



BANNERGHATTA BIOLOGICAL PARK



ANNUAL REPORT 2017-18



Central Zoo Authority
केन्द्रीय चिड़ियाघर प्राधिकरण



World Association of Zoos and Aquariums | WAZA
United for Conservation



Contents

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Officers of BBP
Sri Suresh Devadiga, BBP
Team Dharthi



A Non-Governmental Organization working on the front of Environment, Forests, Communities and Tourism (EFCT), and bringing about qualitative inputs that will help in the planning and strategizing for a sustainable framework. The focus areas include Policy, Research and Advocacy, Ecotourism Consulting, Responsible Tours, Environmental impacts, Environment Education and Rural Livelihoods.

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Most of the Pictures have been sourced from Team Dharthi. Supplementary Pictures have received from the Office of the ED, BBP and other team members from the Laboratory, Zoo Hospital and Butterfly Park.

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1. From the Executive Director



If one considers Zoo animals as the Ambassadors of their cousins in the wild; then the Bannerghatta Zoo has lived up to its expectation of adding value to the metropolis of Bengaluru, with its myriad of people and the visitors who come from afar. The Zoo, today, has become a place of education for the young and old alike.

The Bannerghatta Biological Park (BBP) with its products of the Zoo enclosure, the Butterfly park, the Safari area for the Tiger, Lion, Bear and the Herbivores, demonstrates totality in its conservation and preservation of the Wildlife, the eco-system and off course the habitat. Thereby it becomes pertinent to bring about a transformation of the wildlife scenario for the benefit of the visitors who come in large numbers.

The Park with its unique exchange program has ensured a collection of wild animals from across the world, which has resulted in a habitat creation that helps the viewer to understand the eco-system.

BBP plays host to the Rescue Center, which is out of bounds to the visitors but plays an important role in managing animals that are rescued from various episodes of human-wildlife conflict (HWC) and happenings in the wild. These animals are tended to with utmost care and caution, and brought back to the normalcy. The Laboratory located within the Zoo premises has added a new dimension to the element of research that helps augment knowledge leading towards conservation and preservation. The Scientists in the Laboratory and the Veterinary Hospital have brought about many a framework that has supported in the Zoo and the Wildlife management.

As the years go by, there are many more issues to be addressed and infrastructure to be thought of for the Zoo. The Zoo management proactively is working towards ensuring a quality of life for the animals and the visitor experience.

R. Gokul IFS
Executive Director, BBP

2. History

The BBP as we know of it today, was created in 2002 with 545.00 Hectares of forest from the Bannerghatta National Park being set aside to constitute the Biological Park, which was further extended to 731.88 Hectares. Whilst panning the pages of History, one comes across the contribution of Shri YML Sharma, IFS, the then Chief Conservator of Forests and Head of the Forest Department, who was responsible for identifying the need for a place where Bangaloreans can enjoy the solitude of wilderness. He was instrumental in visualizing and creating the Bannerghatta National Park (BNP). It was his conviction that ensured the notification of land and the creation of a National Park in 1974. He even initiated the transfer of many animals like reptiles, foxes & bison in the park area and even had a small trench dug to ensure protection to the animals and ofcourse the people. The path tread by YML has been eloquently walked and new horizons brought about Zoo Keeper, Officers of the Forest Department, who have ensured that the ethos of recreation, education and ecotourism are promoted with a Scientific understanding of the forest and wildlife to the younger generation and adults alike.

List of officers headed Bannerghatta Biological Park after bifurcation of Bannerghatta National Park and Bannerghatta Biological Park.

- ◆ Sri B.M.T.Rajeev, IFS
- ◆ Sri N.L. Raghava - 27.06.2003 to 30.06.2003
- ◆ Sri K.B. Markandaiah, IFS - 01.07.2003 to 25.06.2006
- ◆ Smt. Geethanjali, IFS - 26.06.2006 to 08.03.2007
- ◆ Sri K.B. Markandaiah, IFS - 08.03.2007 to 05.05.2008
- ◆ Sri Millo Tago, IFS - 05.05.2008 to 09.03.2011
- ◆ Sri Chandrashekhar (in-charge) - 09.03.2011 to 29.04.2011
- ◆ Dr. R.Raju, IFS - 29.04.2011 to 06.03.2013
- ◆ Sri N.Devaraju, IFS - 06.03.013 to 16.09.2013
- ◆ Sri Range Gowda, IFS - 16.09.2013 to 14.09.2015
- ◆ Sri Santhosh Kumar, IFS - 14.09.2015 to 31.10.2017
- ◆ Sri R. Gokul, IFS - 01.11.2017 till date

The history of BBP as we see today is one of glory and a contribution of the forest officers and their teams, who have strived to make BBP a better place not only for the animals but also for visitors to ensure a qualitative experience of the wild animals.

3. Vision

The vision of BBP is to create an opportunity to the citizens - especially to children in and around Bangalore to have a Biological Recreation Centre very close to the city in the midst of forests.

4. Mission

To achieve the distinction of a natural eco zoo through world class conservation, education, research and visitor experience by connecting all creatures of GOD - People, Wildlife & Trees.

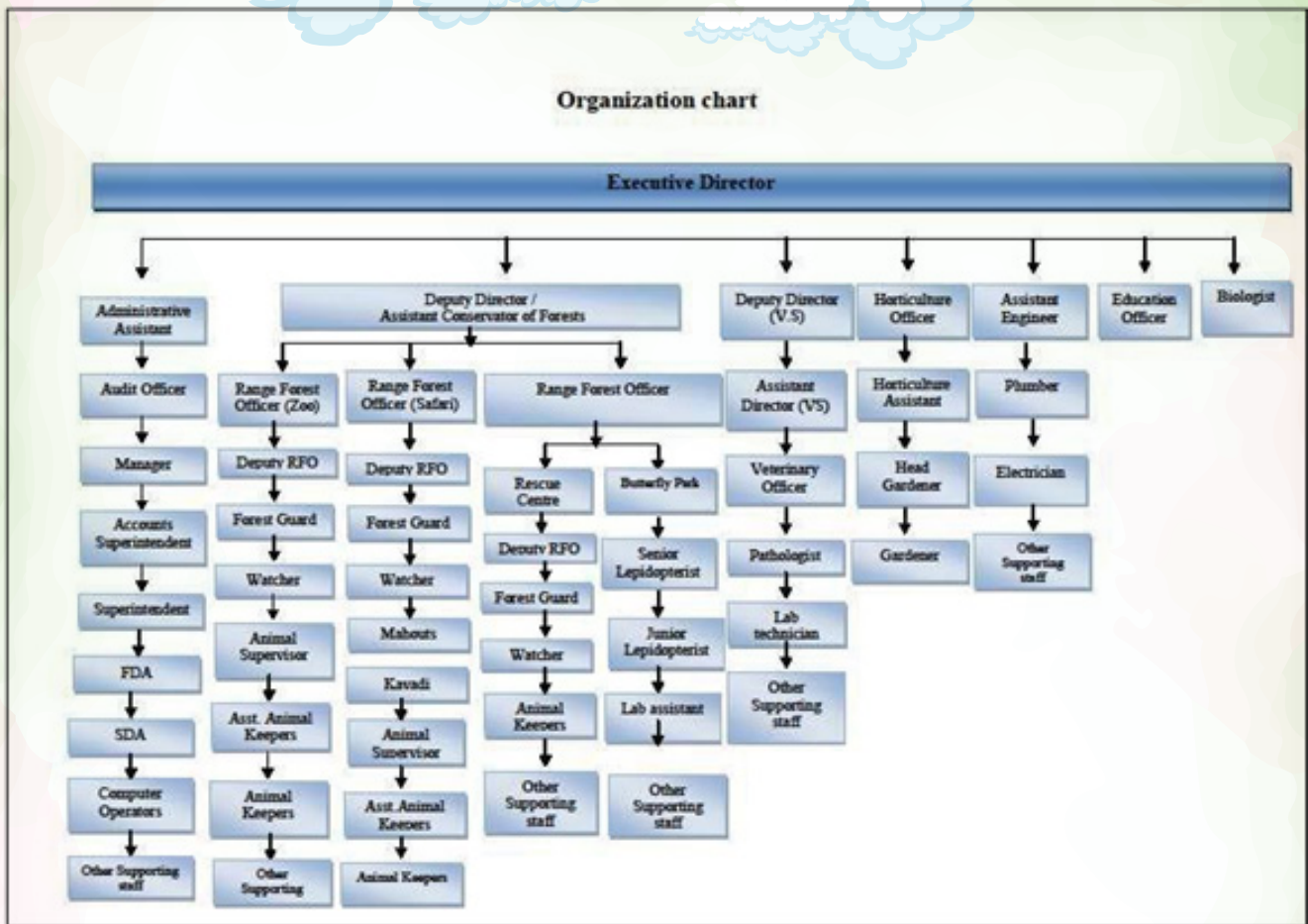
5. Objectives

- To create conditions for captive conservation and breeding of endangered species of wild animals.
- To educate and enlighten the public (visitors) by displaying wild animals that are equally important, interesting and essential for the ecosystem's support and thus create empathy towards wild animals in the public.
- To offer an excellent opportunity to the people to connect with nature and wildlife.
- To serve as gene pool and germ plasm reserve for future biological research on wild animals and to facilitate research on behaviour and breeding of different animals.
- To provide rehabilitation to orphaned animals of endangered species that are rescued from the wild/ circuses/crime etc.,
- Conservation and breeding of butterflies at Butterfly Park
- To provide recreational facilities to the public

6. About Us

S.No.	Particulars	Information
Basic Information about the Zoo		
1	Name of the Zoo	Bannerghatta Biological Park (BBP)
2	Year of Establishment	2002
3	Address of the Zoo	Bannerghatta Biological Park, Bannerghatta, Bengaluru, Karnataka 560083
4	State	Karnataka
5	Telephone Number	080-29776466/29776467 and 8884414268
6	Fax Number	080-27828400
7	E-mail address	bannerghattazoo@gmail.com
8	Website	www.bannerghatabiologicalpark.org
9	Distance from nearest	Airport: Kempegowda International Airport: 59 Km Majestic Railway Station: 24 Km Bus Stand: (Majestic) 24 Km
10	Recognition Valid up to (Date)	05.05.2019
11	Category of zoo	Large
12	Area (in Hectares)	731.88
13	Number of Visitors (Financial Year)	Adult: 13,98,388 Children: 1,99,297 Total Indian: 15,97,685 Total Foreigners: 3951 Total Visitors: 16,01,636
14	Visitors' Facilities Available in Zoo	Wash Rooms, Food Court, Buggy Service, Signage, Walkways, Access to Safari and Butterfly Park
15	Weekly Closure Day of the Zoo	Tuesday
Management Personnel of the Zoo		
16	Name with designation of the Officer in-charge	Sri R. Gokul IFS, Executive Director
	Name of the Veterinary Officer	Dr. Umashankar
	Name of the Pathologist	Dr. Manjunath V
	Name of the Biologist	Shri Kushal
	Name of the Education Officer	Kum. Amala M. Anil
	Name of the Lab Technician	Smt. Madhuri
Owner / Operator of the Zoo		
17	Name of the Operator	Sri. R. Gokul IFS,
18	Address of the Operator	Executive Director, Bannerghatta Biological Park, Bannerghatta, Bengaluru, Karnataka 560083
19	Contact details/Phone number of Operator	080-29776466/29776467 and 8884414268
20	E-mail address of Operator	bannerghattazoo@gmail.com

7. Organization Chart



8. Human Resources

Staff Strength in BBP (as on 31.03.2018)

Sl. No.	Staff	Nos.
1	Permanent Staff	14
2	Kshemanidhi Employees	40
Direct Contract		
3	Category Staff	140
4	Veterinary Officers	2
5	Office Staff	4
6	Public Relations Officer (PRO)	1
7	Entomologist	1
8	Biologist	1
9	Junior Engineer	1
10	Education Officer	1
11	Ex-Army (Security Person)	25
Outsourced Staff		
12	Outsourced Staff from Agency	52
13	Security Staff from Agency	24
Total		306

Sanctioned Establishment Strength and Working Strength at Bannerghatta Biological Park, Bangalore (as on 31.03.2018)

Sl. No.	Designation	No. of Posts Sanctioned	Working Strength	Vacant	Name
1	Executive Director and Chief Conservator of Forests	1	1	0	Shri R. Gokul, IFS
2	Deputy Director and Deputy Conservator of Forests	1	1	0	Shri. HT Kushalappa
3	Gazetted Manager	1	1	0	Smt. MC Hemananada
4	Assistant Director (Veterinary Service)	1	1	0	Dr. Umashankar
5	Assistant Engineer (PWD)	1	1	0	Shri. T Raghavendra
6	Range Forest Officers (RFO)	3	3	0	Smt. MC Bhagyalakshmi Shri. Mahendra Shri. Bheemaraya
7	First Division Assistant	1	1	0	Shri. BV Indresh Kumar
8	Deputy Range Forest Officers (DRFO)	4	3	1	Shri. Hemanth KS Shri. M. Narasimhamurthy Shri. Ashok Kumar
9	Forest Guard	3	0	3	
10	Forest Watcher	3	1	2	Shri. T Ramaiah
11	Mahouts	2	1	1	Shri. Mota
12	Kavadi	4	0	4	
	Total	25	14	11	

9. Capacity Building of Zoo Personnel

The Zoo personnel have been trained to ensure success within the Zoo whilst dealing with animals and the visitors. Some of the employees have attended various programmes outside the ambit of the Zoo which is ensuring further success to the Zoo and its functioning.

Sanctioned Establishment Strength and Working Strength at Bannerghatta Biological Park, Bangalore (as on 31.03.2018)

Sl.No.	Name and designation	Subject matter of Training	Period of Training	Name of the Institution where the Training attended
1	Dr. V. Manjunath	Wildlife Forensics	One week (25th September to 1st October 2017)	CSIR-Centre for Cellular and Molecular Biology
2	Mr. N Kushal (Biologist)	Middle level officials training programme	11th to 14th December 2017	Sanjay Gandhi Biological Park, Patna
3	Mr. R Gokul, IFS (Executive director)	Annual Conference of Indian Zoos on "Vision 2030 of the Zoos in India"	18th to 21st December	Sri Chamarajendra Zoological Gardens
4	Dr. Nirupamma Jaisingh (Veterinary Officer)	Interactive session on ZIMS and data entry in the software	5th and 6th March 2018	Arignar Anna Zoological Park
5	Mallikarjuna C & Chennakeshava (Animal Keepers)	Specialized theme based training programme for keepers of south Indian Zoos	10 to 15th Feb 2018	Arignar Anna Zoological Park

10. Zoo Advisory Committee

List of the Members of Governing Council of Zoo Authority of Karnataka, Mysuru.

SL. No.	Names and Designation	Designation
1.	Smt. Mallige Veeresh, Zoo Authority of Karnataka, Mysuru.	CHAIRPERSON
2.	Sri C. Jayaram, IFS., Principal Chief Conservator of Forests (Wildlife), and Chief Wildlife Warden, Bengaluru.	Vice-Chairman
3.	Sri B.P. Ravi, IFS., Addl. Principal Chief Conservator of Forests, Zoo Authority of Karnataka, Mysuru.	Member Secretary
4.	Sri Vijaya Kumar Gogi , IFS., Secretary to Govt. (Forest), Forests, Environment and Ecology Department, M.S. Building, Bengaluru.	Member
5.	Sri M.J Ravikumar, Hon'ble Mayor, Mysore City Corporation, Sanyaji Rao Road, Mysuru.	Member
6.	Sri B.J. Hemanna, Special Officer (Banking) / Deputy Secretary, Finance Dept., M.S. Building, Bengaluru	Member
7.	Dr. M.P. Manjunath, Director, Dept. of Animal Husbandry and Veterinary Services, Vishveshwaraiah Gopura, Bengaluru	Member
8.	Dr. S.M. Bhyregowda, Director, Institute of Animal Health and Veterinary Biologicals, Hebbal, Bengaluru	Member
9.	Sri B.N. Karigowda, Gandhinagar, Poonadahalli Post, Haranahalli Hobli, Periyapatna Tq., Mysuru Dist.	Member
10.	Sri S.N. Raju, Saathanooru, Kasaba Hobli, Mandya Tq. and Mandya Dist.	Member
11.	Smt. Lata Jagadeesh, No.297, Old Taluk Office Road, T. Narsipur Town, T. Narsipur Tq., Mysuru Dist.	Member
12.	Sri Amjad Khan No. 479, Vivekanandanagar, T. Narsipur Tq., Mysuru Dist	Member
13.	Sri K. Tukaram, No. 46, Ashoka Road, Mysuru-1	Member

BBP Zoo Advisory Committee

- i. Date of constitution: 23rd March 2012
 ii. Members:

SL. No.	Members	Designation
1.	Chief Conservator of Forests, Bangalore Circle, Bangalore	Chairman
2.	Executive Director, BBP, Bangalore	Member Secretary
3.	Deputy Commissioner, Bangalore Urban District	Member
4.	Superintendent of Police, Bangalore Urban District	Member
5.	Chief Executive Officer, Zilla Panchayat, Bangalore Urban District	Member
6.	Deputy Director and District Officer of the Department of Animal Husbandry and Veterinary Sciences, Bangalore Urban District	Member
7.	Head of the Department, Zoology, Bangalore University	Member
8.	Superintending Engineer, PWD South Circle, Bangalore	Member
9.	Deputy Director, BBP	Member

Note: The Local officers of BBP are the member invitees.

- iii. Dates on which Meetings held during the year: -

11. Health Advisory Committee

- i. Date of constitution: February 2018
 ii. Members:

1. Prof Placid D Sauza, Dean, Veterinary College, Bangalore.
2. Prof Ranganath L, Dean, Veterinary College, Hassan.
3. Dr. Byregowda, Director, IAH &VB, Hebbal.
4. Dr. Narayana Bhat, Head TVCC, Hebbal, Bangalore.
5. Dr. Ansar Kamran, Associate Professor, Veterinary Medicine, Hebbal, Bangalore.
6. Dr. Giridhar, Joint Director, (R&DI), IAH &VB, Hebbal, Bangalore.
7. Dr. Yathiraj, Retd Dean, Veterinary College, Hassan.
8. Dr. Vasantha Shetty, Retd Dean, Veterinary College, Hassan
9. Dr. Krishna Swamy, Retd, HOD, Veterinary College, Hebbal, Bangalore.
10. Joint Director, Animal Husbandry, Bangalore Rural.
11. Dr. Umashankar, K.S. Assistant Director (VS), Zoo hospital, BBP
12. Dr. Manjunatha, V. Scientist, WADDL, BBP

- iii. Dates on which Meetings held during the year: 1

12. Statement of income and expenditure of the Zoo

Budget and Actual Income and Expenditure For the period: 1st April 2017 to 31st March 2018 (in Rupees/Lakhs)

Sl. No.	Details of Budget Head	Actual Expenditure from 01.04.2017 to 31.03.2018
1	Establishment Charges	624.55
2	Office Expenses	9.67
3	Advertisement and Publicity	11.32
4	Stores, Tools and Plants	0.23
5	General Charges	21.08
6	Zoo Education	3.47
7	Staff Welfare	26.29
8	Others (If any)	0.28
	Total	696.89
9	Feed Fodder	723.11
10	Hospital/Animal Treatment Charges	27.74
11	Purchase of live stock	0
	Total	750.85
12	Fixed Assets	56.52
13	Garden Development	0
14	Civil Work Development (Zoo, Safari and Butterfly Park)	238.06
	Total	294.58
15	Maintenance Charges	86.84
16	Garden Maintenance	0
17	Research and Documentation	0
18	Enrichment of Captive Habitat	0
19	Payment to KSTDC (50% of Safari Entry)	578.28
	Total	867.65
	Total Expenditure	2609.97

Actual Income 2017 - 18 (31.03.2018) (in Lakh Rupees)

Sl. No.	Particulars	Amount
1	Gate Collection	2170.60
2	License Fees	203.82
3	Sale Proceeds	1.83
4	Bank Interest	209.12
5	Other Receipts	550.01
	Total	3135.38

13. Daily feed Schedule of animals

The Animal Health Monitoring Committee regulates the food requirement of the animals, whenever required. The food requirement varies from animal to animal and quantity of the food also varies between age groups and sex. Herbivores are fed twice a day whereas omnivores are fed in the morning hours according to their requirement of their feed requirements. Carnivores are fed in the evening time, except on Tuesdays, which is a starve day to mimic natural feeding behaviour. Quality and quantity are monitored by the Assistant Director (Veterinary Services) and Range Forest Officers, respectively to ensure high standards are met.

Sl. No	Species	Feed Item	Frequency
1	Mammals Herbivore	Vegetables, concentrates, grains, grass.	Twice daily
	Carnivores	Beef and Chicken	Once in the evening, fasting on Tuesdays.
	Omnivores (toddy cat, monkeys and bears)	Fruits, vegetables, grains, chicken and fish.	Daily
2	Birds	Seasonal fruits, vegetables, concentrates, grains, and fish.	Daily
3	Reptiles Crocodiles	Fish	Alternate days
	Snakes	Live feed (Mice, rat snake and rabbit)	Once in 7 to 10 days
	Turtle	Fish	Everyday
	Tortoise and Iguana	Fruits, green leaves and vegetables.	Everyday

14. Vaccination Schedule of animals

Sl. No.	Species	Disease vaccinated for	Name of the Vaccine and dosage/ quantity used	Periodicity	Remarks
1.	Tigers, Lions, leopards, jungle cat	Feline pan leukopenia, feline calci virus, feline infectious rhinotracheitis	Feligen combined vaccine (Feligen®) 1 ml	annual	
2.	Tigers, Lions, leopards, jungle cat, Wolf, Dhole, Jackal, Hyena, Himalayan Black Bear,	rabies	Rabigen® 1 ml	annual	
3.	Wolf, Dhole, Jackal, Hyena, Himalayan Black Bear	Canine parvo, Canine distemper, ICH, Canine parainfluenza, leptospirosis,	Canine combined vaccine (Canigen®) 1 ml	annual	
4.	Deer and antelopes elephant, giraffe , gaur	Foot and mouth disease Haemorrhagic septicemia	FMD and HS bivalent vaccine	Once in six months	
5.	Tigers, Lions, leopards	Trypanosomiasis	Surral ® 1mg/kg b.wt	Onc in three months	

15. De-worming Schedule of animals

Sl. No.	Species	Drug used	Month
1.	All animals	Oxyclozanide	May
2.	All animals	Albendazole	August
3.	All animals	Fenbendazole	November
4.	All animals	Closantel	February

16. Disinfection Schedule:

Sl.No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1.	All animals	All holding house, passages	Kohrsalin Th Mopping	daily
2.	All animals	All holding house, passages	Biokleen Mopping	Daily
3.	All animals	All holding house, passages	Potassium permanganate Foot dip	Daily
4.	All animals	All holding house, passages, exhibit areas	Viracid Spray and foot dip	Once a week as a prophylactic method

17. Health Check-up of employees for zoonotic diseases

All employees are vaccinated for two diseases

1. Anti-rabies
 2. Hepatitis B
- ❖ Every year, there is a general health check from Apollo Hospital and Sagar Hospital
 - ❖ Health insurance through ESI
 - ❖ BBMP Hospital, Sajjan Rao Circle, Bengaluru
 - ❖ Community Medicine Department, KIMS Hospital, Bengaluru supported with the booster shots for the employees of BBP

All the employees are checked on a random basis for anti-bodies titre for protection against rabies by RFFIT Test. All employees are found to be protected.

18. Development Works carried out in the zoo during the year

The BBP team has always ensured that developmental works carried out ensure a support mechanism to the visitors and to the animals within the Zoo premises. The following were the development works undertaken for 2017-18:

1. Construction of Eland enclosure inside the zoo
2. Visitors path from Zoo entrance to Eland enclosure
3. Visitors path from new Himalayan Black Bear enclosure to new tiger enclosure
4. Development of Parking area
5. Installing of elephant proof spike grating at rescue centre and butterfly park
6. Resurfacing of road inside Indira Gandhi and White Tiger safari
7. Construction of under pass inside white tiger safari
8. Fool proof double entry gate system at safari gates
9. Resurfacing of road inside zoo



Primate enclosure



Development of Parking area



Carnivorous indoor cage



Eland enclosure at zoo



Elephant proof grating



Locking system at Rescue Centre



Strengthening of chainlink fencing at safari



Underpass system for easy movement of white tiger



Visitors path at Tiger enclosure in the Zoo



Visitors path towards zebra and giraffe

Apart from the above developmental works taken up during the financial year the following are work under progress:

1. Construction of Hyena enclosure
2. Construction of Leopard Safari Animal Holding House

19. Education and Awareness programmes during the year

Educating the visitors, especially the children ensures that the future of animals, and biological parks are in good hands. The Education Wing of BBP undertook various events that supported in brining about an understanding of the various nuances of the Zoo.

Youth Club 2017

The pioneering efforts of the Mysore Zoo, who have been conducting the program for the past 25 years, ensured the practice was adopted by BBP as well. Mr. BP Ravi, the Member Secretary, Zoo Authority of Karnataka (ZAK) provided the guidance and the first Youth Club program was organized in 2017. For over 15 Sundays' from 10 am to 1pm, 60 children in the age category of 12 to 18 from various Schools of Bangalore attended the programme; which was inaugurated by Smt. Mallige Veeresh, Chairperson, ZAK. The following was the programme schedule, which had all the personnel of BBP contributing to the understanding of preservation and conservation to the young participants.



Students with the Forest Department Staff



Chinnara Vana Darshana the walk in the Herbivores Safari



Crocodile day talk



Environment day best out of waste winners



Keepers at the Rhesus monkey Birthday



Photography Winner

Speaker	Session title
Sri. Srinivas S, PRO, BBP	<ul style="list-style-type: none"> • Introduction to Bannerghatta Biological Park and visitor facilities.
Sri. Sujay Suresh, AD(VS), BBP	<ul style="list-style-type: none"> • Introduction to animal management in captivity and role of veterinarians at BBP
Sri. Kushal Yadhav, Biologist, BBP	<ul style="list-style-type: none"> • Adaptations of Mammals • Enrichment at the zoo
Dr. Nikita Salian, Veterinary Officer, BBP	<ul style="list-style-type: none"> • Adaptations of Reptiles • Crocodile restraint demo • Snake bite protocol
Dr. Nirupamma Jiasingh, Veterinary Officer, BBP	<ul style="list-style-type: none"> • Rescue of large mammals • Rescue centre at BBP
Sri. Lokanath V, Entomologist, BBP	<ul style="list-style-type: none"> • Adaptations of butterflies and management of the butterfly park
Dr. Roopa Satish, Veterinary Officer, WRRCC Ashoka Youth Venture Programme Akansh, Youth Club Member Srivats, Volunteer Kushagra Tiwari, Youth Club Member Askar Ali, Volunteer	<ul style="list-style-type: none"> • Urban Human Animal Conflict • Entrepreneurship and alternative careers • Adaptations of Birds • Adaptations of Reptiles • Enrichment practicals
Amala, Education officer	<ul style="list-style-type: none"> • Role of zoos • Wildlife distribution in Karnataka
Sri Vipin Ravindranath, Volunteer	<ul style="list-style-type: none"> • Impact of plastic ingestion on wildlife

At the end of the 15 weekend programme, the children were provided with Course Completion Certificate.

Chinnara Mrugalaya Darshana ▣

Launched on 29th November 2017, BBP invited Government School children residing in forest fringes and Human Wildlife Conflict (HWC) prone areas. This trip is completely sponsored by BBP with the provision of free transport, lunch and entry fee waiver to zoo, safari and Butterfly Park. More than a thousand students and their teachers benefitted from the program, providing a qualitative understanding of the functioning of the BBP environs. Hence, the children got an opportunity to understand the ways to preserve and conserve nature and wildlife by acting upon factors that increase the incidence of HWC. BBP also supported the forest departments' flagship program of Chinnara Vana Darshana by waiving the entry into the zoo and butterfly park, which brought 250 Government School students and teachers which ensured learning on the dynamics of preservation and conservation. Leading non-governmental organizations like Ramakrishna Mission and Dharthi along with the Zoo staff provided academic inputs.



School of India at Eco birthday



Toyota environmental awareness programme



World Earth Day Talk



Youth Club Launch



Zebra Day

Plastic Ban in BBP

Plastic has been a bane on the environment. In the wild world, the animals too have been impacted by the presence of plastic. BBP lead from the front to ensure understanding of the negative use of plastic. An initiative to make BBP environmental friendly, a plastic ban has been implemented on bottles, food packet wrappers, plastic covers, etc. Visitors would receive a sticker on each of their plastic items and they will have to pay Rs. 10/- for each sticker / plastic item. Whilst exiting the park premises they would have to display their plastic item with the sticker to receive their refund amount which was paid at the entrance. It is good to note that plastic dumping has reduced considerably which has ensured, besides cleanliness, ensured the animals do not eat plastic.

20. Important Events and Happenings

SL. No.	Day	Event
1	April 22	World Earth Day
2	June 4 and 5	World Environmental Day: animal birthdays – Mithun, Rhesus macaque, leopard, Elephant and Presidency school litter picking and best out of waste
3	June 17	World Crocodile Day
4	June 18	TCS World Environment Month event
5	June 24	Toyota event
6	July 7	St. Mira Pheasant Enclosure painting
7	July 16	Snake Day
8	July 29	Tiger Day
9	August 10	World Lion Day. Hippo Krathik and Nagas birthdays with School of India
10	August 12	World Elephant Day
11	August 19	Rhesus macaque (Siddhanth, Anjan and Shiva) and spectacled langur (Hanuman) naming ceremony - Sri JnanakshiVidyaniketan School
12	August 20	World Photography Day
13	August 25	Elephant naming Ceremony
14	August 27	RFO Training
15	August 30	Pig tailed macaque (Vince, Utkarsh) and marmoset (Tarun) naming ceremony by Mahn AnjanadriVidya Kendra and Standard English School
16	October 2	Talk on organic composting and reusing plastic : Wildlife week launch
17	October 3	Zoo day and Youth Club Launch
18	October 4	International Zoo Keepers Day
19	October 5	Conservation Story telling
20	October 7	Competition for School children
21	December 14	World Monkey Day
22	January 25	World Zebra Day
23	February 3	World Wetlands Day
24	March 3	World Wildlife Day
25	March 20	World Sparrow Day

21. Seasonal special arrangements for upkeep of animals

During the summer months, that animals are provided with measures of enrichment to ensure that they are well taken care during the arduous climate.



Summer enrichment



Enrichment for tiger on its birthday



Marmoset enrichment



Enrichment spectacled langur

22. Research Work carried out and publications

Manjunatha V; Sujay CS; Nikitha Salian; Shiva Shankar BP; Giridhar P and Byregowda SM. (2017) *Molecular and Histological diagnosis of infectious canine hepatitis in Dhole puppies in captive conditions*; Veterinary Pathology Congress-2017 XXXIV Annual Conference of Indian Association of Veterinary Pathologists on “Emerging Horizons in Diagnosis of Animal and Poultry Diseases Towards Sustainable Production in Asian Countries” 09-11 November 2017 at College Of Veterinary Science, Hebbal, Bangalore -560024, Karnataka, India.

Manjunatha V; Roopa Satish; Shankar BP; Giridhar P and Byregowda SM. (2017); *Retrospective study of postmortem lesions and histopathological findings in Asian Koels*; Veterinary pathology congress-2017 xxxiv Annual Conference of Indian Association of Veterinary Pathologists on “Emerging Horizons in Diagnosis of animal and poultry diseases towards sustainable production in asian countries” 09-11 November 2017 at College of Veterinary Science, Hebbal, Bangalore -560024, Karnataka, India.

V. Manjunatha, M. Rout, P. Giridhar, C.S. Sujay, N. Salian, N. Jaisingh, V. Srivastava and S.M. Byregowda (2017); *Occurrence of gastrointestinal parasitic infection in captive Indian elephants (*Elephas maximus indicus*) at Bannerghatta Biological Park, Karnataka*; publication in JII, Vol. 20, No. 1, Jan-June 2018.

Manjunatha Venkataravanappa, Manoranjan Rout, Sujay Suresh, Nirupama Jaisingh and Nikitha Salian : (2018); *Demonstration of parasitic fauna in Indian cobra (*Naja naja*) and Indian rock python (*Python molurus*) reared in a Biological Park of Karnataka, South India*: indian Journal of Animal Research; Print ISSN:0367-6722 / Online ISSN:0976-0555.

Arun Attur Shanmugam, Sanath Krishna Muliya, Ajay Deshmukh, Sujay Suresh, Anukul Nath, Pa Kalaignan, Manjunath Venkataravanappa and Lyju Jose (2017) *Baseline hematology and serum biochemistry results for Indian leopards (*Panthera pardus fusca*)*; Veterinary World, EISSN: 2231-0916; Available at www.veterinaryworld.org/Vol.10/July-2017/19.pdf 19.

V. Manjunatha, M. Rout, C S Sujay, N. Jaisingh, Nikitha Salin and S.M. Byregowda “*Clinico-pathologic observations of spontaneous hepatic coccidiosis in broiler rabbits maintained in Bannerghatta Biological Park in Karnataka state of India; 2017*”. “Indian Journal of Animal Research”. Accepted article Ref. No. B-3436.

23. Conservation Breeding Programme of the Zoo

No conservation Breeding programme within the zoo has been taken up during the year.

24. Animal Exchange Programme

Animal Acquisition							
Sl. No.	Species	Sex			From which Zoo	Date of Arrival in the Zoo	
		M	F	U			
A	1	Peafowl	0	2	0	Rescued	11.05.2017
	2	Sloth bear	1	1	0	Pavagada, Tumkur District	24.05.2017
	3	Red eared slider terrapins	0	0	2		11.06.2017
	4	Tiger Vinay	1	0	0	Pilikula Zoo, Mangalore	22.06.2017
	5	Common Palm civet	1	1	0	Pilikula Zoo, Mangalore	22.06.2017
	6	Jackal	1	0	0	Rescued	02.08.2017
	7	Four horned antelope	1	0	0	Rescued	07.08.2017
	8	Jackal	0	1	0	Rescued	10.08.2017
	9	Ostrich	1	1	0		17.01.2018
Total (14)		6	6	2			

Animal Disposal							
Sl. No.	Species	Sex			Going to which Zoo	Date of deposition from the Zoo	
		M	F	U			
B	1	Hippopotamus Kavitha	0	1	0	Pilikula Zoo, Mangalore	21.06.2017
	2	Tigress Rani	0	1	0	Pilikula Zoo, Mangalore	21.06.2017
	3	Lion Sarvesh	1	0	0	Shimoga Zoo	10.11.2017
	4	Lion Sushminth	0	1	0	Shimoga Zoo	10.11.2017
	5	Elephant Laxmi	0	1	0	Sri Suttur Mutt, Mysore	12.03.2018
Total (5)		1	4	0			

25. Rescue and Rehabilitation of wild animals carried by the BBP Veterinary Team



26. Annual Inventory of animals

Form – II (See Rule 11(1)) Part – A Inventory Report for the Year 2017-18 Endangered Species*

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

INVENTORY OF SCHEDULE I AND II SPECIES (WILDLIFE PROTECTION ACT)

Zoo: Mammals

Sl. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
Mammals																					
1	Black Buck : <i>Antelope cervicapra</i>	5	11	12	28	0	2	12	0	0	0	0	0	0	0	3	6	9	18	6	33
2	Leopard : <i>Panther pardus</i>	15	19	0	34	1	0	0	0	0	0	0	0	0	1	1	0	15	18	0	33
3	Lion Tailed Macaque: <i>Macaca silenus</i>	0	1	0	1													0	1	0	1
4	Himalayan Black Bear : <i>Selenarctels thibetanuts</i>	4	2	0	6													4	2	0	6
5	Jackal : <i>Canis aureus</i>	0	2	0	2	0	0	0	1	1	0	0	0	0	0	0	0	1	3	0	4
6	Macaque Rhesus : <i>Macaca mulatta</i>	3	4	1	8	1	0	1	0	0	0	0	0	0	0	0	0	6	4	0	10
7	Common or Hanuman Langur: <i>Presbytis entellus</i>	0	3	0	3													0	3	0	3
8	Indian Giant Squirrel - <i>Ratufa indica</i>	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
9	Shanghai/Thamin Deer: <i>Cervus Eldi</i>	5	5	10	20	0	0	1	0	0	0	0	0	2	2	0	10	6	1	17	
11	Wild Dogs: <i>Cuon alpinus</i>	1	1	0	2	1	1	0	0	0	0	0	0	1	1	0	1	1	0	2	
12	Indian Grey Wolf: <i>Canis lupas pallipes</i>	2	2	0	4													2	2	0	4
13	Four horned Antelope: <i>Tetracerus quadricornis</i>	1	3	1	5	0	0	0	1	0	0	0	0	0	3	1	2	0	0	2	
14	Jungle Cat: <i>Felis chaus</i>	2	2	11	15	0	0	0	0	0	0	0	0	2	1	0	5	6	1	12	
15	Spectacled Langur: <i>Trachypithecus obscurus</i>	2	2	0	4													2	2	0	4
16	Pig Tailed Macaque: <i>Macaca Leonina blyth</i>	2	2	1	5	1	0	0	0	0	0	0	0	0	0	0	4	2	0	6	
17	Assamese Macaque (Hybrid): <i>Macaca assamensis</i>	1	1	0	2	1	0	0	0	0	0	0	0	1	0	0	1	1	0	2	
18	Goral: <i>Nemorhaedus</i>	0	1	0	1													0	1	0	1
Total		43	62	36	141	5	3	14	2	1	0	0	0	0	7	12	7	62	70	8	140

Zoo: Birds

Sl. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
Birds																					
1	Great Indian Horn bill : <i>Buceros viconis</i>	0	1	0	1													0	1	0	1
2	Pea fowl Indian : <i>Pavo cristatus</i>	4	2	0	6	0	0	1	0	2	0	0	0	0	1	1	4	3	0	7	
2a	Pea fowl white : <i>Pavo cristatus</i>	4	0	0	4													4	0	0	4
3	Spoon bill : <i>Platalea leucorodia</i>	1	0	0	1													1	0	0	1
4	Kalij Pheasant: <i>Lophurs leucomelana</i>	0	1	0	1													0	1	0	1
5	Red Jungle Fowl: <i>Gallus gallus</i>	6	2	0	8	0	0	0	0	0	0	0	0	0	1	0	6	1	0	7	
Total		15	6	0	21	0	0	1	0	2	0	0	0	0	2	1	15	6	0	21	

Zoo: Reptiles

Sl. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018						
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T			
REPTILES																								
1	Crocodile long snouted Gharial: <i>Gravialis gangeticus</i>	0	4	0	4													0	4	0	4			
2	Indian - Rock Python : <i>Python molurus</i>	3	4	0	7	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	2	2	0	4
3	Cobra Indian : <i>Naja naja</i>	9	8	0	17													9	8	0	17			
4	King Cobra: <i>Ophiophagus hannah</i>	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	2
5	Viper Russells : <i>Vipera russelli</i>	4	2	1	7													4	2	1	7			
6	Common Indian Monintor Lizard: <i>Varanus bengalensis</i>	0	1	1	2													0	1	1	2			
7	Rat Snake: <i>Ptyas Mucousus</i>	0	0	30	30													0	0	30	30			
8	Black Spotted Terrapins: <i>Geoclemys Haniltoni</i>	0	0	35	35	0	0	17	0	0	0	0	0	0	0	0	0	1	2	0	29	20	49	
TOTAL		18	21	67	106	0	0	17	0	0	0	0	0	0	0	0	0	2	4	2	16	47	52	115

INVENTORY FORM OF OTHER ANIMALS LISTED UNDER OTHER SCHEDULE AND EXOTIC SPECIES OF WILDLIFE PROTECTION ACT

Sl No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018						
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T			
MAMMALS																								
1	Hippopotamus : <i>Hippopotamus amphibius</i>	3	4	0	7	0	0	2	0	0	0	0	1	0	0	0	0	1	3	3	1	7		
2	Porcupine : <i>Hystrix indica</i>	0	0	4	4													0	0	4	4			
3	Cat Toddy : <i>Paradoxurus hemaphrodites</i>	1	1	2	4	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	2	6		
4	Chital or Spotted deer : <i>Axis axis</i>	5	12	5	22	0	1	10	0	0	0	0	0	0	0	0	0	3	2	7	12	9	28	
5	Marmosets: <i>Callithrix jacchus</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
6	Hog Deer: <i>Axis Porcinus</i>	6	9	6	21	0	2	8	0	0	0	0	0	0	0	0	0	0	7	22	2	31		
7	Barking Deer: <i>Muntiacus muntjak</i>	2	3	2	7	0	0	4	0	0	0	0	0	0	0	0	0	0	2	3	6	11		
8	Striped Hyena: <i>Hyena hyena</i>	1	1	0	2													1	1	0	2			
9	Nilgai or Blue Bull: <i>Boselaphus tragocamelus</i>	2	4	1	7	0	0	3	0	0	0	0	0	0	1	0	0	1	4	4	9			
10	Zebra: <i>Equus burchelli</i>	2	2	0	4	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	3			
Total		23	36	20	79	0	3	27	1	1	0	0	1	0	2	4	3	25	48	28	101			

Zoo area: other mammals

SL. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
MAMMALS																					
1	Hippopotamus : <i>Hippopotamus amphibius</i>	3	4	0	7	0	0	2	0	0	0	0	1	0	0	0	1	3	3	1	7
2	Porcupine : <i>Hystrix indica</i>	0	0	4	4													0	0	4	4
3	Cat Toddy : <i>Paradoxurus hemaphrodites</i>	1	1	2	4	0	0	0	1	1	0	0	0	0	0	0	0	2	2	2	6
4	Chital or Spotted deer : <i>Axis axis</i>	5	12	5	22	0	1	10	0	0	0	0	0	0	0	3	2	7	12	9	28
5	Marmosets: <i>Callithrix jacchus</i>	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
6	Hog Deer: <i>Axis Porcinus</i>	6	9	6	21	0	2	8	0	0	0	0	0	0	0	0	0	7	22	2	31
7	Barking Deer: <i>Muntiacus muntjak</i>	2	3	2	7	0	0	4	0	0	0	0	0	0	0	0	0	2	3	6	11
8	Striped Hyena: <i>Hyena hyena</i>	1	1	0	2													1	1	0	2
9	Nilgai or Blue Bull: <i>Boselaphus tragocamelus</i>	2	4	1	7	0	0	3	0	0	0	0	0	0	1	0	0	1	4	4	9
10	Zebra: <i>Equus burchelli</i>	2	2	0	4	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	3
Total		23	36	20	79	0	3	27	1	1	0	0	1	0	2	4	3	25	48	28	101

Zoo area: other Reptiles

Sl No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
REPTILES																					
1	Red Sand Boa : <i>Eryx johnii</i>	1	1	0	2													1	1	0	2
2	Tortise Indian Star : <i>Geochelone elegans</i>	4	5	0	9	0	0	0	0	0	0	0	0	0	1	1	0	3	4	0	7
3	Crocodile Caiman : <i>Caiman crocodilus</i>	12	10	0	22	0	0	0	0	0	0	0	0	1	0	0	11	10	0	21	
4	Red - eared slider turtle: <i>Trachemys scripta elegans</i>	0	0	57	57	0	0	0	0	0	2	0	0	0	2	0	0	32	25	0	57
5	Batagar Terrapin or River Terrapin: <i>Batagar baska</i>	12	8	0	20	5	9	0	0	0	0	0	0	1	0	0	16	17	0	33	
6	Indian Mud or Flapshell Turtle: <i>Lissemys punctata</i>	2	1	0	3	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	
7	Morelet's Crocodile: <i>Crocodylus moreletii</i>	0	1	0	1													0	1	0	1
8	Iguana green: <i>Iguana iguana</i>	1	1	0	2													1	1	0	2
TOTAL		32	27	57	116	5	9	0	0	0	2	0	0	6	2	0	65	59	0	124	

Lion and Tiger Safari

Sl. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
Schedule I and II species																					
1	Tiger - Royal Bengal:- <i>Panthera tigris tigris</i>	15	11	0	26	0	0	0	1	0	0	0	1	0	1	0	0	15	10	0	25
2	White Tiger-Royal Bengal- <i>Panthera tigris tigris</i>	3	4	0	7	0	0	0	0	0	0	0	0	0	1	2	0	2	2	0	4
	Total	18	15	0	33	0	0	0	1	0	0	0	1	0	2	2	0	17	12	0	29
Other Schedule Exotic species																					
1	Lion - Hybrid <i>Panthera leo</i>	10	10	0	20	0	0	6	0	0	0	1	1	0	0	2	4	11	7	0	18
	Total	10	10	0	20	0	0	6	0	0	0	1	1	0	0	2	4	11	7	0	18

Elephant Care Center

Sl. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
Schedule I and II species																					
1	Elephant Indian : <i>Elephas maximus</i>	9	12	0	21	1	1	0	0	0	0	0	1	0	1	0	0	9	12	0	21
	Total	9	12	0	21	1	1	0	0	0	0	0	1	0	1	0	0	9	12	0	21

Herbivore Safari

Sl. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
Schedule I and II species																					
1	Black Buck : <i>Antelope cervicapra</i>	5	2	0	7													5	2	0	7
2	Gaur or Indian Bison:- <i>Bos gaurus</i>	4	1	0	5	1	0	0	0	0	0	0	0	0	0	0	0	5	1	0	6
	Total	9	3	0	12	1	0	0	0	0	0	0	0	0	0	0	0	10	3	0	13
Other Schedule Exotic species																					
1	Chital or Spotted deer : <i>Axis axis</i>	108	115	431	654	0	0	0	0	0	0	0	0	0	1	0	0	107	115	431	653
2	Barking Deer : <i>Muntiacus muntjak</i>	2	3	0	5													2	3	0	5
3	Sambar:- <i>Rusa uniclour</i>	84	90	128	302	0	0	0	0	0	0	0	0	0	1	0	0	84	89	128	301
4	Nilgai or Blue Bull:- <i>Boselaphus tragocamelus</i>	5	5	0	10	0	0	2	0	0	0	0	0	0	1	1	1	4	4	1	9
5	Ho Deer: <i>Hyelaphus porcinus</i>	3	13	0	16													3	13	0	16
	Total	202	226	559	987	0	0	2	0	0	0	0	0	0	2	2	1	200	224	560	984

Bear Safari

Sl. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
1	Sloth Bear:- <i>Melursus ursinus</i>	32	46	0	78	0	0	0	1	1	0	0	0	0	2	1	0	31	46	0	77
Total		32	46	0	78	0	0	0	1	1	0	0	0	0	2	1	0	31	46	0	77

BFF Tiger

Sl. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
1	Sumatran Tiger:- <i>Panthera tigris sumatrae</i>	1	0	0	1													1	0	0	1
Total		1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1

Rescue Center

Sl. No	Name of the animal & Scientific name	Stock as on 01/04/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
1	Lion-Hybrid:- <i>Panthera leo</i>	7	6	0	13	0	0	0	0	0	0	0	0	0	1	2	0	6	4	0	10
Total		7	6	0	13	0	0	0	0	0	0	0	0	0	1	2	0	6	4	0	10

Rescue and Rehabilitation of wild animals carried out by the Zoo

Sl. No	Name of the animal & Scientific name	Stock as on 01/03/2017				Births			Acquisitions			Disposals			Deaths			Stock as on 31/03/2018			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
1	Star Tortoise	1	2	0	3										0	0	0	1	2	0	3
Total		1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3

Part – B

27. Mortality of Animals

Sl. No.	Animal Name (with individual identification mark, if any)	No.	Sex	Date of Death	Reason of Death as per the Post-mortem report
1	Thamin Deer	1	M	05.04.2017	Succumbed to infighting injuries
2	King Cobra	1	F	14.04.2017	Multi organ failure and age-related complications
3	Sloth Bear	1	M	18.04.2017	Tuberculosis
4	Four horned Antelope	1	F	28.04.2017	Endocarditis
5	Lioness Anu (Safari)	1	F	30.04.2017	Multi organ failure
6	Four horned Antelope	1	F	30.04.2017	Cardiac Myopathy and Septicaemia
7	Grey pelican	1	U	10.05.2017	Trauma, Stress and Respiratory failure
8	Four horned Antelope	1	F	10.05.2017	Haemorrhagic Enteritis
9	Peafowl	1	F	11.05.2017	Egg bound condition
10	Hippopotamus calf	1	U	12.05.2017	Stampede
11	Thamin deer fawn	1	F	13.05.2017	Impaction
12	Four horned Antelope	1	U	14.05.2017	Capture Myopathy
13	Assamese Macaque baby	1	M	21.05.2017	Malnourishment due to rejection by mother
14	Sloth bear Madhan	1	M	28.05.2017	Bronchopneumonia and TB
15	Leopard Anshika cub	1	M	28.05.2017	Malnourishment due to rejection by mother
16	White tiger Raziya	1	F	08.07.2017	Multi organ failure, due to carcinoma
17	Thamin deer	1	F	09.07.2017	Multi organ failure
18	Python	1	M	24.07.2017	Haemo thorax
19	Zebra	1	F	25.07.2017	Caecum torsion and colic
20	Star tortoise	1	F	07.08.2017	Pneumonia
21	Indian Giant Squirrel	1	F	29.08.2017	Hepatitis
22	Spotted Deer	1	F	06.09.2017	Pregnancy related death due to marshy area
23	Lion Arjuna (RC)	1	M	07.09.2017	Chronic pneumonia, renal failure due to senility
24	Pea fowl Chick	1	U	10.09.2017	Thermal shock due to heavy rain
25	Leopard Rakshita (zoo)	1	F	13.09.2017	Dislocation of atlanto-axial due to infighting
26	Spotted Deer	1	F	16.09.2017	Capture myopathy and stress
27	Red Crested pochard	1	M	17.09.2017	multiorgan failure
28	White tiger Shreyas (safari)	1	M	20.09.2017	Trauma due to infighting (Spinal shock)
29	Rhea chick	1	U	26.09.2017	Genetic deformity, death due to stampede
30	White tiger Subhdra	1	F	10.10.2017	Necrotic Hepatitis & Pancreatic atrophy
31	Elephant Aswathama	1	M	13.10.2017	Klebsiella pneumonia and Entero colitis

Sl. No.	Animal Name (with individual identification mark, if any)	No.	Sex	Date of Death	Reason of Death as per the Post-mortem report
32	Black Buck Adult	1	F	18.10.2017	Hypoglycaemia, Capture Myopathy, Foot rot due to excessive water logging.
33	Flap shell Turtle (Chip No:00077169D8)	1	M	14.11.2017	Pneumonia
34	Sambar Deer (HS)	1	F	23.11.2017	Haemorrhagic shock due to infighting
35	Star tortoise	1	F	30.11.2017	Cold shock due to bad weather
36	Indian Rock Python (chip # 000F2E336)	1	F	04.12.2017	Helminthiasis and impaction
37	Eclectus Parrot	1	F	16.12.2017	Avian Kidney Disease
38	Caiman	1	M	17.12.2017	Anorexia and Pneumonia (senility)
39	Red Jungle Fowl	1	F	18.12.2017	Senility and multiorgan failure
40	Crowned pigeon	1	M	23.12.2017	Helminthiasis
41	Sun Conure	1	F	28.12.2017	Enteritis
42	Sun Conure	1	M	02.01.2018	Chronic pancreatitis
43	Black spotted Terrapin	1	F	05.01.2018	Pneumonia
44	Black spotted Terrapin	1	U	08.01.2018	Pneumonia
45	Star tortoise	1	M	09.01.2018	Cold shock
46	Red Eared Slider Turtle	1	M	10.01.2018	Cold shock
47	Black spotted Terrapin	1	U	16.01.2018	Cold shock
48	Nilgai	1	M	16.01.2018	General body weakness, debility, dehydration
49	Grey Pelican	1	M	24.01.2018	Infighting Injury
50	Lioness Hema (Safari)	1	F	01.02.2018	Lung carcinoma
51	Indian Rock Python (Chip# 00075FA07F)	1	F	01.02.2018	Anaemia and Weakness
52	King Cobra	1	M	02.02.2018	Hepatic Carcinoma
53	Tiger Vinay (Safari)	1	M	04.02.2018	Respiratory Failure (lung Infection)
54	Red eared Slider	1	M	12.02.2018	Pneumonia
55	Jungle Cat	1	M	14.02.2018	Cannibalism
56	Nilgai (safari)	1	M	18.02.2018	Hyper volemic shock due to lung puncture
57	Nilgai (safari)	1	U	19.02.2018	Leopard Kill
58	Marmoset	1	M	20.02.2018	Pneumonia
59	Lioness Rashita (RC)	1	F	22.02.2018	Multi organ failure
60	Spotted Deer (Safari)	1	M	24.02.2018	Leopard kill
61	Dhole Puppy (Bhumika Chip #00076952CB)	1	F	26.02.2018	Infectious canine Hepatitis
62	River Terrapin (Microchip No 000771670F)	1	M	05.03.2018	Enteritis
63	Dhole puppy (Bhuvan)	1	M	08.03.2018	ICH
64	Sloth bear (Kukki)	1	F	16.03.2018	Rabies
65	Lioness Usha (RC)	1	F	18.03.2018	Senility, Multi organ failure
66	Jungle cat	1	M	19.03.2018	Intestinal obstruction
67	Jungle cat	1	F	20.03.2018	Peritonitis
68	Thamin deer	1	M	22.03.2018	infighting
69	Silver pheasant	1	F	29.03.2018	Senility
70	Flap shell turtle	1	F	31.03.2018	Septicaemia
71	Nilgai (HS)	1	F	31.03.2018	infighting injury

Total 71

Infant Mortality Report:

Sl. No.	Animal Name (with individual identification mark, if any)	No.	Sex	Date of Death	Reason of Death as per the Post-mortem report
1	Lioness Sana cub	1	U	7/30/2017	Weakling
2	Lioness Sana cub	1	U	7/31/2017	Rejected by mother
3	Black Buck	1	F	8/4/2017	Neonatal death
4	Lioness Sana Cub	1	M	8/9/2017	Neonatal death, lack of care
5	Black Buck fawn	1	U	9/2/2017	Endocarditis/anxiety
6	Black Buck fawn	1	U	9/3/2017	Capture myopathy/Pneumonia
7	Spotted deer fawn	1	U	9/10/2017	Endocarditis/anxiety
8	Spotted deer fawn	1	U	9/11/2017	Pneumonia
9	Spotted deer fawn	1	F	10/15/2017	Capture myopathy, Hypothermia due to heavy rains and water logging
10	Black buck fawn	1	F	10/18/2017	Capture myopathy, Hypothermia due to heavy rains and water logging
11	Lioness Sana cub	1	U	12/9/2017	Catabolism
12	Black Buck	1		1/14/2018	Lack of maternal care
13	Black Buck	1		2/2/2018	Anorexia - Weakling not sucked milk properly
Total		13			

28. Compliance with conditions stipulated by the Central Zoo Authority

Status of compliance to the particulars called for vide letters No. F.No.19-80/92- CZA (125) (Vol. IX) (BKG)/897/2016, dated: 13-06-2016 regarding the standard norms to be followed in the zoo.

Sl. No.	Norm No. Under Rule 10	Details on the conditions stipulated by the CZA	Status of compliance as on 29-10-2016 & 27-04-2017
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General requirements

1	2(6i)	The residential colony including quarter of the Range Officer has entry from the zoo. The entry to the residential colony through the zoo premises may be stopped immediately.	All the Residential quarters including the officers quarters is being shifted outside the zoo. The design and drawings of the same is under process.
2	2 (6ii)	The animal attendants and the other personnel working in the Bear Rescue Center are staying in the same building at the upper storey of the building in which the Veterinary Hospital and the Animal Houses are at the ground level. The building and the campus of the Rescue center may not be used for any type of residential purpose.	Only night duty staffs including veterinarians were present during the night hours on Bear Rescue Center premises for ensuring the security and medical care of the rescued bears.
3	1(7)	The drainage system of the zoo is in very bad shape and has not been properly planned. It should be addressed in a proper manner with a proper drainage plan.	Already 100 mtrs of UGD line has been laid and the unlined drain near the new Hippopotamus enclosure is being converted to RCC drain. The remaining portion will be tackled immediately.

3. Development and Planning

4	3(1)	The enclosure as proposed for modification in the Master Plan should be taken up on priority	The enclosures proposed for modifications being taken up for implementation on priority
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4. Animal housing, display of animals and animal enclosure

5	4(2&3)	The moat in safari needs modification to reduce wild elephant damages	Wherever the moat is vulnerable to elephants retaining wall is being constructed based on the availability of funds
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5. Upkeep and healthcare of animals

6	5(4)	A street dog was seen in the zoo premises. The entry points of the dogs in the zoo premises should be identified and plugged effectively. It should be ensured that the dogs and other feral animals do not enter the zoo premises.	All the access point of street dogs has been closed and the dogs have been caught and rehabilitated.
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9. Acquisition and breeding of animals

7	9(1,2&9)	The breeding of lion, tigers housed in safari needs progeny profile. There are excess tigers and lions in the Safari/Zoo, which should be reduced or exchanged, and further breeding should be stopped.	Action has been initiated
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29. List of free living wild animals within BBP

Tiger, Gaur, Sambar deer, Spotted deer, Leopard, Sloth bear, mugger crocodile, painted stork, elephant, python, cobra, viper, rat snakes, wild boar, peacock, red jungle fowl are part and parcel of the eco-system. Considering that the Zoo is uniquely part of a larger Bannerghatta National Park (BNP) eco-system, there is an interaction with the environment, leading to the unique phenomena.



Wild Elephant



Wild Tiger



Wild Boar

BBP Laboratory

Wild Animal Disease Diagnostic Laboratory (WADDLv), unique laboratory of BBP

A Benchmark agreement between the Zoo Authority of Karnataka (ZAK) and the Institute of Animal Health and Veterinary Biologicals (IAH and VB) ensured the creation of a Center for Excellence in the form of the Wild Animal Disease Diagnostic Laboratory (WADDL) in BBP. WADDL today, collaborates with the BBP Zoo Hospital, the Rescue Center, and Wildlife SoS and generates Scientific Data that helps in the diagnosis and prognosis of the various issues being faced vis-à-vis the health of the animals in the Bannerghatta area and even beyond.

The samples such as urine, stool, sputum, saliva, blood, serum and other required specimens are collected from the inmate animals and dead carcass to investigate into the general status of health, cause of disease, cause of death etc. Based on the periodical results obtained through clinical tests and expert opinion the diseases are prevented, treated, monitored, controlled and eradicated.

WADDL is headed by Dr. Manjunath, Scientist and supported by two staff: Smt Madhuri (Laboratory Technician) and Smt Hemavathi (Laboratory Assistant).

Routine activities of WADDL Lab. (Wild Animal Disease Diagnostic Laboratory)

- ❖ Haematology
 - Clinical Examination of Blood, Serum, Urine and Exudates from the Wild Animals
 - Blood Examination: Hematology – parameters include
 - WBC, RBC, Hb, PCV, DLC, Platelets, MCV, MCH and MCHC
- ❖ Serum Examination: Serology
 - Liver function tests: Total Protein, Albumin, Globulin, SGOT, SGPT and Alkaline Phosphate
 - Kidney function tests: Creatinine and BUN
 - Lipid Profile: Total Cholesterol and Triglycerides
 - General: Glucose and LDH
 - Serum Electrolytes: Ca, P, Na, K
- ❖ Post mortem Examination of Wild Animals, Wild Birds and Reptiles and diagnosis of disease
- ❖ Wild Animal Disease investigation and advices to taking control measures to control the diseases in the BBP, BRC
- ❖ Bacterial Isolation and identification by cultural, staining and biochemical methods in Wild animal and Birds
- ❖ Fungal Isolation and identification by cultural, staining methods in Wild animal and Birds
- ❖ Acid Fast staining / Ziehl Neelsen staining for the Acid-fast bacteria such as mycobacterium spp
- ❖ Confirmation of the bacterial, viral and parasitic diseases in the wild animals by PCR method.
- ❖ Wild animal research and publication of the new data about wild animal diseases and management.
- ❖ The material sent to IAH&VB Hebbal for further confirmation
- ❖ Wildlife forensics, Identification of Wild animal species using confiscated Blood, hair follicle, meat, hide, horn and bone samples.



Type and number of Laboratory Samples received and analyzed from the BBP

Sl. No	Type of specimen	April 2017	May 2017	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017	January 2018	February 2018	March 2018	Total
1	Hematology	5	21	16	17	20	14	13	20	30	15	22	12	205
2	Blood smears	5	21	15	16	18	14	13	20	28	16	20	12	198
3	Fecal samples	28	8	19	17	30	25	40	74	22	65	35	63	426
4	Impression Smears	11	10	14	16	23	26	36	44	17	35	24	30	286
5	Immunoserology													
6	Histopathology	11	20	9	15	17	14	5	4	1	4	23	6	129
7	Serum chemistry	80	315	240	238	260	181	169	254	293	188	264	156	2638
8	Skin scrapings		5					4	4	4	3	4	7	31
9	Urine analysis								2	6	4	2	4	18
10	TB & JD testing	6			2	6		4		4	4			26
11	Fecal sample-AFB	2	10	6	10	2	10	5	7	3		9	9	73
12	Anti bioassay		3	1					4	6	6	5	1	26
13	Autopsies	1	6	5	6	7	10	12	17	8	5	13	13	103
14	Brain for Rabies						2	1				1	3	7
15	FMD-Tong. Epith.													
16	Brain for BSE													
17	AI - tracheal / cloacal/Envf swabs							7		1				8
18	Poisoning/ Toxicity			1	1	1		2	2					7
19	Milk sample													
20	Nasal discharge		2					1	3	1	6	2		15
21	Miscellaneous	9	34	19	25	18	28	41	16	12	26	5	18	251
	TOTAL	159	455	346	349	387	302	353	471	438	376	459	334	4429

Collaborative Wildlife Investigations between: BBP, WADDL and IAH&VB during 2017-18

1. Elephant deaths investigated by Dr. Manjunath and Dr. Chandra Naik at Nagarahole National Park in May 2017.
2. Dr. Manjunath and Dr. Shivaraj investigated the Black Buck deaths at the Animal Rescue Center in Puttaparthi, August 2017.
3. In January 2018, WDDL Scientists investigated and identified the disease ICH following the death of Dhole pups in BBP Zoo. (January 2018).
4. Investigated the Tiger Deaths in BBP Safari area (February 2018).
5. Dr. Manjunath investigated the death of a Gaur in the Anekal Wildlife Forest Area.

Extension Education activities in WADDL, BBP during 2017-18

- ❖ Dr. Manjunath was the Resource Person in the Continuing Education Refresher Course on Diseases Diagnosis and Management Practices of Livestock, held at the Karnataka Veterinary Council, Bangalore during: 14th to 16th and 21st to 23rd September 2017.
- ❖ Dr. Manjunath attended the one-week CCMB- Lacones training course in "DNA-based Wildlife Forensics" to sensitize and provide hands on training to participants on DNA Technology and its use in Wildlife Forensics. 25th September 2017 to 1st October 2017.
- ❖ The leading Television Channel TV9 had invited Dr. Manjunath for a panel discussion on Elephant and the Human Conflict in December 2017.

BBP Butterfly Park

According to some estimates, there are about 20,000 different butterfly species in the world, of which 1,501 exist in India. Butterflies, attract attention of all for their beauty, the grace, and the efforts they take at survival. Besides, of course scientists and the common man get attracted to Butterflies which fall under the invertebrate group, for the metamorphosis, one of the most remarkable phenomena of nature, which the Butterfly demonstrates.



One glance at the Circular Conservatory which occupies an area of 10,000 square feet with a Polycarbonate roof and plays host to 20 species of Butterflies; one feels that a small insect like the Butterfly commands so much respect because the support it provides to the Ecosystem. Inaugurated on 25th November 2006; the Butterfly Park in Bannerghatta is the First Butterfly Park in India.



List of butterflies breeding in research centre in Butterfly Park

Sl.No	Common name	Scientific name	Host plant
Papilionidae(family)			
1	Common mormon	<i>Papilio polytes L.</i>	<i>Murraya koenigi</i>
2	Crimson rose	<i>Pachliopta hector.L.</i>	<i>Aristolochia indica</i>
3	Blue mormon	<i>Papilio polymnestor</i>	<i>Citrus spp</i>
4	Southern bird wing	<i>Triodes minos</i>	<i>Aristolochia indica</i>
5	Common lime	<i>Papilio demoleus</i>	<i>Citrus spp</i>
Nymphalidae			
4	Plain tiger	<i>Danus chrysippus</i>	<i>Calotropis gigantean</i>
5	Blue tiger	<i>Tirumala limniace</i>	<i>Wattakaka volubilis</i>
6	Striped tiger	<i>Danus genutia</i>	<i>Cynumcum spp</i>
7	Common castor	<i>Ariadne merione</i>	<i>Recinus communis</i>
8	Indian common crow	<i>Euploea core cramer</i>	<i>Nerium oleander</i>
9	Double branded crow	<i>Eulopea sylvester fabricius</i>	<i>Ichocarpus frutescens</i>
Pieridae			
10	Common emigrant	<i>Catopsilia pomana</i>	<i>Cassia tora</i>
11	Mottle emigrant	<i>Catopsilia pyrantha</i>	<i>Cassia fistula</i>
12	Common grass yellow	<i>Eurema hecabe</i>	<i>Cassia tora</i>
Lycaenidae			
13	Red pierrot	<i>Talicerca nyseus</i>	<i>Kalanchoea pinnata</i>
14	Common pioneer	<i>Anaphaeis aurota</i>	<i>Capparis sepiaria</i>
15	Common rose	<i>Pachliopta aristolochiae</i>	<i>Aristolochia indica</i>
16	Common wanderer	<i>Pareronia valeria</i>	<i>Capparis zeylanica</i>
17	Yellow orange tip	<i>Ixias pyrene</i>	<i>Capparis sepiaria</i>
18	Tawny castor	<i>Acraea violae</i>	<i>Passiflora foetida</i>
19	Common jazelbel	<i>Delias eucharis</i>	<i>Loranthus</i>
20	Common leopard	<i>Phalanta phalanta</i>	<i>Salix tetra sperma</i>
21	Chocolate pansy	<i>Junonia iphita</i>	<i>Ruelia simplex</i>
22	Common baron	<i>Euthalia aconthea</i>	<i>Anacardium occidentale</i>

Other activities:

- planting flowering plants in entire butterfly park is carried out,
- In few species, the park faced INBREEDING PROBLEM; it was tackled by introducing wild butterflies in same species.
- The Park personnel trained the volunteers regarding importance of butterflies and their behavior
- Some butterfly prefer not only nectar as food source, they required minerals and amino acids as well, for this the Entomologist and team kept bird droppings in patches, and observed the butterflies being attracted to droppings, as well as fruits were supplied as a food source.
- Mud puddling spots to attract male butterflies.
- During 2017-18 the Butterfly Park team successfully tried 4 new species in breeding centre like common pierrot, common bushbrown, psych butterfly, chocolate pansy, with their respective host plants.

Zoo Hospital

The BBP Zoo Hospital, has uniquely positioned itself as the organization which provides for the well-being of the animals in the Zoo, the Safari, and the Rescue Center. Work in tandem with the various functionaries of the Zoo, the Veterinarians have ensured successful identification of diseases; treated the animals to vaccinations; ensured a supply chain of food; regimes for dis-infection and de-worming; operated upon them in case of injuries and health issues and even rescued many animals from the Bannerghatta ecosystem and other places.

Dr. K.S. Umashankar, Assistant Director (Veterinary Services) and team have ensured a constant vigil of the animals, leading to a healthy Zoo. The team of Veterinarians, have ensured enrichment of animals in the Zoo, Safari and Rescue Center during the difficult months, leading to better wildlife management.



Zoo Hospital



Zoo Hospital Ambulance



Zoo Hospital



Tending to elephant leg fracture

Animals rescued by the Zoo Hospital:

SL. No.	Species	Place	Date	Number
1	Leopard	Sangana Basavana Doddi, Ramanagara District	05.02.2018	1
2	Sloth Bear	Biligumba, Ramanagara District	16.02.2018	1
3	Sloth Bear	Jogi Doddi, Ramanagara District	17.02.2018	2
4	Leopard	Wonderla Amusement Park, Bidadi	28.03.2018	1
5	Leopard	Beli Kothanuru, Kanakapura Taluk	26.05.2018	1

The Zoo Hospital Veterinarians have been active in training Students and Teachers in the various aspects of Human Wildlife Conflict (HWC), which has resulted in the attitudinal change in the minds of the young, thereby bring in a new thinking in society.



Tending to elephant leg fracture



Savitamma tender care for Leopard Cub



Procedure on a leopard



Celebrating
WVD
100th Anniversary
100th World Veterinary Day

The
Veterinarian's Prayer

Oh Lord, maker of all living things,
I ask that you guide me everyday,
With compassion, as I attend to the animals
that are in need of my care.
Guide me in all decisions
and keep me focused.
Grant me the ability to console those in
need, comfort those that are saddened and to
rejoice in all of your miracles.
And please Lord, give me courage to make
the tough decisions and the knowledge to
help heal in a gentle loving manner.



Darting of nilgai



Snake treatment



Chipping of animal

BBP Safari

One of the important flagship products of BBP is the Safari, which has attracted visitors of all hues and in thousands. The Safari is one of the most invigorating and adrenaline pumping activity in the BBP. Jointly managed and monitored by BBP and the Karnataka State Tourism Development Corporation (KSTDC); with the BBP fixing the fee for the visitor, the KSTDC focusing on the counter sales, revenue collection, and physically monitoring the 20 mini buses with a capacity of 30 per bus that ply in the Safari route. Revenue sharing is on a 50: 50 basis. Two high end Air Conditioned bus are also made available for high end visitors wherein Safari tours are conducted with the Naturalist helping visitors to understand by interpreting flora and fauna. This apart, BBP also conducts Safari by Jeep for the benefit of families and groups of up to four in number.



The present Safari boasts of the following:

Sl. No.	Safari Enclosure	(Extent) Area (in Hectares)	Name of the Forest	Year of establishment
1	Herbivores Safari	68.00	Bannerghatta Reserve Forest	Developed in the 1970's opened to Public in 2002
2	Bear Safari I	20.00	Ragihalli Reserve Forest	2002
3	Elephant Care Center	49.50		
4	Tiger Safari	15.00	Ragihalli Reserve Forest	1987
5	Lion Safari	6.00	Ragihalli Reserve Forest	1979

Total Area: 158.5 Hectares

Herbivores Safari

One of the largest segments of the Safari enclosure, Herbivores Safari, has evolved from the 1970's and was opened to public view in 2002. The Herbivore Safari enclosure has been barricaded with stone wall along with the additional support of solar power fence and Elephant proof trench (EPT). What is very visible in the enclosure is the vegetation that has ensured the Herbivore population survives with vigor. Species such as bamboo and anogassius interspread along with the water bodies, and the edible grass species such as sacharam, symbopogon and heteropogon are common to the grass land and constitute as the main fodder for animals. The patches of shorea telura provide for shade of the animals. The water bodies, viz., Deepankere, Chennamanakere, Gowdanakere and Seegadikunte cater to the animals throughout the year. Besides the naturally available Wild Boar, porcupine and pangolin to mention a few, larger animals like the Gaur, Sambar, Cheetal, Barking Deer, Black Buck and Nilgai were brought to BBP and released under the rescue and rehabilitation program. Over two decades, all the animals in the Herbivores enclosure has naturalized and the population has multiplied substantially, thus creating a best practice for others to emulate.





Lion Safari

An open enclosure of 6.00 Ha of the Ragihalli Reserve Forest, the designated Lion Safari area has tall Chain Link mesh with a height of around 15 feet, and a moat all around the Chain link mesh that has been created to avoid trespass of any wild animals; thereby avoiding conflict and also providing safety and security. A total of 11 holding rooms have been provided with the retrieval area for day time rest. The holding rooms also have a squeeze cage facility (three in number) to treat and attend the animal for any clinical or routine observations by the Veterinarians and other Park staff. The Lion Pride has benefited the most and groups of Lions on a rotational basis are allowed into the Safari for the benefit of the visitors who throng in large numbers.



Tiger Safari

The Tiger Safari area has three different units within itself:

Sl. No.	Tiger Safari Unit	(Extent) area in Hectares
1	Indira Gandhi Tiger Safari	6.00
2	Appaiah Tiger Safari	8.00
3	White Tiger Safari	1.00

The peripheral boundary has been created for all the three units by digging open moat and erecting chain link mesh fence. All the three areas have been compartmentalized as autonomous areas and provided with housing complexes as follows:

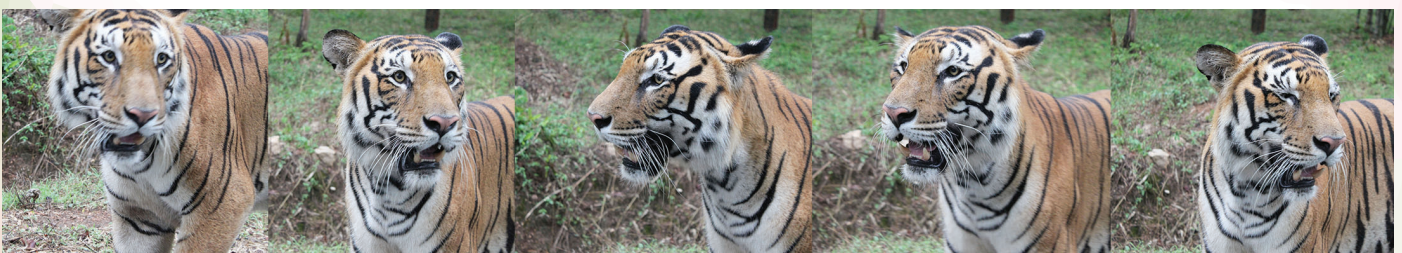
Indira Gandhi Tiger Safari:

The Indira Gandhi Tiger Safari has three different units of animal housing facilities. A total of 11 rooms with 3 squeeze cages and retrieval are at the backyard are to be found.



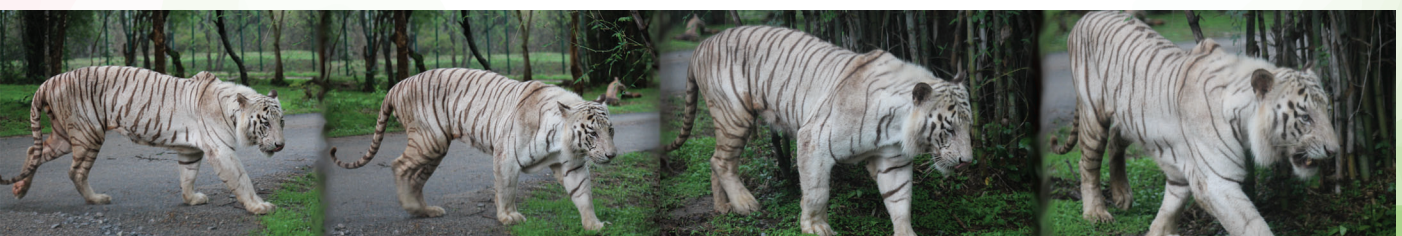
Appaiah Tiger Safari:

The 2 animal housing complexes, together have 10 animal holding rooms with the primary facilities of water and sanitation as required for the animals in the enclosures.



White Tiger Safari:

This facility has 2 animal housing buildings, with 8 animal holding rooms and 3 squeeze cages at the provided besides the regular water and sanitation facilities.



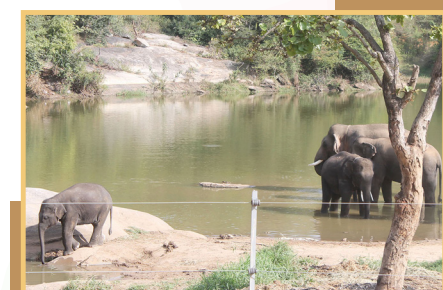
Bear Safari

Located in the Ragihalli Reserve Forest, the Bear Safari has a peripheral open moat and an outer wall of the moat which is embedded with stone slabs all round in order to prevent the sloth bears from escaping or to avoid trespass of any other animal from the free range area. A total of 5 animal housing facilities are christened as Panchavati, Chitrakuta, Kishkinda, Dr. GVK Block1 and Jambava 2 are home to the sloth bears. The facility also has a kitchen to take care of the needs of the bears.



Elephant Care Center

An area of 60.00 ha supported with thick bamboo breaks with a big water body called Sigekattekere intermitted with grasslands was proposed for Elephant Care Center in the approved Master Plan. Out of the 60.00 ha area 49.50 ha area is enclosed with a secured solar power fencing with gates wherever necessary and this will serve as a habitat for the captive elephants in "Elephant Care Centre". This is in adherence to the recommendation made by the CZA. A 0.65 Ha of land for emergency Coral is constructed within the enclosure to contain and separating the elephants for medical and bouts of un-controllable aggression. There are 21 (9 Male + 12 Female) elephants which are housed here in the Elephant Care Center. Within the area of herbivore safari, an elephant weaning care center has been established. Whilst the visitors get to move around the Safari in vehicles, they get a window view of the elephant activity at the center.



(Footnotes)

1 Includes 8 hectares allocated to Wildlife SoS (WSoS)

1 Constructed by Wildlife SoS (WSOS). Wildlife SoS has an Agreement with the Zoo Authority of Karnataka (ZAK), which is in force from November, 2005 to provide maintenance and care to the dancing bears rescued from the Khalandars. These bears have a human imprint on them. The agreement between ZAK and WSOS is to end on 30th November, 2015.

2 Constructed by Wildlife SoS

Animal Sponsors for 2017-18

Sl. No.	Name of Person/Firm	Animal Adopted	Amount (INR)
1	M/s Inventure Academy	Three Tiger Cubs (Arunya, Shambhavi and Shiva)	3,00,000
2	Sri. G. Janardhana Reddy	One Elephant Cub (Sriramulu)	1,75,000
3	Smt. G. Lakshmi Aruna	One Tiger	1,00,000
5	Sri Shreevardhan	Two Red Ear Slider Turtles	1,00,000
6	M/s Forgepro India Private Limited	Tiger (Mithun)	1,00,000
7	M/s Kumar Organic, Bangalore	Tigress (Sindu)	1,00,000
8	Smt Jayeeta	Spot Billed Pelican	15,000
9	Deens Academy, Bangalore	Spot Billed Pelican	15,000
10	Dr. Lakshmi Ananth, Bangalore	Peacock (2) and King Cobra (2)	14,000
11	Sri. N. Sheshadri	Spotted Deer, Peacock	11,000
12	Sri Saksham & Samyam, Bangalore	Jungle Cat and Four Home Antelope	11,000
13	Toyota Kirloskar Pvt Limited, Bidadi	Ostrich	10,001
14	Sri Ashish Chaturvedi	One each of Python, King Cobra, Viper, Rat Snake	10,000
15	Sri Vijaya Deshpande	Lion Tailed Mecaque	10,000
16	Sri Rohit Kumar	King Cobra (2)	7,000
17	Smt Monika P, Bangalore	Peacock (1) Star Tortoise	5,500
18	Sunitha BC, Bangalore	Jungle Cat	5,000
19	Sri Shreevardhan	Red Ear Slider Turtle (2)	4,000
20	Bishop Cotton Women's Christian Law College, Bangalore	White Peacock	3,500
21	Sri Anand, Bangalore	King Cobra	3,500
22	Ms. VS Parineetha	King Cobra	3,500
23	Sri Balaji	Indian Cobra	2,000
24	Sonali Mishra, Bhubaneshwar, Odisha	Softshell Turtle (Tuntong)	2,000
25	Sri KA Ramesh, Bangalore	Indian Cobra	2,000
26	Sri Gurudeep, Bangalore	Rainbow Lorikeet	2,000
27	M/s Nuance NTS Operations, Bangalore	Star Tortoise	2,000
28	Sri Kartik DS, Mangalore	Indian Cobra	2,000
29	Sri Anantha Prakash N, Bangalore	Common Rat Snake	2,000
30	Smt Rajamma, Mysore	India Cobra	2,000
31	Sri Muthukrishna	Love Birds	2,000
32	Sri Deepak N., Bangalore	Indian Cobra	2,000
33	Sri Madhu Surya, Bangalore	Indian Cobra	2,000
33	Ms. VS Parineetha	Rainbow Lorikeet	2,000
34	Sri Vinay Kothari, Jodhpur, Rajasthan	Rainbow Lorikeet	2,000
35	Ashwyn Muthu, Bangalore	River Terrapin	2,000
36	Bishop Cotton Women's Christian Law College, Bangalore	Love Bird (1)	1,000
37	Smt. Poornima, Bangalore	Love Bird	1,000
38	Sri Jagadeesh Kumar B, Vaigaidam, Theni District, Tamil Nadu	Budgerigar	1,000
39	Sri Nagarjun GD, Bangalore	Common Rate Snake	1,000
40	Gittu Modi, Queens Village, NY11427	Cockatiel	1,000
41	Awanindra Athrishi, Paschin Vihar, New Delhi	Munia	1,000
42	Sagarika Kumar, Lakshmi Bai Nagar, New Delhi	Sparrow	1,000
43	Mrudula K Gowda, Bangalore	Cockatiel	1,000
44	Mrunalini K Gowda, Bangalore	Love Bird	1,000
Total			9,38,001





The Zoo Authority of Karnataka (ZAK) is registered under Societies Registration Act, 1960, and functioning at Sri Chamarajendra Zoological Garden's Premises, Mysuru. ZAK currently manages eight zoos in the state.



Central Zoo Authority (CZA) (www.cza.nic.in), is an autonomous statutory body of the Government of India, constituted under the Wild Life (Protection) Act, which supports the conservation of Wildlife by laying down standards and norms for housing, upkeep, health care and overall management of animals in zoos as under the Recognition of Zoo Rules, 1992.



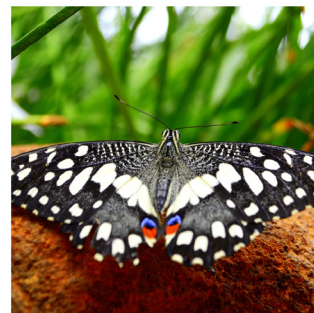
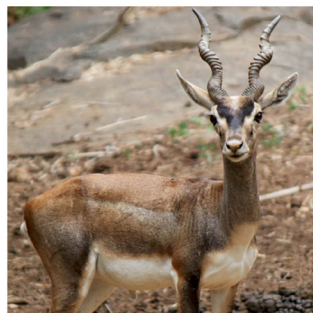
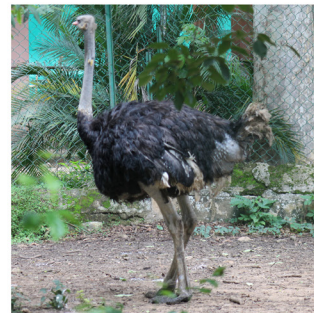
World Association of Zoos
and Aquariums | **WAZA**
United for Conservation

Established in 1935 and headquartered in Gland, Switzerland, the World Association of Zoos and Aquariums (WAZA) (www.waza.org) is the "umbrella" organization for the world zoo and aquarium community. Its mission is to provide leadership and support for zoos, aquariums, and partner organizations of the world in animal care and welfare, conservation of biodiversity, environmental education and global sustainability.



The vision of the Bannerghatta Biological Park (<http://bannerghattabiologicalpark.org>) is to create an opportunity to the citizens - specially to children of Bangalore Metropolitan City to have a Biological Recreation Center very close to the city in the midst of the forests in the valley of the famous Champakadhama hills inside the Bannerghatta National Park. The endeavor has been to inculcate the awareness of nature conservation, provide natural habitat to all the animals suitable for their conservation and propagation through educational program and to connect visitor and wild animals through exemplary welfare, care and best educational practice to foster public support in ex-situ conservation.

**“The Greatness of a Nation and its moral progress
can be judged by the way its animals are treated”**
~ *Mahatma Gandhi* ~



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