## Annual Report 2016-2017



CHIDIYATAPU BIOLOGICAL PARK Window to Nature

# VISITOR'S CIRCULATION FOR BIOLOGICAL PARK, CHIDIYA TAPU





### CHIDIYATAPU BIOLOGICAL PARK

# ANNUAL REPORT 2016-17



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#### A coordinating zoo for conservation breeding of endemic species

- Crab eating Macaque or long tailed Macaque
- Andaman Water Monitor Lizard
- Nicobar Pigeon
- Narcondam Hom Bill
- Nicobar Megapod

### Mission

"To encourage people to develop a caring attitude towards nature and all living beings; to serve as a dynamic breeding and nature conservation centre for endemic, rare and endangered faunal and floral species found in this archipelago and to offer public service through eco awareness, education and recreation to the visitors to achieve goals of nature conservation and wildlife as a whole

#### Objectives:

Following are the main objectives for developing and maintaining this facility.

(i). To provide formal and informal conservation

Conservation Breeding Plan for Chidiyatapu Biological Park.

Central Zoo Authority have selected Chidiyatapu Biological Park as coordinating zoo and few zoos as participating zoos education to the public including school children and younger generation for conservation of wild life and to provide basic information about wild animals and their natural habitat so as to influence people's behavior and values for their effective in-situ conservation.

(ii). To carry out planned Conservation Breeding of targeted rare, endangered and endemic species of the region with the intention of reintroduction into the wild and cooperative ex-situ population management by coordinating at regional and global level.

(iii). To carry out research on animal behavior, nutrition, reproduction, wild life ecology and management, animal genetics and disease etc and to create infrastructure for data storage, training of per-



sonnel for research related activities and to make sound decisions based on scientific knowledge for wildlife management in ex-situ and insitu conditions.

(iv). To act as a medium for recreation and leisure for the public by providing recreational facility to a large number of people by utilizing out door setting of nature.

(v). To rescue wild animals which have been displaced from the natural habitat due to human interference or other reasons for their rehabilitation and reintroduction into the wild.





### From Deputy Director's Desk

Biological Park, Chidiyatapu, as a modern facility for ex-situ biodiversity conservation, education and research is coming up well in the Chidiyatapu Bimblitan Reserve Forests of the Southern most part of South Andaman Island.

The diverse habitats ranging from the luxuriant tropical rain forests, clear coastal waters to the open oceans, harbour a range of unique and fascinating wildlife. To make aware the people of these islands of this unique biodiversity, a Mini Zoo was established at Port Blair during 1967 with the objective of exhibiting the faunal species of these Islands mainly for educational and recreational purpose. To house and display wild animals with the objectives of creation of empathy for wild animals and to provide a near natural setting for the display. Considering the limitations, need was felt during the late eighties to establish a Biological Park on modern and scientific lines in a natural setting and sufficiently large area having pollution free environment. The Wildlife Advisory Board of the Union Territory recommended in 1989 for the creation of a new Biological Park. It was decided to develop a modern Biological Park at Chidiyatapu on the southern tip of South Andaman Island, 26Km away from Port Blair ay of animals. The Central Zoo Authority conveyed its approval for the proposal in May 1993 vide letter No F.No. 19-98/92 in 1993. The Ministry of Environment and Forests approved diversion of 40 Ha of forest land in Chidiyatapu for establishment of this Biological Park in May 1997. The park was opened to public in October 2009. At present the park do not attract the visitors as compared to mainland zoos. The entire southern tip of the South Andaman Island will be brought under the Biological Park with an area of 405 Ha.with about 70 ha. of marine waters. This will add more facilities to visitors for entertainment as well as scope of scientific management of the endemic animal and bird

The display of faunal species will be restricted to 40 hectares area of the park. The layout of the park is in an evolutionary pattern in five loops to show cause the maximum Islands' biodiversity in the park. The park will establish as a resource and facilitator for research students in the fields of conservation wildlife.

The visitors can see, a real representation of the biodiversity in an evolutionary layout, plenty of endemic birds, butterflies and insects any time in and around the park. The main attraction of the park are endemic fauna of these Islands, mainly Salt water crocodiles ( largest living crocodile of Jurassic era) Andaman water monitor lizard (second largest in the world), White bellied sea eagle, Andaman dark serpent eagle, Andaman green imperial pigeon, Andaman red breasted parakeet, Alexandrine parakeet, Andaman wild pig, Palm civet cat and crab eating macaque besides trees like Ficus, Andaman padauk, Titpock (Tetramelis nudiflora) with huge buttresses, Cycas rumphy, Podocarpus nerifolia, Thitmin, Jungli Amm and many endemic plants and trees.

The park though in the development stage has all modern facilities for a comfortable stay, study and research besides recreation for a joyful day of the life with the nature.

The park has evolved to successful breeding in captivity of Crab eating macaque, Andaman wild pig, Salt water crocodile ,water monitor lizard etc.

The Biological Park Chidiyatapu is going to be unique and one of best zoos in the world, that will develop skills to breeding for conservation of all endangered species of these Islands.

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Biological Park, Chidiyatapu is aimed to show cause the evolution of life in these oceanic Islands as a whole for recreation, education and conservation breeding of rare and endangered species. It was dedicated to the public in October, 2009. Most of animals of Biological Park live in open, large moated areas surrounded by natural forests. This gives them a feeling of living in their natural habitat. The Biological Park is located in tropical rain forests with endemism occurring in varied ecosystems aimed to show cause the endemic fauna and flora.

### IMPORTANT ANIMALS IN BIOLOGICAL PARK CHIDIYATAPU



Water Monitor Lizard



Salt Water Crocodile



Crab Eating Macaque



Andaman Wild Pig

## SPECIAL ATTRACTIONS

1 SALT WATER CROCODILE

Largest living reptile in the world .



White Bellied Sea Eagle



White billied King Fisher







ANDAMAN WATER MONITOR LIZARD The second largest living lizard in the world





Andaman Dark Serpent Eagle



King Cobra



Nicobar pigeon

Andaman Green imperial Pigeon



Andaman Wild Pig



Andamas Palm Cost



## SPECIAL PLANT ATTRACTIONS



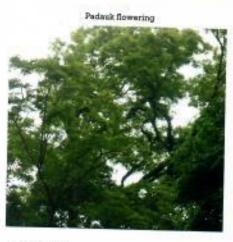
Ficus and Padauk have unique relationship



Tetramelis nudiflora have huge buttresses for stress management



Padauk trees develop huge buttresses and Burrs of high commercial value



Ficus spps



Lagersrtroeia hypoleuca flowering



Artocarpus chaplasha (Taung pinne) an evergreen tree



Padauk Trunk



# BIRTH/ ACQUISITION OF CAPTIVE ANIMALS AT BIOLOGICAL PARK, CHIDIYATAPU

### DURING THE YEAR 2014-15

SI.No.	Date of Birth	Name of the species	No.s of new born/Sex
1.	.04.2014	Spotted Deer	1.0000013-01-11-10-01-12-01-12-11-11-11-11-11-11-11-11-11-11-11-11
2		Spotted Deer	01 (US)
2.	_11.2014	Spotted Deer	05 (US)
3.	03.2015		00 (03)
	00.00	Crab Eating Macaque	01 (US)

#### DURING THE YEAR 2015-16

SI.No.	Date of Birth	Name of the species	No.s of new born/Sex
1.	17.07.2015	Andaman Wild Pig	Total control of the
2		DOMESTIC STATE OF THE PARTY OF	01 (US)(Acquisition)
2.	July 2015	Spotted Deer	06 (US)
3.	August 2015	White Belied Sea Eagle	18(03/8/20
4.	August 2015	The American State Control Security	02 (US) )(Acquisition)
-	The second second	Andaman Dark Serpent Eagle	02 (US) )(Acquisition)
5.	27.10.2015	Andaman Dark Serpent Eagle	04 (US) )(Acquisition)
6.	22.02.2016	Andaman Wild Pig	
	Analysis (180)	ratament vviid Pig	02 (US)

### DURING THE YEAR 2016-17

SI.No.	Date of Birth	Name of the species	No.s of new born/Sex
1.	29.04.2016	Spotted Deer	
2.	19.06.2016		01 (Male) & 01 (US)
0871	P SOMESTIC WAS ACT	Crab Eating Macaque (Rescued)	01(M), 01(F) & 01(US)
3.	14.08.2016	Barking Deer (Rescued)	01 (US)
4.	25.08.2016	Andaman Green Imperial Pigeon (Received from Zoo)	32 (US)
5.	25.08.2016	Red Breasted Parakeet (Received from Zoo)	02 (US)
6.	25.08.2016	Alexandrine Parakeet (Received from Zoo)	02 (US)
7.	28.08.2016	Andaman Wild Pig( Rescued)	01 (F)
8.	16.09.2016	Civet Cat (Received from Zoo)	01 (M)
9.	16.09.2016	Barking Deer (Rescued)	01(M) & 01(F)
10.	01.11.2016	Recess Monkey (Received from Zoo)	01(M)
11.	12.12.2016	Spotted Deer (Rescued)	01(M)
12.	09.02.2017	Charles and a second of the	o r(m)
2440	T-wasananyacias	Crab Eating Macaque (Zoo Born)	01(US)
13.	10.02.2017	Bonnet Monkey (received from M/Zoo)	02(F)

# REPORT OF DEATH OF CAPTIVE ANIMALS AT BIOLOGICAL PARK, CHIDIYATAPU

#### **DURING THE YEAR 2014-15**

SI.No.	Date of Death	Name of the species	Age	Sex	Cause of Death
1.	06.02.2014	Salt Mater Co	- (7)-52	57150	Gadae of Death
4		Salt Water Crocodile	Adult	Female	Severe injury due to infighting
2.	17.08.2014	Water Monitor Lizard	00	-	
	- 600000000	Trates monitor Eizard	08 years	Female	Sudden ingestion of big stone stuck in
3.	21.01.2015	Spotted D.			the stomach blocked the passage
	21.01.2013	Spotted Deer	3 years	Female	Severe injury at
4	0F 00 0046		58	1000000	right leg due to infighting
	05.02.2015	Water Monitor Lizard	07 years	Female	Due to heavy parasitic low.
5.	16.02.2015	C-1414/-1 0	050 50	10000	ode to neavy parasitic low.
100	10.02.2015	Salt Water Crocodile	22 years	Female	
6.	17.03.2015	Crab Eating Macaque	00.4		
-		Charles to the contract of the	03 days	Male	Pre-matured birth
7.	18.03.2015	Water Monitor Lizard	Adult	Male	F
8.	20.00.0045		rwant	iviale	Due to heavy load of ecto-parasite
٥.	30.03,2015	Crab Eating Macaque	26 years	Male	Old age cardiac arrest and Old
		5W0016483		100000000	Old age cardiac arrest and Old age com

#### DURING THE YEAR 2015-16

SI.No.	Date of Death	Name of the species	Age	Sex	Cause of Death
1.	19.06.2015	Control D	. ASSOCIATION		Cause of Death
		Spotted Deer	06 months	Female	Pneumonia and respiratory distress
2.	07.11.2015	Spotted Deer		-	
-		The state of the s		Female	Due to pregnancy toxemia
3.	18.11.2015	White Belied Sea Eagle	Un Known	Female	Exacture of wine and do in the
4.	29.12.2015		2000 0000000000000000000000000000000000	. Ciriale	Fracture of wing and drowning of Bird
	20.12.2015	Spotted Deer	30 years	Male	Cardio Vascular and respiratory fail
5.	19.01.2016	Dark Serpent Eagle	Heat		
	27/20/20/20/20	Dank Gerpent Lagie	Un Known	Male	Non specific enteritis
6.	22.01.2016	Dark Serpent Eagle	Un Known	Male	B-L 4 W
			SHITCHOWN	iviale	Dehydration and Non specific enteritie

### DURING THE YEAR 2016-17

SI. No.	Date of Death	Name of the species	Age	Sex	Cause of Death
1,	20.04.2016	Barking Deer	-	Male	Injury due to infighting
2	29.04.2016	Spotted Deer (Rescued)	-	US	
3.	30.04.2016	Spotted Deer (Rescued)		Male	Due to septicemia
4	01.05.2016	Spotted Deer		100000	Due to septicemia
5.	08.05.2016	- 5 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0	-	Male	Injury due to infighting
330	Distriction of the Control of the Co	Spotted Deer	Un Known	Male	Injury due to infighting
6.	24.07.2016	Spotted Deer	**	Male	Deep Injuries infighting
7.	31.07.2016	Crab Eating Macaque (Rescued)		Male	Due to drowning
8.	03.09.2016	Crab Eating Macaque	-	Female	Shock caused severe bleeding due
9.	22.09.2016	Water Monitor Lizard	-	Male	to injuries
10.	20.10.2016	Barking Deer (Rescued)			Fatty liver syndrome
44	The state of the s			Male	
11.	04.02.2017	Spotted Deer		Male	
12.	17.02.2017	Water Monitor Lizard		Male	

## Faunal diversity and Endemism in A&N islands

Animal Group	No of species/ sub- species	No. of endem-	% Endemism
Terrestrial		108	
Fauna			
Mammalia	58	32	
Aves	246		55.2
Reptilia	78	99	40.2
Amphibia	20	27	34.6
Mollusca	110	8	40.0
Arachnida	94	77	70.0
Hemiptera	146	38	40.4
Diptera	214	22	15.0
Coleiotera	878	24	11.2
Lepidoptera	426	92	10.5
soptera	40	52	12.2
Odonata	36	19	47,5
Annelida	30	4	11.1
FOTAL		9	30.0
darine fauna	2,376	503	21.17
Mammalia	7		
Reptilia	12	(+×)-	(A)
isces	1,200		
Chinodermata		2	0.2
Iollusca	350	4	0.4
rustacea	1,000	18	1.9
olychaeta	600	6	1.0
nthozoa	184	4	2.2
orifera	326	2	0.6
ornera Ieiofauna	72		
OTAL	490	102	21.0
OTAL	4,241	138	0.11

#### Endemism

ammals:

ent endemic mammals

an wild pig,

r wild pig,

rews

an Palm Civet.

res:

ent Birds are :

an teal.

dam Hornbill,

Megapod,

pigeon

an Bulbul,

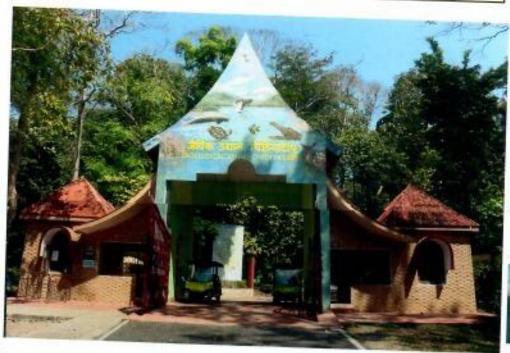
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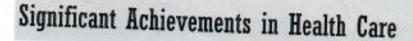
ptiles:

ent groups are :

er crocodile.









#### VETERINARY SECTION

Hand Rearing of Long Tailed Macaque (Crab eating macaque)(Macaca fasticularis umbrosa)

Jyoti, a zoo born female long tailed macaque baby was born on 13.01.2014. The mother Rani's fourth baby was abandoned as a regular feature of unable to bring up the young. The animal attendants have picked up and hand reared the baby in the in patient ward of the hospital for one year and later released in the display area of the enclosure. It has well adjusted to the new environment and other members in the enclosure.

### Rearing of Andaman wild pig ( Sus scrofa Linnaeus)

There were only one male and a female Andaman wild pigs in the enclosure for a long time and not able to breed. On 13 02.2014 a female baby Yogita was rescued from poachers by the forest officials and the court had requested to keep the one week old and 01 kg baby at the park. The Yogita was reared in the inpatient ward and released in the animal enclosure on 25.04 2014. Yogita has adjusted its new environment and started breeding from the year 2016

Yogita had delivered two live babies and one dead male baby of her first delivery on 22.02.2016. The young ones also have grown up well adjusted to the enclosure environment .

#### Development of Inpatient ward

The Veterinary Hospital attached to the Biological Park has an attached inpatient ward to cater the health care of sick animals and rescued animals . The inpatient ward has been helpful in hand rearing of Long Tailed Macaque ,Barking Deer, Andaman Wild Pig, Chital, Rhesus Macaque and Bonnet monkeys.

### Rearing of Rescued animals



# Inside Story Headline

19	No. of visitors	2013-14 - 16559
	(during the current and last	2014-15 - 17254
	three financial year)	2015-16 - 22080
		2016-17 - 25920 (Indian) 245 ( Foreign National)
20	Budget of the zoo	2013-14 - Rs.95,04,000/-
	(last three years)	2014-15 - Rs.94,96,399/-
		2015-16 - Rs.1,01,30,479/-
		2016-17 - Rs.
21	Revenue earned	2013-14 - Rs.3,03,910/-
	(last three years)	2014-15 - Rs.3,13,670/-
	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	2015-16 - Rs.3,95,675/-
		2016-17- Rs. 6,17,605/-
	-	
22	Utilization of financial Assis-	2013-14 - Rs.
	tance received from the core	2014-15 - Rs.
	tance received from the CZA	2014-15 - RS.
	during last three years and its	2015-16 - Rs.
		Carrie Securities 100
23	during last three years and its utilization	2015-16 - Rs. 2016-17
23	during last three years and its utilization  Major works Undertaken for	2015-16 - Rs. 2016-17
23	during last three years and its utilization	2015-16 - Rs. 2016-17  203-14  1.Construction of White Bellied Sea Eagle Englosure
23	during last three years and its utilization  Major works Undertaken for	2015-16 - Rs. 2016-17  203-14  1.Construction of White Bellied Sea Eagle Enclosure. 2. Construction of Andaman Dark Serpent Eagle Enclosure
23	during last three years and its utilization  Major works Undertaken for	2015-16 - Rs. 2016-17  203-14  1.Construction of White Bellied Sea Eagle Enclosure. 2. Construction of Andaman Dark Serpent Eagle Enclosure. 3. Construction of Terrestrial bird Enclosures 3 numbers
23	during last three years and its utilization  Major works Undertaken for	2015-16 - Rs.  2016-17  203-14  1.Construction of White Bellied Sea Eagle Enclosure. 2. Construction of Andaman Dark Serpent Eagle Enclosure. 3. Construction of Terrestrial bird Enclosures 3 numbers Construction and replacement of Fencing of Hog Deer enclosure Construction and replacement of Fencing of Chital enclosure
23	during last three years and its utilization  Major works Undertaken for	2015-16 - Rs. 2016-17  203-14  1.Construction of White Bellied Sea Eagle Enclosure. 2. Construction of Andaman Dark Serpent Eagle Enclosure. 3. Construction of Terrestrial bird Enclosures 3 numbers
223	during last three years and its utilization  Major works Undertaken for	2015-16 - Rs.  2016-17  203-14  1.Construction of White Bellied Sea Eagle Enclosure. 2. Construction of Andaman Dark Serpent Eagle Enclosure. 3. Construction of Terrestrial bird Enclosures 3 numbers Construction and replacement of Fencing of Hog Deer enclosure Construction and replacement of Fencing of Chital enclosure
23	during last three years and its utilization  Major works Undertaken for	203-14  1. Construction of White Bellied Sea Eagle Enclosure.  2. Construction of Andaman Dark Serpent Eagle Enclosure.  3. Construction of Terrestrial bird Enclosures 3 numbers  Construction and replacement of Fencing of Hog Deer enclosure  Construction and replacement of Fencing of Chital enclosure.  2014-16
223	during last three years and its utilization  Major works Undertaken for	2016-17  203-14  1. Construction of White Bellied Sea Eagle Enclosure. 2. Construction of Andaman Dark Serpent Eagle Enclosure. 3. Construction of Terrestrial bird Enclosures 3 numbers Construction and replacement of Fencing of Hog Deer enclosure Construction and replacement of Fencing of Chital enclosure. 2014-16  2016-17
223	during last three years and its utilization  Major works Undertaken for	2016-17  203-14  1. Construction of White Bellied Sea Eagle Enclosure. 2. Construction of Andaman Dark Serpent Eagle Enclosure. 3. Construction of Terrestrial bird Enclosures 3 numbers Construction and replacement of Fencing of Hog Deer enclosure Construction and replacement of Fencing of Chital enclosure. 2014-16  2016-17  1. Construction of 3 terrestrial bird enclosures:
23	during last three years and its utilization  Major works Undertaken for	2016-17  203-14  1. Construction of White Bellied Sea Eagle Enclosure. 2. Construction of Andaman Dark Serpent Eagle Enclosure. 3. Construction of Terrestrial bird Enclosures 3 numbers Construction and replacement of Fencing of Hog Deer enclosure Construction and replacement of Fencing of Chital enclosure. 2014-16  2016-17

## Impression of Our Esteemed Guests

Some one like me who keep coming at regular interval to see the Chidiyatapu zoo, it was gratifying to see the improvement and developments taking place. The visitors path have been well laid out the new raptor bird section has been included. Small step but in the context of a zoo in Andaman, specializing to show case the fauna of the Islands, the developments are worth mentioning. The energy efficient visitor vehicle also is a new addition and the main path if improved to a tar topped one will help visitor flow significantly. I wish to see the Chidiyatapu zoo to develop into a big attraction in future

Shri. B C Choudhury

CZA Zoo Evaluator, Former Faculty of WII, Fr Advisor to WII, WWF & IUCN

I have visited the biological park in its infancy & it is of great joy to see that the vision + plan conceived at that time are taking excellent shape with several value additions. The wealth of natural assets is very rich with combination of terrestrial and marine ecosystems. The path to the future is based on transferring the natural values in a manner that would enable the visitors to appreciate our heritage. I have no doubts that with such meticulous aesthetic planning this would be one of its best in the country.

Shri. V B Sawarkar IFS (Retd), Member National Board for Wildlife

An Exhilarating experience to have visited the Bio-diversity Andamans. Forest Department officials have done a commendable job here. With introduction of modern technology an a little more creative imagination may go a long way in making Chidiyatapu a world class destination into itself.

Shri. O P Rawat (Election Commissioner Of India New Delhi.)

Visited Chidiyatapu along with my wife Usha Bahuguna to end our 5 days Andaman trip. Andaman is very rich in Bio –diversity as s well as scenic beauty. The beaches are world class and Forest Rest House is one of the best I have sseen icin the country. Forest staff have done wonderful job and they deserve full some praise.

Dr V K Bahuguna (Ex Director General, Indian Council Forestry Research and Education, Dehradun)

A very interesting and innovative Biological Park has been developed here at Chidiyatapu. It show causes interesting flora and fauna of the Andaman Islands. This Biological Park and its surroundings will play a big role in conservation of biodiversity and also serve as an extension facility for awareness about such rich flora and faunal heritage. The need to increase its visibility on the tourist map of A & N Islands. Keep it up.

Shri Siddanta Das D C Forests & S. S. Govt. of India New Delhi.

## BUTTERFLIES OF CHIDIYATAPU BIOLOGICAL PARK

















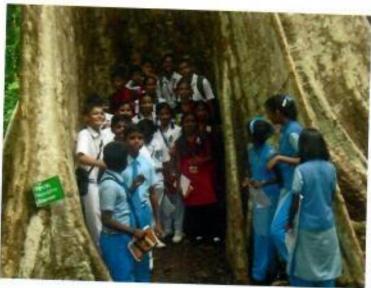


## COMMON BIRDS OF CHIDIYATAPU BIOLOGICAL PARK



# NATURE EDUCATION PROGRAMME



























# PUBLIC AWARENSS AND NATURE EDUCATION











# STAFF AND MANAGEMENT











