

BONDLA ZOO

ANNUAL REPORT 2016-17



GOA FOREST DEPARTMENT

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FOREWORD

A Rescue center for housing rescued wild animal in stress was initiated in 1969 and has over a period of time transformed into a zoo known popularly as Bondla Zoo. Indigenous faunal species of the Western Ghats are mainly housed in the Zoo, which has been recognized as a small Zoo in 2006 by the Central Zoo Authority.

Bondla Zoo is unique in terms of its location, i.e. within Bondla Wildlife Sanctuary. Wild animals are kept in their natural habitat with sufficiently large enclosures in the Zoo. It attracts both domestic as well as foreign nationals and is one of the most preferred hinterland destinations in Goa. It is also visited by many school students, nature lovers, general public for various recreational, educational and awareness purposes. The State Government has extended free entry for school children. The steady increase in the number of visitors over the year is a testimony to the popularity of this Zoo.



13-11-2017


(Ajai Saxena)
Principal Chief Conservator of Forests.
Chief Wildlife Warden.
Goa

FROM THE ZOO DIRECTORS'S DESK

It gives me an immense please in presenting the Annual Report for 2016-2017 of Bondla Zoo. This Zoo is located in the midst of pristine forest are of Bondla Wildlife Sanctuary. The greenery along the approach and surrounding the Zoo is the key feature that mesmerizes the visitors.

Major emphasis of the Zoo Authority is to achieve the greater objectives of Conservation, Awareness, Recreation and Education (CARE). Various activities are carried out to achieve the objectives like maintenance of enclosures, providing healthy feed to the animals, conduct of various nature camps and planned breeding of selected endangered species etc in the Zoo. The addition of Pheasant enclosures has been a major attraction for visitors, as said birds are exotic and more colorful in nature. The dedicated team of officers and staff of Bondla Zoo are responsible for proper upkeep and management of Bondla Zoo and hence deserve due appreciation. We are also thankful to the print and electronic media for supporting the Zoo management. Zoo management is thankful to our Principal Chief Conservator of Forests, Shri Ajai Saxena and the Conservator of Forests, Shri A. Anil Kumar (Wildlife) for their continued guidance and support.

I sincerely thank the Member Secretary, CZA, New Delhi for consistent administrative as well as technical support in the management of the Zoo.


(Vikas V. Desai)

MISSION

The Mission of Bondla Zoo is to achieve the distinction of an outstanding zoo of the region on Conservation, Awareness, Education and Visitor Experience by connecting people to wildlife and Biodiversity of the Western Ghats.

OBJECTIVES

- To promote conservation breeding with emphasis on endangered species like Gaur, King Cobra. Exchange of such species of animals with other zoos, release of suitable animals in wild in their natural habitat with strict adherence to protocol and guidelines.
- To promote education and interpretation so as to inspire the visitors to become environmentally responsible and take home the message of conservation needs of fast dwindling biodiversity.
- To facilitate scientific study and research in the arena of animal etiology, enclosure enrichment, feed and nutrition of zoo intimates and reproductive biology.
- To ensure naturalistic and spacious housing, ethical and standard health-care, excellence in animal husbandry and enrichment of enclosures.



Leopard (*Panthera pardus*)

INTRODUCTION

Bondla Zoo is located within the Bondla Wildlife Sanctuary in a valley near hill ranges at foot hills of Sahyadri (Western Ghats). Bondla is about twenty kms away from Ponda town. It was started as an asylum for the rescued and injured wild animals during 1960s. Initially it was an integrated Government venture involving various departments viz. Forest, Agriculture and the Tourism. Subsequently all the activities at Bondla came under Forest Department. Efforts were made to develop the rescue and rehabilitation area into a Zoo by creating spacious and scientifically designed enclosures within the natural habitat of the wild animals. Bondla Zoo is now recognized as a "Small Zoo" by the Central Zoo Authority and a Master Plan is under submission to Central Zoo Authority for approval. Presently the Zoo is existing in an area of 60 ha of natural forest with a Veterinary Clinic attached to it. Bondla Zoo houses wide range of wild animals that include Mammals, Reptiles, Birds etc. It also has exotic animals along with the native species. Bondla Zoo is recognized for the planned breeding of Gaur for its conservation.

Bondla Zoo attracted 2, 68,162 numbers of visitors during the year 2016-2017 and earned about 54, 00,320/- lakhs revenue. The Zoo has been successfully breeding Gaurs, Four horned Antelope, Crocodile, Python and Silver Pheasant etc.



Sloth bears (*Melursus ursinus*)

FEE & PERMIT CHARGES

ENTRY FEE

CHILD/STUDENTS	Rs. 10/-
ZOO ADULTS	Rs. 50/-
SANCTUARY ADULTS	Rs. 20/-
MOTOR CYCLE/SCOOTER	Rs. 25/-
THREE WHEELERS	Rs. 40/-
CAR/ 4 WHEELERS	Rs. 75/-
STILT CAMERA	Rs. 30/-
BUS/TRUCK	Rs. 150/-
VIDEO CAMERA 8 mm Handy Cam	Rs. 150/-

STAFF STRENGTH

Sr. No.	Designation	Numbers
1	Zoo Manager	01
2	Range Forest Officer	01
3	Veterinary Officer (On contract)	01
4	Dy. Range Forest Officer	01
5	Veterinary Assistant	01
6	Forest Guard	02
7	Animal Attendant	02
8	Elephant Mahout	04
10	Regular Labourer	07
11	Temporary Status Labourer	09
12	Daily Wage Labourer	17
	Total	46

FACILITIES FOR VISITORS



Parking



Public Convenience



Canteen



Restaurant



Playground for children



Solar Water Heater Plant

INVENTORY OF ANIMALS

Under Schedule I of the Wildlife (Protection) Act, 1972

SR. NO.	SPECIES	STOCK POSITION AS ON 31.03.2017			
		M	F	NS	T
A	MAMMALS				
1	Gaur (<i>Bos gaurus</i>)	5	2	0	7
2	Tiger (<i>Panthera tigris</i>)	0	1	0	1
3	Leopard (<i>Panthera pardus</i>)	1	2	0	3
4	Four-horned Antelope (<i>Tetracerus quadricornis</i>)	1	1	0	2
5	Black Buck (<i>Antelope cervicapra</i>)	9	4	0	13
B	AMPHIBIANS AND REPTILES				
1	Mugger Crocodile (<i>Crocodylus palustris</i>)	2	2	0	4
2	Indian Flap-Shell Turtle (<i>Lissemys punctata</i>)	0	0	2	2
3	Indian Rock Python (<i>Python molurus</i>)	0	1	1	2
C	BIRDS				
1	Indian Peafowl (<i>Pavo cristatus</i>)	1	0	0	1

Under Schedule II of the Wildlife (Protection) Act, 1972

A	MAMMALS				
1	Palm Civet (<i>Paradoxurus hermaphroditus</i>)	1	3	0	4
2	Jackal (<i>Canis aureus</i>)	1	1	0	2
3	Sloth Bear (<i>Melursus ursinus</i>)	1	1	0	2
B	REPTILES				
1	King Cobra (<i>Ophiophagus hannah</i>)	1	0	1	2
2	Spectacled Cobra (<i>Naja naja</i>)	2	1	0	3
3	Russell's Viper (<i>Daboia russelii</i>)	1	0	3	4
4	Indian Rat Snake (<i>Pythas mucosus</i>)	0	0	3	3
5	Checkered Keelback (<i>Xenochrophis piscator</i>)	0	2	0	2

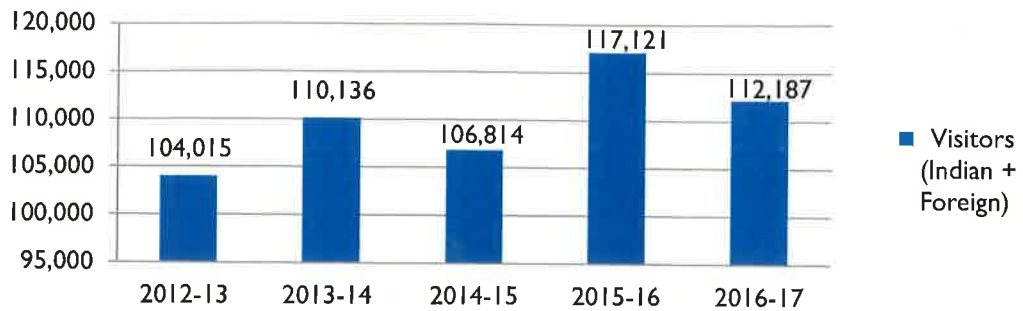
AT BONDLA ZOO

SR. NO.	SPECIES Under Schedule III and IV of the Wildlife (Protection) Act, 1972	STOCK POSITION AS ON 31.03.2017			
		M	F	U	T
A	MAMMALS				
1	Sambar (<i>Cervus unicolor</i>)	6	11	0	17
2	Spotted Deer (<i>Axis axis</i>)	1	5	0	6
3	Wild Pig (<i>Sus scrofa</i>)	15	10	0	25
4	Porcupine (<i>Hytrix indica</i>)	1	3	0	4
B	REPTILES				
1	Common Bronzeback Tree Snake (<i>Dendrelaphis tristis</i>)	0	0	3	3
2	Trinket Snake (<i>Elaphe helena</i>)	0	1	0	1
3	Sand Boa (<i>Eryx conicus</i>)	4	1	0	5
C	AMPHIBIANS				
1	Indian Black Turtle (<i>Melanochelys trijuga trijuga</i>)	3	4	0	7
D	Exotic Animals (Not included in Schedule species)				
1	Hippopotamus (<i>Hippopotamus amphibious</i>)	1	0	0	1
2	Spectacled caiman (<i>Caiman crocodylus</i>)	1	2	0	3
3	Silver Pheasant (<i>Lophura nycthemera</i>)	1	2	0	3
4	Ring Necked Pheasant (<i>Phaisanus colchicus</i>)	1	2	0	3
5	Lady Amherst Pheasant (<i>Chrysolophus amherstiae</i>)	1	0	0	1
6	Cockatiels (<i>Nymphicus hollandicus</i>)	4	4	0	8

VISITORS AND REVENUE STATISTICS

Financial Year	2012-13	2013-14	2014-15	2015-16	2016-17
Visitors (Indian + Foreign)	1,04,015	1,10,136	1,06,814	1,17,121	1,12,187

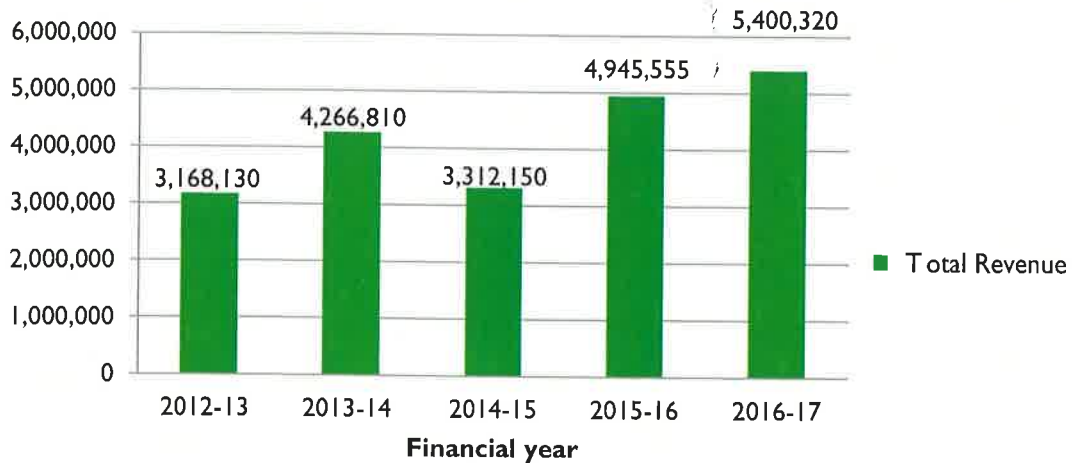
Total no. of Visitors



Financial Year

Financial Year	2012-13	2013-14	2014-15	2015-16	2016-17
Total Revenue	3,168,130	4,266,810	33,12,150	49,95,555	54,00,320

Total Revenue



BIRTH AND DEATH RECORDS

BIRTH

Sr. No.	Species	Male	Female
1	Spotted Deer	0	3
2	Sambar	1	3
3	Black Buck	1	0
4	Gaur	1	0



New Born Fawns of Chowsingha

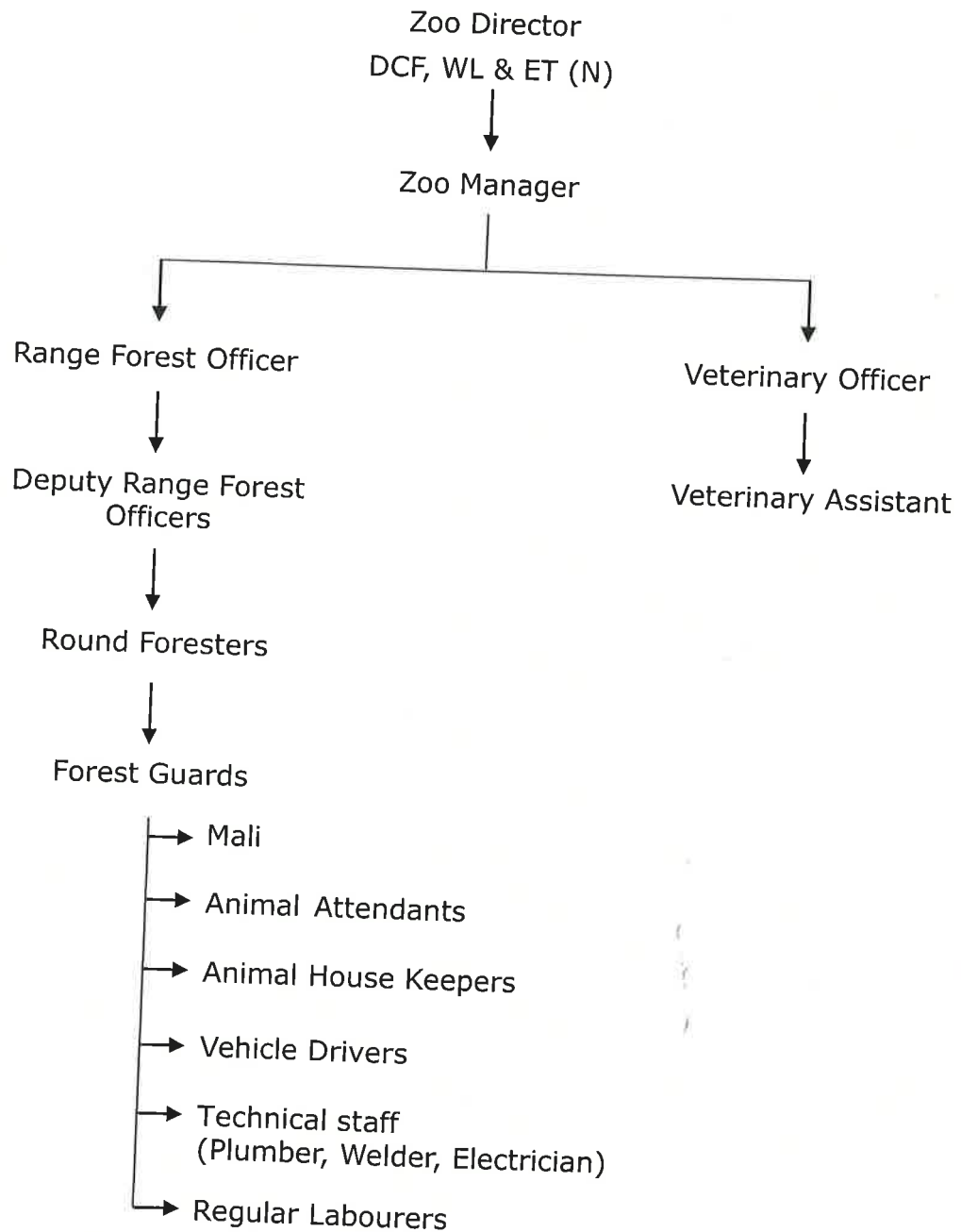


New Born Calf of Gaur in Bondla Zoo

DEATHS

Animal Name	Scientific Name	Sex	Date of Death	Reason of Death
Four Horned Antelope	<i>Tetracerus quadricornis</i>	Male	04/04/16	Suggestive of Respiratory failure due to pulmonary hemorrhage.
Four Horned Antelope	<i>Tetracerus quadricornis</i>	Male	05/04/16	Suggestive of Respiratory failure due to pulmonary hemorrhage.
Four Horned Antelope	<i>Tetracerus quadricornis</i>	Male	13/04/16	Respiratory failure due to pulmonary hemorrhage.
Four Horned Antelope	<i>Tetracerus quadricornis</i>	Male	14/04/16	Suggestive of Respiratory failure due to pulmonary hemorrhage.
Four Horned Antelope	<i>Tetracerus quadricornis</i>	Female	23/04/16	Respiratory failure due to pulmonary hemorrhage.
Four Horned Antelope	<i>Tetracerus quadricornis</i>	Male	05/05/16	Respiratory & liver failure cause by bronchopneumonia & Hepatitis.
Four Horned Antelope	<i>Tetracerus quadricornis</i>	Female	02/06/16	Chronic pulmonary pyogranulomatous caseous nostrils suggestive of allergies/ bacterial.
Black Buck	<i>Antelope cervicapra</i>	Female	10/06/16	Acute fatal intra muscular damage, circulatory shock (mainly trampled upon) & subsequent.
Four Horned Antelope	<i>Tetracerus quadricornis</i>	Male	16/06/16	Endometrial enlargement, pyogranulomatous caseous pulmonary nostrils suggestive of viral/ bacterial origin.
Flap shell Turtle	<i>Lissemys punctata</i>	Female	15/07/16	Death due to in. fight injuries.
Indian Black Turtle	<i>Melanochelys trijuga trijuga</i>	Male	04/08/16	Death due to in. fight injuries. PM not conducted (Carcass total macerated).
Indian Rock Python	<i>Python molurus</i>	Male	10/08/16	Lungworm infestation, fatty liver degeneration.
Flap shell Turtle	<i>Lissemys punctata</i>	Unknown	16/08/16	Death due to in fight injuries PM not conducted (Carcass total macerated).
Hippopotamus	<i>Hippopotamus amphibious</i>	Female	05/10/16	Right sided trauma, rupture of respiratory cavity & internal soft tissue trauma as a result of severe fall leading to circulatory shock, asphyxia & death.
Forstern's Cat Snake	<i>Boiga forsteni</i>	Female	12/10/16	Chronic liver disorder.
Tiger	<i>Panthera tigris</i>	Male	16/12/16	Overall organ deterioration as a result of ageing & senility.

ORGANISATIONAL CHART



NATURE AND WILDLIFE AWARENESS CAMPS

The Zoo caters to imparting training in Forestry and Wildlife Conservation to general public and school children. Various education and industrial institutes utilize the accommodation facilities for public awareness camps. Nature awareness camps for various target groups are conducted by the Zoo management. The students of schools in the mining belts visit Bondla for nature Camp organized by Mineral Foundation, Goa.

NATURE AWARENESS CAMPS AT BONDLA

Date	Name of school	No. of participant students
06.10.16	Govt. High School, Guleli, Sattari	33 students + 02 teachers & 02 staff
06.10.16	Govt. High School, Ganjem Usgao .	18 students + 02 teachers & 01 staff
06.10.16	Govt. High School, Dhavshire, Tisk, Usgao .	21 students + 02 Teachers & 02 staff
06.10.16	Sarvodaya High School, Barazan Usgao .	23 students + 02 teachers & 02 staff
07.10.2016	Sanjay Centre for Special Education, Research & Training, Porvorim.	20 students + 22 teachers & 06 staff
12.10.2016	Lokvishwas Pratisthan's special School, Dhavali, Ponda.	55 students + 19 teachers + .05 staff
	Total	170 students + 49 teachers + 18 staff



Nature camp for students at Bondla Zoo

NATURE AWARENESS TRIPS AT BONDLA



STUDENTS OBSERVING SNAKE ENCLOSURES AT BONDLA ZOO

Date	Name of school	No. of participant students
01.10.16	People High School, Mala Panaji - Goa	118 students + 04 teachers & 02 staff
02.10.16	Sarvoday Education Society High School, Curchorem - Goa	39 students + 02 teachers & 01 staff
05.10.16	Sarvoday Education Society High School, Barazan, Usgao - Goa	100 students + 03 teachers
06.10.16	Govt. High School, Bhuipal Honda Sattari - Goa	47 students + 11 teachers
07.10.16	Tarabai Dalvi High School, Bhamai, Pale - Goa	65 students + 03 teachers & 01 staff
07.10.16	Shishu Vatika, Ganjem Usgao - Goa	20 students + 16 parents
08.10.16	St. Britto High School, Mapusa - Goa	136 students + 03 teachers & 02 staff
	Total	525 students + 26 teachers, 06 staff & 16 parents

CLEANLINESS DRIVE DURING WILDLIFE WEEK 2016

Date	Name of school	No. of participant students
05.10.16	Kendriya Vidyalaya, Ponda - Goa	33 students + 03 teachers
06.10.16	Sarvodaya Education Society High School, Barazan, Usgao - Goa	33 students + 02 teachers
06.10.16	Govt. High School, Guleli, Sattari - Goa	18 students + 02 teachers
06.10.16	Govt. High School, Ganjem Usgao - Goa	21 students + 02 Teachers
06.10.16	Govt. High School, Dhavshire Usgao - Goa	23 students + 02 teachers
	Total	128 students + 11 teachers



PLASTIC COLLECTION DRIVE AT BONDLA ZOO.

EXPENDITURE FOR INMATES

[Excluding staff / worker salary]

2016 - 17

Milk	Rs. 49900/-
Vegetables	Rs. 5,36,872/-
Grocery	Rs. 10,42,703/-
Bread	Rs. 18,040/-
Fruits	Rs. 1,46,696/-
Beef	Rs. 6,03,874/-
Chicken	Rs. 6,06,023/-
Fish	Rs. 15,650/-
Eggs	Rs. 6,390/-

MEDICINES

Rs. 1,04,740/-

Expenditure incurred under adoption scheme towards expenses feed of Tiger and Hippopotamus is

Rs. 3,97,973/-

NEW INITIATIVES AT BONDLA ZOO IN 2016-17



HYDROPONICS MAIZE SEEDS



HYDROPONICS MAIZE CULTURE



AZOLLA CULTURE



INSPECTION BUNGALOW AT BONDLA ZOO



Published by

ZOO DIRECTOR & DEPUTY CONSERVATOR OF FORESTS
WILDLIFE & ECO-TOURISM (NORTH) DIVISION
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