by means of exchange programmes. The Park has the distinction of housing one of the largest animal as well as species collections in the country.

For any exchange programme to succeed the animal should be behaviourally compatible with the new environment and should also successfully breed. Inbreeding among zoo population is an important problem, which results in depression of genetic vigor. Hence new blood lines are required to be regularly introduced to maintain the genetic vigor of the species. Animal exchange is a standard practice wherein the surplus and single sexed animals are exchanged between the zoos to balance their sex ratios as well as to sustain the population in the Zoo. Considering the above, animal exchange programmes were carried out at Arignar Anna Zoological Park with other Indian Zoos.

#### ANIMAL EXCHANGE PROGRAMME DURING THE PERIOD 2019-2020





Deputy Director Sudha Raman IFS & AAZP team visited Patna Zoo before the Animal exchange Programme





Screening the animal health during travel

Rhino exchange Programme with Hyderabad Zoo

# ANIMAL ACQUISITION THROUGH EXCHANGE

# **MAMMALS**

Sl. No	Name of the species	Scientific Name	Date	Sex	Place
1	Indian one horned Rhinoceros	Rhinoceros unicornis	02.08.2019	1:0	Nehru Zoological Park, Hyderabad
2	Indian one horned Rhinoceros	Rhinoceros unicornis	05.09.2019	0:1	Sanjai Gandhi Biological Park, Patna
3	Mouse deer	Mousehila indica	02.08.2019	2:2	Nehru Zoological Park, Hyderabad
4	Hog deer	Axis porcinus	00.08.2019	1:2	Thiruvananthapuram Zoo,Kerala
5	Jungle cat	Felis chaus	05.09.2019	0:1	Sanjai Gandhi Biological Park, Patna

# **BIRDS**

Sl.	Name of the species	Scientific Name	Date	Sex	Place
No					
1	Blue and golden macaw	Ara ararauna	08.10.2018	0:0:1	DRI
2	Eclectics' parrot	Electus roratus	08.10.2018	0:0:2	DRI
3	Rhea	Rhea americana	00.08.2019	2:2	Thiruvananthapuram Zoo,Kerala
4	Grey Goose	Anser anser	00.06.2019	0:0:16	Donated by Public

### **REPTILES**

Sl. No	Name of the species	Scientific Name	Date	Sex	Place
1	Red Iguana	Iguana iguana	08.10.2018	0:0:2	DRI
2	King cobra	Ophiophagus hanna	27.06.2019	1:1	Pilicula Biological Park, Mangalore
3	Whitaker's boa	Eryx whitakeri	27.06.2019	2:2	Pilicula Biological Park, Mangalore
4	Gharial	Gavialis gangeticus	05.09.2019	1:2	Sanjai Gandhi Biological Park ,Patna

# ANIMAL DISPOSAL THROUGH EXCHANGE

### **MAMMALS**

Sl. No	Name of the species	Scientific Name	Date	Sex	Place
1	Indian Gaur	Bos gaurus	25.06.2019	1:1	Pilicula Biological Park, Mangalur
2	Lion tailed macaque	Macaca silenus	05.08.2019	1:0	Nehru Zoological Park, Hyderabad
3	Nilgiri langur	Semnopithecus johnii	05.08.2019	1:1	Nehru Zoological Park, Hyderabad
4	Grey Wolf	Canis lupus	05.08.2019	1:1	Nehru Zoological Park, Hyderabad
5	Hippopotamus	Hippopotamus amphibious	05.08.2019	1:1	Nehru Zoological Park, Hyderabad
6	Lion tailed macaque	Macaca silenus	29.08.2019	1:1	Sanjay Gandhi Biological Park, Patna
7	Grey Wolf	Canis lupus	29.08.2019	1:1	Sanjay Gandhi Biological Park, Patna
8	Tiger	Panthera tigris tigris	29.08.2019	1:1	Sanjay Gandhi Biological Park, Patna

### **BIRDS**

Sl. No	Name of the species	Scientific Name	Date	Sex	Place
1	Painted Stork	Mycteria leucocephala	25.06.2019	5:5	Pilicula Biological Park, Mangalur
2	Ostrich	Strutheo camelus	00.08.2019	1:1	Thiruvananthapuram Zoo,Kerala
3	Painted stork	Mycteria leucocephala	00.08.2019	5:5	Thiruvananthapuram Zoo,Kerala
4	Painted stork	Mycteria leucocephala	29.08.2019	5:5	Sanjay Gandhi Biological Park, Patna
5	Ostrich	Strutheo camelus	29.08.2019	1:1	Sanjay Gandhi Biological Park, Patna
6	White peafowl	Pavo cristatus	29.08.2019	1:1	Sanjay Gandhi Biological Park, Patna

# **REPTILES**

Sl. No	Name of the species	Scientific Name	Date	Sex	Place
1	Reticulated Python	Python reticulatus	25.06.2019	1:1	Pilicula Biological Park, Mangalur
2	Reticulated python	Python reticulates	29.08.2019	1:1	Sanjay Gandhi Biological Park,Patna

### RESCUE AND RAHABILITATION OF WILD ANIMALS



Extremely sick animals, orphan and neonatal animals are taken into in-patient animal ward. These animals are attended to throughout the day; their treatment, feeding and nutrition is taken care of at zoo veterinary hospital. After the completion of treatment protocols and when the animal is fit to be released, they are sent back their respective enclosures. Rescued animals

from regions around the zoo come to the Zoo Veterinary Hospital for emergency treatments. Animals are taken into in-patient ward for further treatment after obtaining proper receipts, letters from concerned ranges providing information about the site and time of rescue, animal's condition during the rescue operation.

Rescued animals are mainly from Guindy National Park, Tambaram range, Chengalpet range, Sriperumbudur range and Thiruporur range. The commonly rescued animals are bonnet macaques, spotted deers, black bucks, parakeets. After successful recovery from the ailment, these animals are handed over back to the respective ranges from where they were received. Confiscated animals from the Headquarters and Wildlife Crime Control Bureau are received and maintained in the hospital transit animal facilities till the time they are released back. Around 660 rescued and confiscated animals were received from other outside ranges and other agencies during 2019 -20.

The possession of wildlife or wildlife related article is an offence as per Wildlife Protection Act, 1972. Thus Wildlife trade is illegal and stringent actions are being taken against the offenders. Joint endeavours of Directorate of Revenue Intelligence, Wildlife Crime control bureau, Advance Institute for Wildlife Conservation and Arignar Anna Zoological Park have rescued many indigenous and exotic animals from illegal wildlife trade. Star tortoises, Assam roof turtles, exotic birds, mammals and reptiles were confiscated and rehabilitated in AAZP.

Arignar Anna Zoological Park plays a vital role in rehabilitation of rescued wildlife. Rescued animals were given a proper shelter and feed to simulate their natural habitat and feeding pattern. Proper space and enrichments were given to exotic animals which cannot be rehabilitated in Indian forests.



### **Treatment Record – Rescue and Inpatient**

S.No	Month	Mammals	Birds	Reptiles
1	Apr-19	31	3	1
2	May -19	16	6	2
3	June -19	22	3	4
4	July-19	44	5	2
5	Aug-19	54	10	22
6	Sep -19	25	0	13
7	Oct-19	25	5	45
8	Nov-19	29	2	0
9	Dec-19	48	10	2
10	Jan-20	20	20	45
11	Feb-20	22	1	20
12	Mar-20	41	31	9
	Total	377	96	165







Rescued tortoises being evaluated, Biometrics being done. This is the phase two of the rehabilitation process in which their weight gain and Single Carapace length is taken to determine growth

The zoo veterinary hospital ZVH, AAZP specializes in handling various species with varying needs and specific physiological demands. During the year 2019 -2020, a total of 660 animals were rescued, comprising 19 individual mammals which includes Spotted Deer, Black buck, Slender Loris, Jungle Cat, Porcupine, Bonnet macaque. 44 birds were received which belongs to species of Indian peacock, Black kite, Barn owl, Eagle owl, Shikra, Rose ringed parakeet, cockatiel, Grey Pelican, Swamp hen and 597 numbers of Reptiles which includes Star tortoise, Red



eared slider, Rat snake, Russels viper. The animals were stabilized and monitored. It is noteworthy to mention that the ZVH has a Neonatal Intensive Care Unit (NICU) that enhances the rate of success in rehabilitation. Round the clock care, nutrition and adequate enrichment cater to better convalescence.

### STANDARDIZING IMMOBILIZATION PROTOCOL FOR CHELONIANS

Zoo Veterinary Hospital also specializes in treating reptile patients. Certain critical parameters such as preferred optimal temperature zone (POTZ), renal portal system and cold blooded nature of these animals have always posed challenges. Star tortoises have been chemically immobilized using ketamine and this protocol has been standardized. Most commonly, the dissociative anesthetic agent ketamine HCl is used in reptiles to produce immobilization and induce anesthesia. Ketamine has a wide range of safety in most reptiles and can be administered intramuscularly. Allometric scaling is vital in estimating their body weights. Although a renal portal system has been identified in chelonians, the pharmacokinetics of injectable agents has been shown to be minimally altered if injected into the caudal half of the body. Using radio-labeled injectable anesthestic agents and monitoring of pharmacokinetics may give conclusive results.







### **ULTRASOUND SCANNING OF A WHITE TIGER**

Ultra-Sonographic measurements of kidney size are useful in the discrete diagnosis of kidney diseases in animals. In tigers, there is a lack of standardized reference regarding the ultrasonography methods used to measure the kidney size of the tiger. Efforts to standardize this protocol have been initiated by Zoo Veterinarians at AAZP. Routine scans are carried out to understand the renal morphology and to enhance diagnostic attributes in conscious tigers.



#### PERIODIC HEALTH EVALUATION AND BIOMETRICS

Periodic Health evaluation and Biometrics of animals are done by the Veterinarians. This procedure helps in obtaining baseline values of growth rate, which includes factors like Inter canine length, tail length, foot circumference etc. These references act as standards which help to estimate age in some animals of unknown age. The zoo acts as a facilitation center and a database bank. AAZP became yet another pioneer in this field, contributing to enhanced conservation its vision of conservation education.





### **ELEPHANT FOOTPAD TRIMMING**



Elephants are the largest living terrestrial mammals. Their feet carry the huge body mass and the wear and tear of the foot pad maintains their functional form in in free ranging animals. In case of captive elephants foot care is an important measure, which includes trimming of foot pad. In spite of the special care given for foot care, foot problems are not uncommon in captive elephants. The thickness of elephant foot pad varies from 5-8mm and increased thickening, uneven and irregular wear and tear of foot pad might predispose the elephants to a variety of foot problems,

which in turn could affect the quality of life of elephants. Our captive elephants are subjected to frequent foot examination and care.

### **EMERGENCY AND CRITICAL CARE UNIT**

The Zoo veterinary hospital, AAZP receives a number of cases of animals that are critically ill or injured. Our dedicated team led by Veterinarians, which includes veterinary technicians and staff, work together to deliver the highest possible standard of veterinary care to ill or injured animals. The Service excels in managing patients helping them successfully recover from major surgery, illness, or trauma as well as those patients requiring positive pressure ventilation, thermoregulation or other specialized care. These patients are hospitalized in a well-equipped intensive care unit, and their care is taken by experts.









Emergency Veterinary care

### **ABSCESS EXCISION IN A RAT SNAKE**

There are more than 40 species of reptiles including various kinds of snakes housed at Zoological Reptile Park. husbandry still under developed and not completely understood. reptiles Hence maintained in captivity get many ailments, among which abscessation is not uncommon. A rat snake with swelling at two sites was brought to veterinary hospital -one of a size



Reptile surgery and under gas anesthesia

of around 2 centimeters in diameter and the other one of around 0.5 centimeter, at the second, one third of the body segment right laterally with the smaller one located 4 centimeters caudal to the other one. On needle aspiration and cytology analysis of the mass, it was diagnosed to be abscess. Unlike in mammals, abscess of reptiles will be encapsulated because of which surgical excision such as simple draining of abscess will not cure the condition completely. Hence, a decision to go for surgical excision was taken.



The snake weighed 1.6 kg, with length of 210 centimeters and condition of body being fair to good. After physical evaluation of the animal, the entire second third segment of the snake was scrubbed on physical restraint and moved to the operation theatre. Animal was premeditated with meloxicam, induced with ketamine and incubated soon after the abolishment of righting reflex. Further the anesthesia was maintained by inhalation technique using Isoflurane, under continuous monitoring and mechanical ventilation. Then after preparing the site surgically, skin incision was made with a care not to incise the abscess capsule. Multiple capsulated

abscesses were removed from cranial site and closed with opposition pattern. Similarly at the caudal one where one encapsulated abscess was present was also excised and closed. Isoflurane was weaned few minutes before the end of surgery and animal was flushed with oxygen 10 minutes and further incubated until recovery. Soon on recovery, the snake was transferred to a separate case and maintained. Snake is recovering well.

# RECONSTRUCTION OF A DEEP LACERATED WOUND OF FORELIMB AND ITS FUNCTIONAL RECOVERY IN A NILGIRI LANGUR

A male Nilgiri langur was reported to be with bleeding injury of left arm to the zoo veterinarians, due to in fight. Infighting is commonly observed in animals that live in group, including primates, especially when a new male attempts to establish a hierarchical dominance. Soon the animal was chemically immobilized and transferred to the Zoo Veterinary Hospital immediately. On clinical examination it was found that the animal had a third grade deep lacerated injury exposing tendon with deep and complete transection of biceps brachia muscle. The victim was stabilized immediately and a reconstructive surgery was performed immediately under general anesthesia in order to regain the function of the hand. The wound debrided surgically, individual muscle were



anatomically opposed, sub-cutaneous and intradermal sutures were applied, which was further reinforced with skin staples. The animal began using the injured arm from 2nd post-operative day and was completely recovered with full functionality from 10th post-operative day. The skin staples were removed on 12th post-operative day.







### INTERNAL FIXATION OF FRACTURE IN BONNET MACAQUE

A female infant bonnet macaque of age around 3 months was brought to zoo veterinary hospital with immense pain and swelling on right hind limb. On physical examination, crepitus was felt in the mid shaft of the femur and it was diagnosed as complete short oblique overriding fracture of right femur and the same was confirmed in radiography. Under general anesthesia, intramedullary pinning with cerclage wiring was done. As the patient is an infant anesthesia dose was titrated very carefully and special care was given during recovery to take care of post-anesthesia hypothermia. The animal regained the locomotory functions on the 7th post-operative day itself and recovered uneventfully.



### **ULTRA-VIOLET IRRADIATION CHAMBER FOR MEAT DISINFECTION**



UV-C rays inactivate all microorganisms, including viruses on the surface of the meat, rendering them safe without the problem of residual odour or taste, that are side effects of surface disinfection with chlorine or potassium permanganate. The objective of the exercise was to put in place a facility to rapidly surface sterilize the meat procured from vendors as feed for carnivores, to ensure that pathogens acquired during processing and transit

of meat were inactivated and safe meat is fed to the animals. At the juncture of COVID-19 outbreak, this protocol was implemented immediately with the suggestions of experts from TANUVAS, and all meat for carnivores are UV-chamber treated before they are fed.

### SLOTH BEAR- ANESTHETIC PROTOCOL

It is important to periodically evaluate the health of animals and sometimes it is challenging. Research on health and diseases on captive bear species is in its infancy. Understanding the health related parameters and evidence of diseases in captive-reared bears will thus significantly contribute towards effective management of this species. Hematological and serum biochemical indices constitute to health assessment. However, for this assessment, immobilization of this species is warranted.



A sloth bear in transit after immobilization

### **IMMOBILIZATION TALES – "GRACEFUL GIANTS"**

Many general anesthetic techniques and agents have been used on Gaur. Techniques and agents vary with availability. The route of most general anesthetics is intramuscular, because of the large size and their potentially aggressive nature, safety measures were taken in immobilizing these gentle giants. All the personnel were briefed on how the event will take place, and what contingencies may go into effect if the stated plan did not go as expected. The environment was considered and ideally, the animal was confined to the smallest and quietest enclosure that will allow manipulation of the animal once it has been anesthetized. Placing the animals in the sternal recumbence was considered vital for its survival. Common sites for venous access included the jugular, auricular veins. A new combination of drugs namely Xylazine and Midazolam was used which resulted in smooth induction, essential anesthesia and safe recovery.









Animal transport using AAZP standardized anesthetic protocol

### **PROPHYLAXIS**





The overall health management of the zoo is based on the principle "Prevention is better than cure". The vaccination regime varies according to the species concerned and age. Vaccination is prophylaxis measure where, injection of a killed/inactivated microbe is done in order to stimulate the immune system against the microbe, thereby preventing disease. Vaccinations, or immunizations, work by stimulating the immune system, the natural disease-fighting system of the body. The healthy immune system is able to recognize invading bacteria and viruses and produce substances (antibodies) to destroy or disable them. Immunizations prepare the immune system to ward off a disease. To immunize against viral diseases, the virus used in the vaccine has been weakened or killed. To immunize against bacterial diseases, it is generally possible to use a small portion of the killed/ inactivated microbe/ deactivated toxin produced by them, to stimulate the formation of antibodies against the respective antigen. In addition to the initial immunization process, it has been found that the effectiveness of immunizations can be improved by periodic repeat injections or "boosters."

### **ADVANCED VETERINARY CARE FACILITIES AT AAZP**



# ANNUAL INVENTORY OF ANIMALS

		ABSTRACT			
	Class	Stock as on			
		01.04.2019		31	.03.2019
		Sp. Nos	Ani.	Sp.	Ani. Nos
			Nos	Nos	
1	Mammals	46	475	47	471
2	Birds	90	1754	88	1820
3	Reptiles	35	415	37	413
	Total	171	2644	172	2704

SI.	Name of the species	Stoc	k as or	n 01.04	2019					Dur	ing tl	he p	erioc	i				Stoc	k as oı	1 31.03	3.2020
No.						I	Birth	s	Acq	uisit	ions	Di	ispos	als	D	eath	ıs				
		M	F	U	Т	M	F	U	M	F	U	M	F	U	М	F	U	M	F	U	Т
					SCHI	DUL	E I a	nd I	I												
	BIRDS																				
1	PEAFOWL (Pavo cristatus)	10	16	7	33			5							2	2		8	14	12	34
2	SPOONBILL WHITE (Platalea leucorodia)	0	0	4	4													0	0	4	4
3	EASTERN WHITE STORK (Ciconia ciconia)	0	0	1	1													0	0	1	1
4	GREAT PIED HORNBILL (Buceros bicornis)	0	1	0	1											1		0	0	0	0
5	SEA EAGLE WHITE BELLIED (Haliaeetus lecogaster)	0	1	0	1													0	1	0	1
	TOTAL SCH I & II BIRDS	10	18	12	40	0	0	5	0	0	0	0	0	0	2	3	0	8	15	17	40
	T		Т																		
	MAMMALS																				
1	ASS WILD INDIAN GHORKHAR (Equus heminous khur)	1	3	0	4											1		1	2	0	3
2	BEAR HIMALAYAN BLACK (Selenarctos thibetanus)	1	1	0	2													1	1	0	2
3	BEAR SLOTH (Melursus ursinus)	1	1	0	2													1	1	0	2
4	BLACK BUCK KRISHNA MRIG(Antilope cervicapra)	8	9	2	19			1							4	1		4	8	3	15
5	CAT JUNGLE (Felis chaus)	2	1	0	3					1								2	2	0	4

6	SWAMP DEER (Cervus duvauceli)	6	6	0	12			3							1			5	6	3	14
7	MOUSE DEER ( Mousehila indica)	1	2	0	3				2	2					1	1		2	3	0	5
8	CIVET CAT SMALL INDIAN (Viverricula indica)	1	0	0	1													1	0	0	1
9	LORIS SLENDER (Loris tardigradus)	1	1	0	2													1	1	0	2
10	PALM CIVET CAT (Paradoxure hemaphroditus)	2	2	4	8										1			1	2	4	7
11	DOG WILD (DHOLE) (Cuon alpinus)	1	1	0	2			5									5	1	1	0	2
12	INDIAN ONE HORNED RHINOCEROS(Rhinoceros unicomis)	0	0	0	0				1	1								1	1	0	2
13	ELEPHANT INDIAN (Elephas maximus)	0	2	0	2													0	2	0	2
14	GAUR INDIAN (Bos gaurus)	11	11	0	22	2	1	2				1	1		1			11	11	2	24
15	JACKAL (Canis aureus)	4	2	0	6													4	2	0	6
16	DECCAN HANUMAN LANGUR (Semnopithecus entellus )	2	1	0	3										1			1	1	0	2
17	GREY LANGUR (Semnopithecus thersites)	1	1	1	3													1	1	1	3
18	LANGUR NILGIRI (Semnopithecus johni)	8	6	4	18			2				1	1					7	5	6	18
19	LEOPARD / PANTHER (Panthera pardus)	4	1	0	5													4	1	0	5
20	MACAQUE BONNET (Macaca radiata )	9	13	2	24										1			8	13	2	23
21	MACAQUE LION TAILED (Macaca silenus)	7	10	4	21			6				2	1		1			4	9	10	23
22	MACAQUE RHESUS (Macaca mulatta)	22	18	0	40													22	18	0	40
23	OTTER COMMON (Lutra lutra)	1	1	0	2													1	1	0	2
24	PORCUPINE BENGAL (Atherucus mecrourus assamensis)	1	2	5	8													1	2	5	8
25	MALABAR GIANT SQUIRREL (Ratufa indica)	0	1	0	1													0	1	0	1
26	GRIZZLED GIANT SQUIRREL ( Ratufa macroura)	1	0	0	1													1	0	0	1
27	INDIAN WOLF (Canis lupus)	10	4	0	14	4	3					2	2					12	5	0	17
28	TIGER BENGAL WHITE (Panthera tigris tigris)	4	8	0	12										1			3	8	0	11
29	TIGER BENGAL (Panthera tigris tigris)	6	10	0	16	1	1					1	1					6	10	0	16
	TOTAL SCH I & II MAMMALS	116	118	22	256	7	5	19	3	4	0	7	6	0	12	3	5	107	118	36	261

	REPTILES																				
1	KING COBRA (Ophiophagus hanna)	0	0	0	0				2	2								2	2	0	4
2	COBRA INDIAN (Naja naja)	0	0	14	14													0	0	14	14
3	CROCODILE - GHARIAL (Gavialis gangeticus)	2	2	2	6			9	1	2							7	3	4	4	11
4	CROCODILE MARSH (MUGGER) (Crocodylus palustris )	42	60	15	117										1	1		41	59	15	115
5	CROCODILE SALT WATER (Crocodylus porosus)	2	1	0	3													2	1	0	3
6	MONITOR LIZARD WATER (Varanus salvator)	1	1	0	2													1	1	0	2
7	MONITOR LIZARD / COMMON INDIAN (Varanus bengalensis)	2	7	0	9													2	7	0	9
8	TURTLE POND (Geoclemys trijuga)	0	0	6	6													0	0	6	6
9	PYTHON INDIAN ROCK (Python molurus molurus)	2	1	40	43										1	1		1	0	40	41
	PYTHON RETICULATED (Python reticulatus)	3	7	18	28							2	2					1	5	18	24
	SNAKE KEELBACK CHECKERED (Xeno chrophis piscator)	0	0	9	9													0	0	9	9
12	SNAKE RAT / DHAMAN (Ptyas mucosus)	0	0	24	24													0	0	24	24
13	VIPER RUSSEL'S (Vipem ruselli)	0	0	3	3													0	0	3	3
14	TRICARINATE HILL TURTLE (Melanochelys tricarinata )	0	0	2	2													0	0	2	2
15	W HITAKER'S BOA(Eryx whitakeri)	0	0	0	0				2	2								2	2	0	4
16	ASSAM ROOF TURTLE (Pangshura sylhetensis)	0	0	4	4													0	0	4	4
17	CHAMELEON (Chameleon zylanicus)	1	1	1	3													1	1	1	3
	TOTAL SCH I & II REPTILES	55	80	138	273	0	0	9	3	4	0	2	2	0	2	2	7	54	80	140	274
	TOTAL SCHEDULE I and II	181	216	172	569	7	5	33	6	8	0	9	8	0	16	8	12	169	213	193	575
	SCHEDULE III, IV and EXOTICS																				
	BIRDS																				
1	BABBLER YELLOW BILLED (Turdodies caudatus)	0	0	17	17													0	0	17	17
	BULBUL RED VENTED (Pycnonotus cafer)	0	0	17	17													0	0	17	17
3	BULBUL RED WHISKERED (Pycnonotus jocosus)	0	0	13	13													0	0	13	13

4	BULBUL WHITE BROWED	0	0	4	4	l	1				ı	l		1	l	I	0	0	4	4
	(Pycnonotus luteolus)	U	U	4	4												U	U	4	4
	CASSOW ARY (Casuarius unappendiculatus)	1	0	0	1												1	0	0	1
-	COCKATIEL GREY (Nymphicus hollandicus)	9	1	7	17									1			8	1	7	16
7	COCKATIEL WHITE (Nymphicus hollandicus)	0	0	16	16									2			-2	0	16	14
	COCKATOO WHITE CRESTED (Cacatua alba)	0	0	1	1												0	0	1	1
9	SULPHUR CRESTED COCKATOO(Cacatua gaterita)	1	1	1	3									1			0	1	1	2
10	CRANE DEMOISELLE (Anthropoides virgo)	1	0	0	1												1	0	0	1
11	CRANE SARUS (Grus antigone)	1	1	0	2										1		1	0	0	1
12	DOVE COLLARED RED (Streptopelia tranquebarica.)	1	2	2	5												1	2	2	5
13	DOVE SPOTTED (Streptopelia chinensis.)	0	0	19	19									1			-1	0	19	18
	DUCK SPOT-BILLED (Anas poecilorhyncha)	0	0	1	1												0	0	1	1
	EGRET CATTLE (Bubulcus ibis)	0	0	4	4												0	0	4	4
	EGRET LITTLE (Egretta garzetta)	0	0	112	112											2	0	0	110	110
	OSTRICH (Strutheo camelus)	4	5	7	16			22				2	2	1	1	1	1	2	28	31
18	RHEA(Rhea americana)	0	1	0	1				2	2					1		2	2	0	4
19	EMU (Dromaius novaehollandiae)	2	2	0	4												2	2	0	4
	FLAMINGO GREATER (Phoenico pterus antiguarum)	0	0	1	1												0	0	1	1
21	FLAMINGO LESSER (Phoenicopterus minor)	0	0	2	2												0	0	2	2
	GOOSE (Anser anser)	0	0	3	3						16						0	0	19	19
23	BAR HEADED GOOSE (Anser indicus)	0	0	3	3											2	0	0	1	1
	HERON EASTERN GREY (Ardea cinerea )	0	0	38	38												0	0	38	38
	HERON NIGHT (Nycticorax nycticorax)	0	0	530	530			70									0	0	600	600
26	HERON POND (Ardeola grayii)	0	0	3	3												0	0	3	3
27	IBIS WHITE (Threskiornis aethiopica)	0	0	26	26												0	0	26	26
	KITE BRAHMINY (Haliastur indus)	0	0	1	1												0	0	1	1
	INDIAN COMMON KITE (Milvus migrans)	0	0	25	25									2		1	-2	0	24	22
30	MACAW RED & GREEN (Ara chloroptera)	0	0	0	0												0	0	0	0
	MUNIA BLACK HEADED	0	0	27	27										1		0	-1	27	26
	(Lonchura malabarica )																			ı

33	OWL BARN (Tyto alba)	0	0	2	2										0	0	2	2
34	OWL INDIAN EAGLE (Bubo	0	0	1	1										0	0	1	1
0.5	bengalensis)	4.0	4.0		25							4		4		4.0	4.	22
	PARAKEET ALEXANDRINE (Psittacula eupatria)	10	10	15	35							1		1	9	10	14	33
36	PARAKEET ROSE RINGED (Psittacula krameri)	23	34	123	180								1		23	33	123	179
37	PARAKEET ROSE RINGED (MUTANT)(Psittacula krameri)	7	3	16	26								1		7	2	16	25
38	REDBREASTED PARAKEET(Psittacula alexandri)	0	0	0	0										0	0	0	0
39	PARAKEET MALABAR (Psittacula columboides)	0	0	0	0										0	0	0	0
40	PARAKEET BLOSSOM HEADED (Psittacula cyanocephala)	2	2	4	8										2	2	4	8
41	PARROT AFRICAN GREY (Psitacus erithacus)	1	1	2	4										1	1	2	4
42	PARROT ECLECTUS (Electus roratus)	2	1	0	3				2						2	1	2	5
43	ROSELLA EASTERN (Platycerus exinus)	1	1	0	2										1	1	0	2
44	PARTRIDGE GREY (Francolinus pondicerianus)	0	0	3	3										0	0	3	3
45	PEAFOWL WHITE (Pavo cristatus)	10	17	0	27		2			1	1		1	1	9	15	1	25
46	PELICAN GREY (Pelecanus philippensis)	0	0	26	26										0	0	26	26
47	PELICAN ROSY / WHITE (Pelecanus onocrotalus)	0	0	5	5										0	0	5	5
48	REDJUNGLE FOWL (Gallus gallus murghi)	2	1	0	3							2			0	1	0	1
49	GREY JUNGLE FOWL (gallus gallus sonneritti)	1	1	0	2										1	1	0	2
50	RING NECKED PHEASANT(Phasianus colchicus)	1	0	0	1										1	0	0	1
51	LADY AMHERST PHEASANT(Chrysolophus amherstiae)	2	3	0	5								1		2	2	0	4
52	PHEASANT GOLDEN (Chrysololphus pictus)	1	2	0	3										1	2	0	3
53	PHESANT SILVER (Lophura nycthemera)	3	4	0	7								1		3	3	0	6
54	SEA GULL BROWN HEADED (Larus brunnicephalus)	0	0	1	1										0	0	1	1
55	SHIKRA (Accipiter badius badius)	0	0	1	1										0	0	1	1
56	STORK ADJUTANT LESSER (Leptoptilos javanicus)	1	0	1	2										1	0	1	2
57	STORK ADJUTANT GREATER (Leptoptilos dubius)	1	0	0	1										1	0	0	1
58	STORK PAINTED (Mycteria leucocephala)	20	20	123	163		20			15	15				5	5	143	153
59	VULTURE WHITE BACKED BENGAL(Gyps bengalensis)	0	1	0	1										0	1	0	1
60	KOEL (Eudynamys scolopacea)	1	1	0	2										1	1	0	2
61	BLUE ROCK PIGEON (Columbia livia)	0	0	34	34										0	0	34	34

62	PEACH FACED LOVE BIRD (Agapomis roseicollis)	1	2	0	3													1	2	0	3
63	FISCHERS LOVE BIRD (Agapornis fischeri)	1	1	0	2													1	1	0	2
64	ZEBRA FINCH(Teniopygia guttata)	10	10	0	20													10	10	0	20
65	GREATER COUCAL(Centropus sinensis)	0	0	1	1													0	0	1	1
66	BLUE AND GOLDEN MACAW (Am ararauna)	1	1	5	7						1							1	1	6	8
67	PADDYFIELD PIPIT(Anthus rufulus)	0	0	10	10													0	0	10	10
68	BLACK SWAN (Cygnus atratus)	3	2	0	5											1		3	1	0	4
69	SERPENT EAGLE (Spilornis cheela)	0	0	2	2													0	0	2	2
70	WHITE PIGEON (Columba livia)	0	0	5	5													0	0	5	5
71	WHITE DOVE (Streptopelia decaocto )	0	0	0	0													0	0	0	0
72	OPENBILL STORK(Anastomus oscitans)	0	2	1	3													0	2	1	3
73	PEARLY CONURE(Pyrrhura lepida)	1	1	0	2													1	1	0	2
74	MAROON BELIED CONURE(Pyrrhura frontalis)	1	1	0	2													1	1	0	2
75	GREEN CHEEK CONURE PINAPPLE(Pyrthura molinae)	1	1	0	2										1	1		0	0	0	0
76	JENDAY CONURE (Aratinga jandaya)	0	1	0	1													0	1	0	1
77	GREEN CHEEK CONURE CINNOMON(Pyrrhura molinae)	1	1	0	2													1	1	0	2
78	WHITE BROWED WAGTAIL (Motacilla maderaspatensis)	0	0	4	4													0	0	4	4
79	MONK PARAKEET (Myiopsitta onachus)	2	1	0	3													2	1	0	3
80	GLOSSY IBIS(Anhinga melanogaster)	0	0	3	3													0	0	3	3
81	DARTER(Anhinga melanogaster)	0	0	2	2													0	0	2	2
82	CORMORANT LITTLE(Phalacrocorax niger)	0	0	30	30											1		0	-1	30	29
83	DOVE SILVER DIAMOND(Geopelia cuneata)	6	7	3	16										1			5	7	3	15
84	LESSER WHISTLING DUCK (Dendrocygna bicolor)	0	0	1	1													0	0	1	1
85	INDIAN VULTURE(Gyps indicus)	0	0	1	1													0	0	1	1
86	BUDGERIGARS(Melopsittacus undulatus)	6	5	68	79													6	5	68	79
87	RAINBOW LORIKEET (Trichoglossus haematodus)	2	1	0	3										1			1	1	0	2
88	JAVA SPARROW (Lonchura oryzwon)	8	10	0	18										1			7	10	0	17
89	FOREST OW LET (Athene blewitti)	0	0	1	1													0	0	1	1
	SCH III, IV & EXOTIC BIRDS	153	162	1399	1714	0	0	114	2	2	19	18	18	0	15	12	8	122	134	1524	1780
	TOTAL BIRDS	163	180	1411	1754	0	0	119	2	2	19	18	18	0	17	15	8	130	149	1541	1820
	MAMMALS																				
1	BABOON SAVANA (Papio cynocephalus)	1	0	0	1													1	0	0	1
2	CAPUCHIN BROWN	2	2	0	4											1		2	1	0	3
	(Cebus apella )																				

3	CHIMPANZEE	1	1	0	2													1	1	0	2
4	(Pan troglodytes) DEER BARKING MUNTJAC	4	9	0	13			1							1	2		3	7	1	11
1	(Muntiacus muntjak)	-			15			1							1	_		3	,	1	11
5	DEER HOG	3	1	0	4			1	1	2					1			3	3	1	7
	(Axis porcinus)																				
6	DEER SAMBAR	21	46	23	90										6			15	46	23	84
	(Rusa unicolor)																				
7	DEER SPOTTED (CHITAL)	4	23	10	37													4	23	10	37
	(Axis axis)																				
8	GIRAFFE (Giraffa cameleopardalis)	0	1	0	1													0	1	0	1
9	HIPPOPOTAMUS	4	4	0	8		2					1	1			2		3	3	0	6
	(Hippopotamus amphibius )																				
10	HYAENA STRIPED	2	3	0	5			3									3	2	3	0	5
	(Hyaena hyaena)																				
11	JAGUAR	1	0	0	1													1	0	0	1
	(Panthera onca)																				
12	LION HYBRID (Panthera leo)	7	9	0	16											1		7	8	0	15
13	MONGOOSE COMMON INDIAN	1	2	0	3													1	2	0	3
	(Herpestes edwardsii)																				
14	NILGAI / BLUE BULL (Boselaphust tragocamelus)	3	6	0	9		4									2		3	8	0	11
15	HARE BLACK NAPED(Lepus nigricollis)	0	0	1	1													0	0	1	1
16	WILD BOAR	7	9	6	22											1		7	8	6	21
10	(Sus scrofa)	,														-		,			
17	RED NECKED W ALLABY (Macropus	0	1	0	1											1		0	0	0	0
17	rufogrieus)	0	1		1											1					
18	ZEBRA GRANT	0	1	0	1													0	1	0	1
	(Equus burchelli bohemi)																				
	SCH III, IV, EXOTIC MAMMALS	61	118	40	219	0	6	5	1	2	0	1	1	0	8	10	3	53	115	42	210
										6										78	471
	TOTAL MAMMALS	177	236	62	475	7	11	24	4	U	0	8	7	0	20	13	8	160	233		
	TOTAL MAMMALS	177	236	62	475	7	11	24	4	0	0	8	7	0	20	13	8	160	233	Į	
		177	236	62	475	7	11	24	4	0	0	8	7	0	20	13	8	160	233	I	
1	REPTILES				<u> </u>	7	11	24	4	•	0	8	7	0	20	13	8			0	
1	REPTILES CAIMAN SPECTACLED	177	236	0	3	7	11	24	4	0	0	8	7	0	20	13	8	160	2	0	3
	REPTILES  CAIMAN SPECTACLED (Caiman caiman)	1	2	0	3	7	11	24	4		0	8	7	0	20		8	1	2		
1 2	REPTILES CAIMAN SPECTACLED				<u> </u>	7	11	24	4		0	8	7	0	20	13	8			0	3
	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE	1	2	0	3	7	11	24	4		0	8	7	0	20		8	1	2		
2	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)	1 0	2	0	3	7	11	24	4		0	8	7	0	20		8	1 0	2 2	0	2
3	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)	1 0 2	3	0 0	3 3	7	11	24	4		0	8	7	0	20		8	1 0 2	2 2	0	2
3	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE	1 0 2	3	0 0	3 3	7	11	24	4		0	8	7	0	20		8	1 0 2	2 2	0	2
3	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)	1 0 2 0	3	0 0 0	3 3	7	11	24	4		0	8	7	0	20		8	1 0 2 0	2 2 1	0 0	3
3 4	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE	1 0 2 0	3	0 0 0	3 3	7	11	24	4		0	8	7	0	20		8	1 0 2 0	2 2 1	0 0	3
2 3 4	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE (Lissemys punctata)	1 0 2 0	2 3 1 1	0 0 0	3 3 1 6	7	11	24	4			8	7		20		8	1 0 2 0	2 2 1 1 0	0 0 0	3 1 6
2 3 4	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE (Lissemys punctata)  TURTLE INDIAN BLACK	1 0 2 0	2 3 1 1	0 0 0	3 3 1 6	7	11	24	4			8	7		20		8	1 0 2 0	2 2 1 1 0	0 0 0	3 1 6
2 3 4 5	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE (Lissemys punctata)  TURTLE INDIAN BLACK (Melanochelys hamiltonii)	1 0 2 0 0 0 0	2 3 1 1 0	0 0 0 0 6 45	3 3 3 1 6 45	7	11	24	4		0	8	7		20		8	1 0 0 0 0	2 2 1 1 0 0 0	0 0 0 6 45	2 3 1 6 45
2 3 4 5	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE (Lissemys punctata)  TURTLE INDIAN BLACK (Melanochelys hamiltonii)  KRAIT COMMON INDIAN	1 0 2 0 0 0 0	2 3 1 1 0	0 0 0 0 6 45	3 3 3 1 6 45	7	11	24	4			8	7		20		8	1 0 0 0 0	2 2 1 1 0 0 0	0 0 0 6 45	2 3 1 6 45
2 3 4 5 6	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE (Lissemys punctata)  TURTLE INDIAN BLACK (Melanochelys hamiltonii)  KRAIT COMMON INDIAN (Bungarus caeruleus)	0 0 0	2 3 1 1 0 0	0 0 0 0 45 2	3 3 1 6 45	7	11	24	4			8	7		20		8	0 0 0	2 2 1 1 0 0 0 0 0	0 0 0 6 45	2 3 1 6 45
2 3 4 5 6	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE (Lissemys punctata)  TURTLE INDIAN BLACK (Melanochelys hamiltonii)  KRAIT COMMON INDIAN (Bungarus caeruleus)  SAND BOA	0 0 0	2 3 1 1 0 0	0 0 0 0 45 2	3 3 1 6 45	7	11	24	4			8	7		20		8	0 0 0	2 2 1 1 0 0 0 0 0	0 0 0 6 45	2 3 1 6 45
2 3 4 5 6 7	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE (Lissemys punctata)  TURTLE INDIAN BLACK (Melanochelys hamiltonii)  KRAIT COMMON INDIAN (Bungarus caeruleus)  SAND BOA (Erix johni)  SAND BOA RED (Erix conicus)	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 3 1 1 0 0	0 0 0 6 45 2 5	3 3 3 1 6 45 2	7	11	24	4			8	7		20		8	0 0 0 0	2 2 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 6 45 2	2 3 1 6 45 2
2 3 4 5 6 7	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE (Lissemys punctata)  TURTLE INDIAN BLACK (Melanochelys hamiltonii)  KRAIT COMMON INDIAN (Bungarus caeruleus)  SAND BOA (Erix johni)  SAND BOA RED (Erix conicus)  SNAKE BEAUTY	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 3 1 1 0 0	0 0 0 6 45 2 5	3 3 3 1 6 45 2	7	11	24	4			8	7		20		1	0 0 0 0	2 2 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 6 45 2	2 3 1 6 45 2
2 3 4 5 6 7 8	REPTILES  CAIMAN SPECTACLED (Caiman caiman)  MOROLET CROCODILE (Crocodylus moretti)  SIAMESE CROCODILE (Crocodylus siamensis)  NILE CROCODILE (Crocodylus niloticus)  FLAP SHELLED TURTLE (Lissemys punctata)  TURTLE INDIAN BLACK (Melanochelys hamiltonii)  KRAIT COMMON INDIAN (Bungarus caeruleus)  SAND BOA (Erix johni)  SAND BOA RED (Erix conicus)	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 3 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 45 2 5	3 3 3 1 6 45 2 7	7	11	24	4			8	7		20			1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 6 45 2 5	2 3 1 6 45 2 5

	ALL TOTAL	399	504	1741	2644	7	11	152	9	12	21	28	27	0	40	32	25	347	468	1889	2704
	and Exotic Animals																				
	TOTAL SCHEDULE III ,IV ,V	218	288	1569	2075	0	6	119	3	4	21	19	19	0	24	24	13	178	255	1696	2129
	TOTAL REPTILES	59	88	268	415	0	0	9	3	4	2	2	2	0	3	4	9	57	86	270	413
	REPTILES	4		130	144	U	U	U	U	U		U	U	U	1			3	U	130	139
	TOTAL SCH III, IV & EXOTIC	4	8	130	142	0	0	0	0	0	2	0	0	0	1	2	2	3	6	130	139
21	RED EARED TERAPIN( Saguinus midas )	0	0	24	24										1			-1	0	24	23
20	RED IGUANA (Iguana iguana)	0	0	0	0						2							0	0	2	2
19	GREEN IGUANA(Iguana iguana)	1	1	2	4													1	1	2	4
	CROCODILE(Osteolaemus tetraspis)																				
18	WEST AFRICAN DW ARF	0	0	1	1													0	0	1	1
1/	palpebrosu)	U	U	_														U	U		
17	(Echis carinata) DW ARF CAIMAN(Paleosuchus	0	0	2	2													0	0	2	2
16	VIPER SAW SCALED	0	0	3	3													0	0	3	3
	(Geochelone elegans)																				
15	TORTOISE INDIAN STAR	0	0	19	19													0	0	19	19
14	BALL PYTHON ( Python regius)	0	0	1	1													0	0	1	1
13	COMMON INDIAN TREE SNAKE (Dendrelaphais tristis)	0	0	2	2													0	0	2	2
	SNAKE KEELBACK STRIPED (Amphiesma stolata)	0	0	4	4													0	0	4	4
	SNAKE GREEN (Ahaeutulla nasutus)	0	0	6	6											1	1	0	-1	5	4

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











ANIMAL BIRTH DETAILS DURING 2019-2020					
Sl.No	Name of the species	Scientific name	Date	Sex	
1	Hog deer	Axis porcinus	31.09.2019	0:0:1	
2	Nilgiri langur	Semnopithecus johni	18.01.2019	0:0:1	
3	Indian Gaur	Bos gaurus	28.01.2019	0:0:1	
4	Indian Gaur	Bos gaurus	08.03.2019	0:0:1	
6	Lion tailed macaque	Macaca silenus	03.04.2019	0:0:1	
7	Nilgiri langur	Semnopithecus johni	18.05.2019	0:0:1	
8	Hippopotamus calf	Hippopotamus amphibius	15.06.2019	0:1	
9	Lion tailed macaque	Macaca silenus	21.06.2019	0:0:1	
10	Black buck	Antilope cervicapra	23.06.2019	0:0:1	
11	Barking deer	Muntiacus muntjak	25.06.2019	0:0:1	
12	Lion tailed macaque	Macaca silenus	16.08.2019	0:0:1	
13	Lion tailed macaque	Macaca silenus	08.09.2019	0:0:1	
14	Bengal Tiger	Panthera tigris tigris	18.09.2019	1:1	
15	Swamp deer	Cervus duvauceli	19.08.2019	1:0	
16	Swamp deer	Cervus duvauceli	31.08.2019	1:0	
17	Swamp deer	Cervus duvauceli	12.09.2019	1:0	
18	Hippopotamus	Hippopotamus amphibius	26.09.2019	0:1	
19	Indian gaur	Bos gaurus	28.09.2019	1:0	
20	Indian gaur	Bos gaurus	03.11.2019	1:0	
21	Lion tailed macaque	Macaca silenus	03.11.2019	0:0:1	
22	Nilgai	Boselaphus tragocamelus	07.12.2019	0:0:1	
23	Nilgai	Boselaphus tragocamelus	10.12.2019	0:0:2	
24	Hyena	Hyaena hyaena	11.12.2019	0:0:3	
25	Wild dog	Cuon alpinus	14.12.2019	0:0:5	
26	Grey wolf	Canis lupus	28.12.2019	4:3	
27	Indian gaur	Bos gaurus	05.01.2020	0:1	
28	Lion tailed macaque	Macaca silenus	23.03.2020	0:0:1	
29	Nilgai	Boselaphus tragocamelus	03.03.2020	0:0:1	

**BIRD** 

Sl. No	Name of the species	Scientific name	Date	Sex
1	Ostrich	Strutheo camelus	02.02.2019	0:0:9
2	Ostrich	Strutheo camelus	17.05.2019	0:0:5
3	Common peafowl	Pavo cristatus	25.07.2019	0:0::2
4	Common peafowl	Pavo cristatus	10.08.2019	0:0::2
5	Common peafowl	Pavo cristatus	19.08.2019	0:0::1
6	White peafowl	Pavo cristatus	20.08.2019	0:0::2
7	Ostrich	Strutheo camelus	17.11.2019	0:0::3
8	Ostrich	Strutheo camelus	17.11.2019	0:0::5
9	Painted stork	Mycteria leucocephala	Jan-Mar-2020	0:0:20
10	Night heron	Nycticorx nycticorax	Jan-Mar-2020	0:0:70

#### **REPTILES**

Sl. No	Name of the species	Scientific name	Date	Sex
1	Gharial	Gavialis gangeticus	09.06.2019	0:0:9

## ANIMAL DEATH DETAILS DURING 2019-2020

SI. No.	Name of the species	Scientific Name	Date of Death	Sex	Cause of Death	
1	Sambar	Rusa unicolor	10.04.2019	М	Infighting	
2*	Tiger cub	Panthera tigris tigris	06.04.2019	F	Still born	
3	Mouse deer	Mousehila indica	10.05.2019	F	Results awaited	
4	Barking deer	Muntiacus muntjak	31.05.2019	F	Predator attack	
5*	Hippopotamus calf	Hippopotamus amphibius	15.06.2019	F	Trauma (Heart Punctured)	
6	Sambar	Rusa unicolor	10.06.2019	М	Infighting	
7	Blackbuck	Antilope cervicapra	10.07.2019	М	Shock(Infighting)	
8	Brown capuchin	Cebus appella	21.07.2019	F	Septicemia	
9	Barking deer	Muntiacus muntjak	16.08.2019	F	Capture shock syndrome	
10	Bonnet macaque	Macaca radiata	15.08.2019	M	Senility	

#### **ANNUAL REPORT 2019-2020**

11	Blackbuck	Antilope cervicapra	16.08.2019	F	Pneumonia	
12	Blackbuck	Antilope cervicapra	18.08.2019	М	Infighting	
13	Lion tailed macaque	Macaca silenus	04.08.2019	М	Awaited	
14	Blackbuck	Antilope cervicapra	02.09.2019	М	Infighting	
15	Barking deer	Muntiacus muntjak	13.09.2019	М	Myopathy	
16	Blackbuck	Antilope cervicapra	15.09.2019	М	Shock	
17*	Hippopotamus	Hippopotamus amphibius	26.09.2019	F	Still born	
18	Palm civet cat	Paradoxurus hermaphrodites	27.09.2019	М	Pneumonia	
19	Wallaby red handed	Macropus rufogrieus	27.09.2019	F	Septicemia	
20	Sambar	Rusa unicolor	29.09.2019	М	Predator bite	
21	Mouse deer	Mousehila indica	12.10.2019	М	Results awaited	
22	Wild boar	Sus srofa	25.10.2019	F	Septicemia	
23	Lion cub(Dhatchana)	Panthera leo	25.10.2019	F	Asphyxia	
24	Sambar	Rusa unicolor	09.11.2019	М	Infighting	
25	White tiger(Bheema)	Panthera tigris tigris	18.11.2019	М	Kidney failure	
26	Swamp deer	Cervus duvauceli	23.11.2019	М	Septicemia	
27	Wild Ass	Equus heminouskhur	04.12.2019	F	Colic	
28*	Hyena	Hyaena hyaena	12.12.2019	3Nos	Cannibalism	
29*	Wild dog	Cuon alpinus	15.12.2019	5nos	Cannibalism	
30	Hog deer	Axis porcinus	21.12.2019	M	Shock syndrome	
31	Grey langur	Semnopithecus entellus	08.01.2020	М	Senility	
32	Sambar	Rusa unicolor	10.02.2020	M	Senility	
33	Sambar	Rusa unicolor	21.02.2020	М	Shock/Infighting	
34	Indian gaur	Bos gaurus	19.03.2020	М	Trauma	
35*	Nilgai	Boselaphus tragocamelus	24.03.2020	F	Infanticide	
36	Nilgai	Boselaphus tragocamelus	29.03.2020	F	Enteritis	

#### **BIRDS**

SI. No.	Name of the species	Scientific Name	Date of Death	Sex	Cause of Death
1	Sulphur crested cockatoo	Cacatua gaterita	22.04.2019	M	Heat stroke
2	Cormorant	Phalacrocorax niger	08.04.2019	F	Impaction
3	Indian Common kite	Milvus migrans	08.05.2019	М	Enteritis
4	Great Indian Pied horn bill	Buceros bicornis	03.05.2019	F	Predator bite
5	Rhea	Rhea americana	29.06.2019	F	<b>Exertion Myopathy</b>
6	Silver Pheasant	Lophura nycthemera	19.06.2019	F	Septicemia
7	Common peafowl	Pavo cristatus	13.06.2019	М	Infighting
8	Bar headed goose	Anser indicus	07.06.2019	U	Heat stroke
9	Red jungle fowl	Gallus gallusmurghi	11.06.2019	М	Pneumonia
10	Ostrich	Strutheo camelus	01.06.2019	М	Infighting
11*	Ostrich(Chick)	Struthio cameleus	03.07.2019		Pneumonia
12	Common peafowl	Pavo cristatus	10.07.2019	М	Infighting
13	Spotted dove	Streptopelia chinensis	11.07.2019	М	Stork
14	Lady Amherst pheasant	Chrysolophus amherstiae	23.07.2019	F	Pneumonia
15	Common peafowl	Pavo cristatus	31.07.2019	F	Egg bound syndrome
16	Green cheek conure	Pyrrhura molinae	24.08.2019	F	Predator bite
17	Ostrich	Struthio cameleus	25.08.2019	F	Infighting
18	Green cheek conure	Pyrrhura molinae	27.08.2019	М	Bronco pneumonia
19*	White peafowl(Chick)	Pavo cristatus	05.09.2019	U	Septicemia
20	Rose ringed parakeet (Mutant)	Psittacula krameri	16.09.2019	F	Snake bite
21	Little egret	Egretta garzetta	26.09.2019	U	Septicemia
22	Red jungle fowl	Gallus murghi	27.09.2019	М	Senility
23	Little egret	Egretta garzetta	27.09.2019	U	Septicemia
24	White peafowl	Pavo cristatus	26.10.2019	М	Impaction
25	Common peafowl	Pavo cristatus	02.11.2019	F	Septicemia
26	Alexandrian parakeet	Psittacula eupatria	13.11.2019	U	Apoplexy

27	Java sparrow	Lonchura oryzivora)	22.11.2019	М	Head trauma	
28	Rainbow lorikeet	Trichoglossus haematodus	29.11.2019	M	Capture myopathy	
29	Silver diamond dove	Geopelia cuneata)	07.12.2019	М	Cerebral Apoplexy	
30	Common kite	Milvus migrans	12.12.2019	U	Predator bite	
31	White cockatiel	Nymphicus hollandicus	12.12.2019	М	Shock	
32	White pigeon	Columba livia	24.12.2019	U	Ingluvitis	
33	Alexandrine parakeet	Psittacula eupatria	23.01.2020	М	Shock	
34	Sarus crane	Grus antigone	03.02.2020	F	Shock	
35	Bar headed goose	Anser indicus	05.02.2020	М	Predator attack	
36	Black headed munia	Lonchura malabarica	09.02.2020	F	Capture myopathy	
37	Rose ringed parakeet	Psittacula krameri	22.02.2020	F	Shock	
38	Grey cockatiel	Nymphicus hollandicus	11.03.2020	М	Enteritis	
39	Black swan	Cygnus atratus	11.03.2020	F	Septicemia	
40	White Cockatiel	Nymphicus hollandicus	25.03.2029	М	Septicemia	

#### **REPTILES**

Sl. No.	Name of the species	Scientific Name	Date of Death	Sex	Cause of Death
1	Green snake	Ahaeutulla nasutus	20.06.2019	M	Renal carcinoma
2	Green snake	Ahaetulla nasutus	03.07.2019	U	Fecal impaction
3	Beauty snake	Elaphae helena	03.07.2019	U	Septicemia
4	Marsh crocodile	Crocodylus palustris	10.07.2019	F	Septicemia
5	Red eared turtle	Saguinus midas	20.08.2019	M	Pneumonia
6	Indian rock python	Python molurus molurus	20.08.2019	M	Cannibalism
7*	Gharial	Gavialis gangeticus	08.10.2019	U	Septicemia
8*	Gharial	Gavialis gangeticus	09.10.2019	U	Septicemia
10	Indian Rock Python	Python molurus molurus	30.11 2019	F	Senility
11*	Morelet crocodile	Crocodylus moretti	17.01.2020	F	Senility
12*	Gharial	Gavialis gangeticus	10.12.2020	U	Septicemia
13*	Gharial	Gavialis gangeticus	25.12.2020	U	Septicemia

14*	Gharial	Gavialis gangeticus	27.12.2020	U	Septicemia
15*	Gharial	Gavialis gangeticus	09.01.2020	U	Septicemia
16*	Gharial	Gavialis gangeticus	29.03.2020	U	Septicemia
17	Marsh crocodile	Crocodylus palustris	22.01.2020	М	Septicemia

<sup>\*-</sup>infant death

## COMPLIANCE WITH CONDITION STIPULATED BY CZA

SI. No.	Norm No.	Particulars of Suggestion	Time required to comply	Status with regard to compliance
1.Gene	eral requ	uirements		
1	1.1	The zoo should continue its determined campaign to organize its animal collection in to viable breeding groups to optimize breeding potential and to do away with single sex animals for which mates are not available for remaining species such as Horn bill, Baboons, Himalayan Black bear, Wolf, Vulture and Zebra	Complied with	Pairs received for Himalayan Black bear and Wolf and through the upcoming exchange process remaining animals will be paired. Animal exchange proposal approved by CZA for Zebra from Vietnam.
2	1.2	The colour particularly blue, being used in the zoo at most of the places for benches, structures, Curbstones do not merge with the green environment inside the zoo. The sober, dark colour merging with the nature and greenery of the zoo, use that do not become very prominent in the environment, in the zoo all places.	Complied with	Blue colour repainted with Gray colour and green for the signage boards.
3. Development and Planning				
3	3.6	The zoo should submit to the CZA a copy of the report it has submitted to Principal Chief Conservator of Forests and Chief Wildlife Warden, of the state in respect of rescued animals pertaining to endangered species that has been received in the zoo.	Complied with	All related documents have been submitted.

4,Anin	nal hous	ing, display of animals and animal encl	osures	
4	4.8	Design of all animal enclosures that have been constructed without approval of CZA i.e. Wild dog, Jackal, White / normal colored Tiger and the primate enclosures should be submitted to CZA for further directions.	Complied with	Bifurcation of existing CZA approved enclosures only was done and animal night shelters were only constructed.
5	4.9	The direction of last evaluation that the height of standoff barriers should not exceed one meter should be complied with	In progress	Erection of Solar fences at animal enclosures is in progress, so in phased manner the suggestion will be implemented.
6	4.9	The direction of last evaluation to plant thorny bushes/green hedge between the standoff barrier and the moat wall should be complied with.	In progress	Planting of hedges was carried out in many enclosures. Remaining works is being carried out this year.
2.Upke	eep and	healthcare of animals		
7	5.1(e)	The perches and shelves of water bird enclosures should be clean regularly and kept free of faeces and urine.	Complied with	Yes, done regularly
8	5.2(4)	The meat handlers entering the facility should change into a clean and disinfected boots and overalls.	Complied with	Yes, done regularly
9	5.2(5)	The meat handlers should use clean gloves when handling meat.	Complied with	Yes, followed
10	5.2(7)	There should be covered drainage system to prevent wastes and water from the meat preparation facility and the stores draining on to the ground surrounding the facility	Complied with	Covered Drainage system works completed at the feed store.
11	5.2(8)	8) The zoo should consider signing a MOU with TANUVAS from where services of experts are being utilized.	In process	MoU draft prepared; permission from authorities is sought.
3.Vete	rinary a	nd infrastructure facilities		
12	6.3	One more stockman / compounder should be appointed	Complied with	Compounder cum Lab Technician has been engaged.
9.Acqu	uisition a	and breeding of animals		
13	9.4	Mates should be acquired for Himalayan black bear, Jungle cat,		Mates acquired for all species. No flying squirrel right now. The

		Indian lion, Flying squirrel, Common	Complied	female Grizzled giant squirrel			
		otter and Grizzled giant squirrel	with	died recently			
14	9.6	The direction of last evaluation that	WICH	Being marked whenever			
1	3.0	all animals of conservation breeding	Complied	capturing so necessitates.			
		programme should be marked with	with	captaining so mecessitates.			
		transponders, particularly Lion tailed	******				
		macaque, Nilgiri langur, Wild dog and					
		Gaur should be complied with.					
15	9.8	Studbooks for endangered species to		Yes , it is followed			
		be maintained in the format	Complied				
		prescribed by the Central Zoo	with				
		Authority					
16	9.9	Effective Population control		Marsh crocodile, Sambar deer &			
		measures should be taken for all	Complied	Spotted deer: Vasectomy had			
		prolifically breeding species since the	with	been done to 50% of male			
		achievement in this regard from last		crocodiles and deer species with			
		evaluation has not been very much		the help of experts from			
		satisfactory		TANUVAS. Additionally, Bonnet			
				Macaque vasectomy was			
				carried out to curb the			
				population			
10. Res	search a	ctivities					
17	10.1	The zoo should implement research		Research is being carried out for			
		plan as indicated in the Master plan	Complied	critical species along with AIWC			
		and conduct research on the		(Vandalur); presently stress			
		prioritized species and specific areas		assessment studies and			
		of concern		standardization of anesthetic			
				protocols in herbivores and			
				birds are being carried out.			
				Additional dissertation of			
				Masters and Doctoral students			
				from the Department of Wildlife			
				Science, Madras Veterinary			
				College, TANUVAS are being			
				carried out in every academic			
				year on specific areas of species			
				and concern.			
12 Vici	tors faci	litios		I			
I IL.VISI	12.Visitors facilities						

18	12.3	The Zoo should make proper		Wheelchair facilities are
		arrangements for providing access to	Complied	available for physically
		the physically challenged persons for		challenged/ differently abled.
		viewing wild animal enclosures		Necessary ramp provisions are
				made at important enclosures
				for their viewing. As per the new
				entry rates – Differently abled
				have free entry to the zoo.

#### FREE LIVING WILD ANIMALS IN THE ZOO PREMISES



With its diverse forest habitat, Arignar Anna Zoological Park, Vandalur is home to many free ranging wild animals. The following free ranging wild animals are seen inside the open areas of the Zoological Park:

Mammals- Spotted Deer, Mongoose, Black naped hare, Porcupine, Palm civet, Jackal, Jungle cat, Small Indian civet cat and small Rodents

Birds- Painted stork, Grey heron, Night heron, Pond heron, Little egret, Intermediate egret, Cattle egret, Cormorant, Spoon bill, Grey pelican, White ibis, Open billed stork, Pariah kite, Brahminy kite, Red vented bulbul, Red whiskered bulbul, Black drongo, Racket tailed drongo, Indian treepie, Coucal, flame back Woodpecker, Asian koel, Spotted dove, Paradise flycatcher, Chestnut headed bee-eater, Magpie robin, Wagtail, Indian robin, Babbler, Red wattle lapwing, White eye, Common mynah, Palm swift, Hoopoe, Sunbird,

Reptiles- Rat snake, Spectacled cobra, Green vine snake, Copper back tree snake, Trinket, kukri, Olive keel back, Checkered keel back, Russell's viper, Saw scaled viper, Common krait, Monitor lizard, Garden lizard, Gecko, Star tortoise, Indian pond terrapin.

#### **BIRD CENSUS AT OTTERI LAKE**



As part of the synchronized bird census which is conducted every year, Arignar Anna Zoological Park carried out bird census on 28.2.2020, 29.2.2020, 6.3.2020 and 7.3.2020 at the Otteri Lake situated inside the Zoological Park. Otteri Lake, lying in the foothills of Vandalur hills witnesses thousands of aquatic and migratory birds every year. It is one of the major attractions of Vandalur Zoo. This year the Zoo management

took several measures for lake renovation and executed it successfully. On the favor of monsoon, the lake reached its maximum capacity. The lake attracted enormous number of aquatic birds comparatively more than the previous year. As a part of lake enrichment, more than 10,000 fish seedling were left in the lake which includes species of Catla, Rohu, Mirgal, Kendai, Rupchanda..etc

The bird Census was carried out by the Zoo expert team in Otteri Lake on 28.2.2020, 29.2.2020, 6.3.2020 and 7.3.2020 from 4.00 pm to 6.30 pm. There is no single technique that can be used for counting all types of birds. The principal reason is that birds differ in terms of their size, behavior and habitat preferences. Hence a census method useful for one species or habitat is ineffective for another. The Census technique followed by Arignar Anna Zoological Park is the direct method (Total count). For accurate counting of birds, optical aids were used to enable correct identification of birds and to collect accurate data. A vantage point was chosen and bird counting was done. A total of 21 species of aquatic birds (3481 Nos) were recorded in the census. The Otteri Lake is now the enriched breeding ground for thousands of aquatic birds. Aquatic birds mainly chose Barringtonia (fresh water mangrove), Acacia auriculiformis, Terminalia arjuna, Bamboo sps for nesting.

\$.No	Common Name	Scientific Name	Average No of Bird;
1	Pond Heron	Ardeola grayii	71
2	Grey Heron	Ardea cinerea	117
3	Night Heron	Nycticorax nycticorax	156
4	Little Egret	Egretta garzetta	706
5	Cattle Egret	Bubulcus ibis	90
6	Open Bill Stork	Anastomus oscitans	349
7	White Ibis	Threskiormis melanocepralus	85
8	Darter	Anhinga melamogaster	66
9	Little Cormorant	Microcarbo niger	1605

10	Indian Cormorant	Phalacrocorax fuscicollis	69
11	Red wattled Lapwing	Vanellus indicus	14
12	Eurasian Spoonbill	Platalea leucorodia	68
13	Little Grebe	Tachybaptus ruficollis	9
14	White Breasted Kingfisher	Halcyon smyrmensis	8
15	Common coot	Fulica atra	6
16	Glossy Ibis	Plegadis falcinellus	22
17	Common Moorhen	Gallinuka chloropus	6
18	Gull billed Tern	Gelochedlidon nilotica	4
19	Water hen	Amauronis phoenicurus	7
20	Bittern	Ixobrychus sinensis	1
21	Greater Cormorant	Phalacrocorax carbo	22
		Total No of Birds	3481

#### EXPERTISE IN HANDLING THE VISITORS CROWD

#### THE POPULAR DESTINATION OF TAMILNADU'S KAANUM PONGAL

Arignar Anna Zoological Park is one of the famous destinations of people to celebrate the Pongal holidays along with family and friends.

This year the Zoo Management made several arrangements to cater to the needs of the huge inflow of visitors during Pongal holidays. A footfall of **56749 Nos** of visitors was recorded on 17.1.2020, Kannum Pongal day which recorded the **highest footfall in the last five years**.

This year during Pongal holidays, the zoo recorded 1, 48,015 nos. of visitors. Last year the zoo had recorded 120944 nos. of visitors. There is thus an increase of 27071 numbers this year.

The following were the special arrangements made for the visitors on Pongal holidays this year.

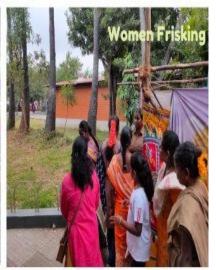
- The zoo management extended the Zoo timings from 8 am to 6pm.
- Additional parking facilities with free shuttle service for visitors from parking area to the zoo were arranged.

2016	44242		
2017	Zoo remained closed		
	for maintenance due		
	to vardha cyclone		
2018	38069		
2019	43483		
2020	56749		

- 3) For the facility of visitors 300 specials buses were operated by the MTC from in and around Chennai.
- 4) 20 ticket counters were fully functional with card payment facilities. Special counter for online ticket booking was opened.
- 5) Frisking of visitors was done by Police department. A Special team to check for the entry of liquor, sugarcane and weapons was arranged.
- 6) Single use plastics were replaced by paper bags at the entrance.
- 7) Children under 5 years were provided with hand tags to avoid child missing cases.
- 8) Wheel chair service for senior citizens & differently abled was provided.
- 9) Additional purified drinking water and toilet facilities were arranged.
- 10) Extra stalls for eateries through TTDC, TANTEA, Aavin and Special sales counter for MPDA, Poompuhar were functional to cater the visitor need.
- 11) Flying squad for Rescue and to attend to emergency like medical need, was functional.
- 12) Special help desks and medical aid desk facilities were utilized by more than 500 visitors.
- 13) About 300 police staff and 150 uniformed forest staff were deputed on protection duty along with 200 Nos. of NCC & NSS volunteers.
- 14) For the safety of visitors, round the clock CCTV monitoring was done.
- 15) As a special attraction this year the zoo management arranged screening of video footage on LED screen of recently born Tiger cubs, Gaur calves, Nilgai fawn and other unique Zoo animals. Special seasonal delicacy sugarcane was fed to elephants at the zoo twice a day at 11.00 am and 3.00 PM which was viewed and enjoyed by the visitors. A special exclusive photo point was setup in the zoo premises which attracted the visitors.
- 16) Overall the day ended with blissful memories and the Zoo successfully handled a large crowd without any untoward incidents.



















#### NOVEL INITATIVES ON WORKSHOP AND TRAININGS

#### INSITUTIONAL MEMBER OF WAZA

Arignar Anna Zoological Park is now an 'Institutional Member' of WAZA (World Association of Zoos and Aquariums)







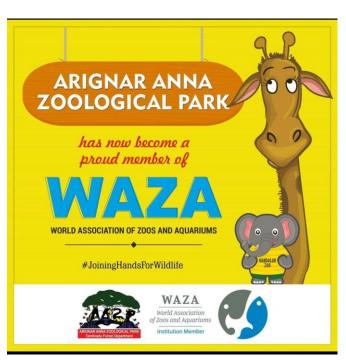
The membership was accepted and

declared on September 8<sup>th</sup>, 2019. WAZA (World Association of Zoos and Aquariums) is a world level organization for the World Zoos and Aquariums community, and is committed to support the vision, mission and interest of the members at International level in terms of wildlife conservation, management and breeding of animals in captivity.

Arignar Anna Zoological Park is proud to be the largest member among the seven other Indian Zoos who are also members of WAZA (Delhi Zoo, Darjeeling Zoo, Assam State Zoo, Nandankanan Zoo, Pune Zoo, Bannerghata Safari Park and Mysuru Zoo).

#### Benefits of the Membership: -

- 1. This membership will provide a global platform to the zoo to attract talents and expertise from all around the world in the field of Wildlife and also to network with Directors and CEOs of the global zoo and aquarium community
- 2. Arignar Anna Zoological Park, Vandalur will be able to partner in WAZA campaigns that address marine litter, single-use plastic, sustainable palm oil, certified forestry and other key issues.
- 3. WAZA association will link Arignar Anna Zoological Park to IUCN, CITES, CBD, RAMSAR, CMS Network.
- 4. Will help Arignar Anna Zoological Park, Vandalur to approach foreign zoos to initiate animal exchange programmes and also provide a platform for knowledge sharing.
- 5. Arignar Anna Zoological Park will have the opportunity to take part in the development of new strategies and policies for future development of zoos and aquarium worldwide.
- Arignar Anna Zoological Park may attend special meeting / conferences at global level.



# WORKSHOP ON ROLE OF CORPORATES IN CONSERVATION OF FOREST & WILDLIFE

Arignar Anna Zoological Park, Vandalur, Chennai hosted a one Day Interactive session on "Role of **Corporates in Conservation of Forest** & Wildlife" on 7.6.2019 at Zoo School Auditorium. More than 35 corporate heads from various firms, companies, institute participated in the one day interactive session with the zoo dignitaries. Thiru. Sanjay kumar Srivastava IFS, PCCF & CWLW presided over the workshop.



Cognizant outreach, Mahindra & Mahindra Company, Crescent Institute of Engineering and Technology, VIT University, MGM, VGP Universal kingdom, WIPRO, Sriram group of companies and so on participated in the workshop. The special guest speakers were *Dr. G. Agoramoorthy*, *M.Sc., Ph.D.*, Distinguished Research Professor, Tajen University, Taiwan & Executive Board Member, South East Asian Zoos Association spoke on the topic 'Partnership in Conservation across the Globe'. Followed by *Dr. Brij Kishore Gupta M.Sc., Ph.D.*, Monitoring and Evaluation officer, Central Zoo Authority, New Delhi spoke on the topic *Indian Perspective of Ex-situ Conservation and role of Stakeholders*. **Tmt. Sudha. S IFS** Deputy Director, AAZP presented on 'Avenues for Corporate/Private organizations to contribute and collaborate with Zoo the Management' followed by field visit.





Special Speaker Dr. G. Agoramoorthy, M.Sc., Ph.D., &

Dr. Brij Kishore Gupta M.Sc., Ph.D

#### CERTIFICATE COURSE ON BIRD IDENTIFICATION AND BASIC ORNITHOLOGY

As a novel initiative, to provide opportunity for the school dropouts for the first time, Arignar Anna Zoological Park coordinated with Department of Environment. Tamil Nadu ENVIS HUB conducted 'Certificate course on Bird Identification and Basic Ornithology' under Green Skill Development Programme (GSDP) funded by Ministry of Environment, forest and Climate change (MOEF&CC).

The course was advertised in the newspaper and social media. Based on personal interview, 20 candidates were selected for the course. The course was conducted in a duration of 160 hours from 11.11.2019 to 06.12.2019.

This course provided an extensive opportunity for the school dropouts, graduates to develop their skills and to enhance their knowledge in bird identification and basics about ornithology. It covered various topics like introduction to birds followed by bird evolution, history, classification, adaptation, habitat, behavior, diversity, threats, conservation, watching, identification, documentation, basic of instrumentation in birding, tourism, field visits to wetland and forest areas and so on.



ANIM. Classroom session

NG 2019-2020

Field visits





Arignar Anna Zoological Park is one of the premier wildlife conservation centers in the country. The concept of Zoo has evolved from entertainment to research and conservation education in recent years. To create love, affection, compassion and kindness among the public towards animals, the animal adoption programme was launched at AAZP. Animal adoption gives the adopter an opportunity to become a conservationist. It supports the highest standard of care for the animals at the zoo and symbolizes his passion towards their conservation. The animals

in the zoo are the representatives of their counterparts in the wild. The adoption amount is spent on the animal feed cost and enclosure maintenance.

#### **Benefits for the Animal Adopters:**

The Adopted amount is exempted under 80G of the Income Tax Act. Besides an official Certificate of animal adoption, adopter will get complimentary benefits as per the Adopter category. The animal adopter's name will also be displayed in front of the animal enclosure. For further assistance visit www.aazp.in/animal-adoption/

Name of the Animal adopter	Contribution (INR)
Vijaya Gurunatha Sethupathi	328000
D.Sivakarthikeyan	215280
All in Picture	180000
Kannan Parthasarathy	118000
K. R. Krishnamoorthy	103000
Santhosh Moses	54000
Jaya Pradeep	25000
Ramani	21120

# POSTINGS, TRANSFERS, TRAINING, RETIREMENT

#### **NEW POSTINGS AT AAZP**

S.No	Name	Designation	Date of joining	Remarks
1	S.Nithya	Forester	02.08.2019	Transferred from ATR, Pollachi and posted in Arignar Anna Zoological Park
2	Arunkumar	Forester	13.05.2019	Recruited through Tamil Nadu Forest Uniform Service Recruitment committee
3	Ramamoorthi	Junior Engineer	21.10.2019	Transferred from District Forest Officer, Dindugal and posted in Arignar Anna Zoological Park
4	S. Ravindran	Steno Gr II	09.07.2019	Promoted and posted in Arignar Anna Zoological Park
5	D.SriRanganathan	Assistant	06.05.2019	Recruited through Tamil Nadu Public Service Commission

#### **PROMOTIONS**

S.No	Name	Designation	Date of Joining	Remarks
1	R. Raghu	Superintendent	19.01.2020	Promoted as Forest Range officer and joined in division of Deputy Conservator of Forests, SFRI, Kolapakkam
2	V. Ravi	SDO	18.07.2019	Promoted as SDO and joined in Arignar Anna Zoological Park

#### **TRANSFERS**

Nil

Some of major contributors of Animal adoption 2019-2020



# அறிஞர் அண்ணா உயிரியல் பூங்கா

# ARIGNAR ANNA ZOOLOGICAL PARK





AAZP-Vandalur Zoo application was launched by the Tamil Nadu Forest
Department and it is in function for over two years to facilitate the public
service. AAZP attracts more than 20 lakh visitors annually from across
the state, country and the world. The application "VANDALUR ZOO" offers hassle
free smooth experience for the visitors, with its multiple features like,

#### **ANIMALS INFO**

Listing of animals and voice based explanation of the animals

#### **4D VIEW**

Take pictures with your favourite animal with AAZP 4D view

#### ONLINE TICKET BOOKING FOR ZOO VISIT

#### **ZOO EVENTS**

The users can keep easy note of the upcoming events of the zoo

#### **ZOO MAP**

An interactive map, which helps as virtual tour guide while inside the zoo

#### ADOPTION

The users can adopt any animal by just registering with AAZP

#### SELFIE

Take selfie pictures with AAZP special frame

#### LIVE STREAM

The users can watch any listed animal live



# அறிஞர் அண்ணா உயிரியல் பூங்கா ARIGNAR ANNA ZOOLOGICAL PARK







## **SCAN THE QR CODE AND** SUBSCRIBE TO OUR CHANNEL



AAZP Zoo School started it's Youtube Channel to exhibit the viewers, to enlighten the importance of conservation of wildlife to the mass audience.

Vandalur Zoo plays a crucial role in the conservation of wild animals, and as the animals here are managed scientifically in a simulated environment of their natural counterpart, the zoo serves as an excellent center for conservation research and education.

> Through this online channel, we reach millions directly from children to people of any age category.

Anyone can now subscribe to our Youtube channel and watch many interesting and informative videos of their favorite animals.

