# Sundarvan Nature Discovery Centre, Ahmedabad

# **Annual Report & Animal Inventory for the Year**

2019-20



# Sundarvan

# **A Nature Discovery Centre**

Jodhpur Tekra, S. M. Road, Ahmedabad – 380 015. Phone: 079-26923148, 26921838 Fax: 079-26858010 Report of the Officer-in-charge

Since its inception in 1978, Sundarvan Nature Discovery Centre has been

carrying out reptile awareness programmes. Regular reptile awareness and rescue

programmes conducted in Sundarvan have sensitized the masses of the city on the

importance of these animals and their ecological role. These awareness programmes

have directly led to considerable reduction in the killing of snakes by people and vice

versa, hence emphasizing the conservation and wildlife educational role of this facility.

Apart from above programmes, the zoo also carries out many activities and workshops

on various lesser-known species such as bats, odonates, amphibians, birds etc on

regular basis. A total of 14624 students and 1975 teachers from 257 schools visited

Sundarvan during this year to enhance their classroom learning.

The Indian zoos are moving towards the new era to fulfil the modern needs. We

at Sundarvan also try our best to create a state-of-the-art Mini Zoo. We are working on

the enclosure design and making changes of the animal facilities in phases. The nature

immersed, spacious crocodile enclosure was completed in the year 2016 with an

external funding. Construction of new snake enclosure and earlier submitted Master

Plan is being reviewed.

The lush green campus acts as sanctuary for wide range of animals in this fast

developing city. Apart from schools, the higher education institutions are also using this

facility for their education, research and internship programmes. Sundarvan is already

working with few institutions/zoos to get technical support. Further support from well-

wishers, institutions, other zoos and Central Zoo Authority will help Sundarvan to reach

as a modern zoo education facility for the masses and region.

Naim Akhtar

(Dr. Naim Akhtar)
Park Manager

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## 1. History of the Zoo

Prior to 1978, the area of Sundarvan was a small mango orchard. Almost half of the area was barren. Later, different tree species were raised to maintain the diversity. The place became a dense green patch with over 50 tree species now. In 1978, the Nehru Foundation for Development, Ahmedabad organised a week long snake awareness programme in Ahmedabad with the help of Madras Crocodile Bank Trust, Chennai. The success of the programme inspired the management to create permanent reptile viewing and educational facility in Sundarvan.

## 2. Objective

- The prime objective of Sundarvan is to impart Nature Education to all the strata of the society.
- To develop model Zoo Education and Management Programme for Zoo Keepers and Zoo Administrators.
- To conduct training workshops for teachers, researchers, naturalists, volunteers, corporate personnel based upon their needs of nature education.

## 3. About us

S.No.	Particulars	Information				
Basic Ir	Basic Information about the Zoo					
1	Name of the Zoo	Sundarvan Nature Discovery Centre				
2	Year of Establishment	1978				
3	Address of the Zoo	Jodhpur Tekra, S. M. Road, Near ISRO, Ahmedabad, Gujarat – 380015.				
4	State	Gujarat				
5	Telephone Number	079-26923148, 26921838				
6	Fax Number	079-26858010				
7	E-mail address	sundarvan@ceeindia.org				
8	Website	www.sundarvan.org				
9	Distance from nearest	Airport: 17 KM				
		Railway Station: 10.5 KM				
		Bus Stand: 2 KM				
10	Recognition Valid up to (Date)	22.03.2019				

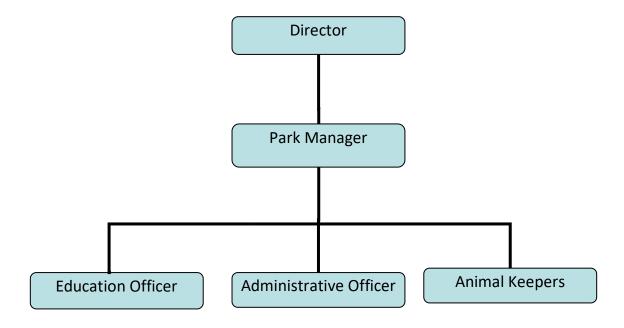
S.No.	Particulars	Information
11	Category of zoo	Mini
12	Area (in Hectares)	1.3
13	Number of Visitors (Financial Year)	Adult : <b>57,044</b>
		Children : <b>45,339</b>
		Total Indian : <b>NA</b>
		Total Foreigners : <b>NA</b>
		Total Visitors: 1,02,383
14	Visitors' Facilities Available in Zoo	Children Play area, Adventure park, Amphitheatre, Seating arrangements, Toilets and Drinking water.
15	Weekly Closure Day of the Zoo	Monday
Manag	ement Personnel of the zoo	
16	Name with designation of the Officer incharge	Dr. Naim Akhtar, Park Manager
	Name of the Veterinary Officer	Dr. Kishore Transadiya (Consultant, visits on request)
	Name of the Curator	NA
	Name of the Biologist	NA
	Name of the Education Officer	Mr. Deep Shah
	Name of the Compounder/ Lab Assistant	NA
Owner	/ Operator of the Zoo	
17	*Name of the Operator	Centre for Environment Education
18	Address of the Operator	Thaltej Tekra, Ahmedabad, Gujarat – 380054.
19	Contact details/Phone number of Operator	079-26858002-05
20	E-mail address of Operator	ceedo@ceeindia.org

<sup>\*</sup> Rule 2(m) of the Recognition of Zoo Rules, 2009.

"Zoo Operator" means the person who has ultimate control over the affairs of the zoos provided that\_\_\_\_\_

- I. in the case of a firm or other association of individuals, any one of the individual partners or members thereof; or
- II. in the case of a company, any director, manager, secretary or other officer, who is incharge of and responsible to the company for the affairs of the zoo; or
- III. In case of zoo owned or controlled by the Central Government or any State Government or Union Territory Administration or any Trust or Society funded by the Central Government or a State Government or a Union Territory Administration, the Secretary of the concerned Department of that Government, or as the case may be the Union Territory Administration, shall be deemed to be the Zoo Operator.

## 4. Organizational Chart



The Veterinary Officer is on call. The security and housekeeping staff are managed by a third part agency on outsourced basis.

## 5. Human Resources

## Manpower of the Zoo\*

Sl.No.	Designation	Number of Sanctioned	Names of the
		Posts	incumbent
1	Park Manager	1	Dr. Naim Akhtar
2	Education Officer	1	Mr. Deep Shah
3	Administrative Assistant	1	Mr. Shailesh Patel
4	Animal Keepers	3	Madan Sisodiya, Ratilal
			Solanki, Jagdish
			Purabiya
5	Peon and Office Attendant	2	Dilipsinh Sisodiya, Dev
			Narayan Tiwari

<sup>\*</sup>Please give above mentioned information in respect of all zoo personnel, from the Officer incharge up to the Animal Keeper.

Services such as Security (3 Gaurds) and House Keeping- cleaning (2 People) for Sundarvan are getting on outsourced basis.

## 5. Capacity Building of zoo personnel

Three days Zoo Keepers workshop was organised at Sundarvan for the zoos of Central and western India with the financial support from Central Zoo Authority and GUJCOST. The staff of the Sundarvan also got an exposure before the zoo keepers of other zoos to learn and share their experiences on animal management.

Workshop planned at Kamla Nehru Zoological Garden, Ahmedabad which was proposed during the last week of March 2020 has been called off for the indefinite period.

## 6. Zoo Advisory Committee

No existing zoo advisory committee

## 7. Health Advisory Committee

No health advisory committee

## 8. Statement of income and expenditure of the Zoo

Year	Income (Rs.)	Expenses (Rs.)
2019-20	31,00,000 (Approximately)	46,00,000

## **Daily Feed Schedule of animals**

SI.	Species	Feed item	Quantity		Day of fasting
No.			Winter	Summer	
1	Star Tortoise	Soaked grams, vegetables, fruits and leaves	100gm per animal.12.5%, 25%, 25% and 37.5% respectively	200gm per animal.12.5%, 25%, 25% and 37.5% respectively	Nil
2	Bengal Monitor Lizard	Mice, chicks and eggs	Two numbers per animal (any one at a time). Twice a month.	Two numbers per animal (any one at a time). Weekly once.	Weekly or fortnightly feeding, depends on the season
3	Indian Rock Python	Rabbit/chicken	One per snake (1.25 to 1.5kg)	One per snake (1.25 to 1.5kg)	Monthly once during winter and fortnightly in other seasons
4	Medium sized snakes (Indian rat snake, Cobra, Russell's viper and Red sand	Rat/chicks	One per snake	Two per snake	Fortnightly during winter and weekly during other seasons

	boa)				
5	Smaller snakes (common sand boa, common krait)	Mice	One per snake	Two per snake	Fortnightly during winter and weekly during other seasons
6	saw-scaled viper	Mice/lizard	One per snake	Two per snake	Fortnightly during winter and weekly during other seasons
7	Checkered Keelback	Frog/fish/mice	Two per snake	Two per snake	Fortnightly during winter and weekly during other seasons
8	African slender- snouted crocodile	Chicken/Rabbit/fish (dead/live)	2kg per animal	2kg per animal	Fortnightly during winter and weekly during other seasons
9	Indian Porcupine	Fruit, grains, vegetables and leaves	1kg per animal. Daily. 15%, 15%, 50% & 30% respectively	1kg per animal. Daily. 15%, 15%, 50% & 30% respectively	
10	Hedgehog	Boiled egg, meat, mice and fruits	100 gm per animal. Daily	100 gm per animal. Daily	
11.	Red eared Slander Turtle	Packaged food	Daily	Daily	
12	Java Finch	Soaked mung, gram, wheat, green coriander, spinach	Daily	Daily	
13	Love Birds	Maize Corn, Soaked Wheat & Gram, Green Cucumber, Tomato, Seasonal fruits	Daily as per requirement	Daily as per requirement	
14	Budgerigar	Millet, and multi seed combination (branded Budgerigar seed food), green coriander, spinach	Daily as per requirement	Daily as per requirement	
15	Cockatiel	Maize Corn, Soaked Wheat & Gram, Green Cucumber, Tomato, Seasonal fruits	Daily as per requirement	Daily as per requirement	

#### 9. Vaccination Schedule of animals

No vaccination schedules, as most of the animals in exhibits are reptiles.

## 10. De-worming Schedule of animals

The faecal analysis carried out on regular interval to find the parasite load. De-worming is carried out on the need base. No de-worming was carried out in this year and detail of the previous de-worming is as given in the table. There is no guideline on deworming of reptiles especially for snakes. However, python were dewormed once as per the details given below:

Sl.No.	Species	Drug used	Month
1	Indian Rock Python	Ivermectin	5-11-2015

#### 11. Disinfection Schedule

Sl.No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1	Snakes	Closed, glass front	Surface change & whitewashing the water trough	Fortnightly
2	Turtle	Open air	Whitewashing the water body	Fortnightly
3	Tortoise	Open air	Whitewashing water trough	Fortnightly
4	Crocodile	Open air	Water change and whitewashing water body	Every 10 days

## 12. Health Check-up of employees for zoonotic diseases

Sl.No.	Name	Designation	Date of Health Check up	Findings of Health Check
				up
1	Mr. Madansinh Sisodia	Animal Keeper	25-05-2019	Normal
2	Mr. Jayendra Kumar	Animal Keeper	25-05-2019	Normal
3	Mr. Ratilal Solanki	Animal Keeper	25-05-2019	Normal

## 13. Development Works carried out in the zoo during the year

## a. Construction of new entry pathway for physically challenged (Divyang) people

As per CZA recommendation; a entry pathway for physically challenged (Divyang) people has been built along the entry gate.

## b. Re-modified Old Aquarium into Python Enclosure:

To provide better upkeep to Indian rock python and surplus population, old aquarium has been modified into naturalistic enclosure in order to ensure better upkeep of python at Sundarvan.

## 14. Education and Awareness programmes conducted by the Sundarvan during the year

Reptile Awareness Programmes was conducted for park visitors on every Sunday. It was carried out for 31 schools on other days, where about 3200 students and teachers participated. Sundarvan plays a very crucial role in sensitizing and creating appreciation for wildlife, specially the lesser known species like snakes and other reptiles. Regular Snake awareness and nature appreciation programmes conducted in Sundarvan have sensitized the masses of the city on the importance of these species and their ecological role. These awareness programmes have directly led to considerable reduction in the killing of snakes by people, hence emphasizing the conservation and wildlife educational role of this facility. The details of the other education/awareness and training programs conducted during the 2019-20 are given below:

# (i) Capacity Building Workshop for Zoo-Keepers on Husbandry and Management of Reptiles in Zoos of Western & Central India

Date/s and Duration: June 25-27, 2019

**Venue:** Sundarvan – Nature Discovery Centre, S.M. Road, Near ISRO, Jodhpur Tekra, Ahmedabad-380015 and Kamla Nehru Zoological Garden, Kankaria, Ahmedabad

## **Speaker / Expert and Subject covered:**

Dr. Raju Vyas, Regional Vice Chair , Institute: South Asia and Iran Crocodile Specialist Group,

Management and Husbandry: Reptiles in Zoo

- (1) Responsibility of a zookeeper, (2) Reptiles and their various species, (3) Taxonomy,
- (4) Ideal enclosures and habitats, (5) Designing a nursery for the hatchlings, and (6) The three important D's (Disease, Detection and Diagnosis).
- Dr. Naim Akhtar, Park Manager, Sundarvan Nature Discovery Centre
- (1) CZA guidelines and role of zoo keepers, (2) Keepers talk
- Dr. R.K. Sahu, Director, Kamla Nehru Zoological Garden, Kankaria, Ahmedabad
- (1) Inauguration and talk on Role of zoos in wildlife conservation, (2) Role of zoo keepers in reptile management, and (3) Handling and transportation of reptiles

Dr. Sharva Shah, Veterinary Officer, Kamla Nehru Zoological Garden, Kankaria, Ahmedabad

(1) Veterinary care of reptiles in zoo, (2) Early detection of any disease, (3) Symptoms of various infections, (4) Reporting to the veterinarian, etc.

Mr. Deep Shah, Education Officer, Sundarvan Nature Discovery Centre

(1) Snake awareness, (2) Do's and don'ts, (3) Myths related to snakes, etc.

Workshop Summary: The first day of the workshop commenced with an introduction to Sundarvan Nature Discovery Centre, describing its set up, aims, objectives and history. This was followed by the inauguration of the event by the Chief Guest of the workshop Dr. R.K. Sahu, Director of Kamla Nehru Zoological Garden, Kankaria, Ahmedabad. A session on the Guidelines of Central Zoo Authority of India (CZA) and the Role of Zoo Keepers was conducted by Dr. Naim Akhtar, Manager Sundarvan, which had deliberations on the types of zoos, their categories, rules and others guidelines and duties of a zoo keeper. Thereafter, group activities were conducted to discuss and share the participants' experiences related to snake species, enclosures, manpower engaged, husbandry protocols and behaviour. Additionally, groups brought forward the various challenges that they face in the management of animals on a routine basis and shared the solutions which they often adopt.

The afternoon session began with a talk on snake awareness and field exercises on handling and restraining techniques for snakes and other reptiles. There was a demonstration of various equipments generally used in rescuing various species of snakes. Various myths associated with snakes were discussed and the knowledge of Zoo Keepers was enhanced by highlighting the real facts as opposed to myths and beliefs. The second half of the afternoon session was an interactive session titled Keepers' Talk, which encouraged the participants to share information on a particular species that they have worked with and to demonstrate their ability to work as Educators in zoos for the common visitors. The objective of this session was to train the participants on how to address the visitors of the zoo with interesting facts and information which may help in the conservation and protection of that particular species. It helped them to sharpen their communication skills in imparting education and awareness.

Group activities on reptiles such as Turtles, Tortoises, Crocodiles and Lizards were carried out on the second day and participants shared their knowledge and experience on husbandry and management of these species. Dr. Raju Vyas, being an expert, shared his life

long experience of Vadodara zoo in the form of an interactive talk on Husbandry and Management of reptiles in zoo where he had worked on reptiles as Animal Keeper initially and later as Zoo Inspector. He shared his valuable experience with the participants. The second half of the day was a field exposure trip to the Kamla Nehru Zoological Garden, Kankaria, Ahmedabad. As part of this, there was a session organized by Dr. R.K. Sahu in his office where he talked about role of Zoo Keepers and the handling and transportation of reptiles. He emphasized the importance of the Zoo Keepers in the present scenario where many of the reptile species are either vulnerable or threatened. A visit to the new and old reptile house was organized to show the existing housing of the reptiles and their upkeep. The participants could realize and experience the difference between the old and new reptile house. Knowledge on upkeep, housing and management was shared with the participants through live demonstration and an interactive discussion. Dr. Sharva Shah, Veterinary Officer of the zoo, explained to the participants about the practices undertaken in the veterinary care of reptiles, the common symptoms of diseases affecting reptiles, how the Keeper develop the ability to identify that his animal is not doing well and that there is an urgent need to contact his supervisor/veterinarian.

The last day was dedicated to imparting hands-on training and experience in managing reptile cages and enclosures at Sundarvan. The workshop concluded with the distribution of certificates to the participants. Since the motto of this workshop was 'Learning and Sharing,' the participants were given sufficient opportunities to interact with each other and share their experiences. In fact, participants enjoyed the sessions and could learn from and share experiences on the husbandry and management of reptiles. Several specific guidelines were also discussed and proposed to be sent to the higher authorities for further consideration.

#### Photo-I: Press Release / Media Report



Navgujarat Samay\_29<sup>th</sup> June, 2019

(https://epaper.navgujaratsamay.com/2218538/Ahmedabad-Samay/29-June-2019#page/3/2)



Gujarat Samachar\_29<sup>th</sup> June, 2019

(http://gujaratsamacharepaper.com/nd/gsnews2.php?pageid=GUJARAT GSP 20190629 1)

#### (ii) National Wildlife Week Celebration 2019

The Wildlife week is celebrated every year with the view to conserve the wildlife of the India in the country during the during the month of October from 2<sup>nd</sup> to 8<sup>th</sup> October every year which coincides with the birth anniversary of Mahatma Gandhi. It was first started in the year 1952 with the great vision of saving the life of the Indian animals through education & awareness and encouraging concerned authorities to take corrective actions. Further the Honourable Prime Minister of India has launched the Swachh Bharat Mission on 2<sup>nd</sup> October, 2014. In this regard, Ministry of Environment, Forest and Climate Change, Govt. of India has taken various steps for cleanliness and sanitation drive throughout the country and recently launched a campaign named as "Swachhata Hi Seva" under Swachh Bharat Mission. Sundarvan observed Wildlife Week 2019 along with the "Swachh Bharat Mission" campaign and people were told about the importance of cleanliness and hygiene during its activities not only at Sundarvan but other places of Gujarat as well.

#### OBJECTIVES OF CELEBRATING WILD LIFE WEEK

- > To make people aware for the conservation and protection of the wildlife.
- > To focus the people's attention towards the importance of conservation of the wildlife.
- To implement more services to preserve the wildlife.
- To discuss all the issues related to the preservation of the wildlife.

## Program organized during the Wildlife Week at Sundarvan:

## a. Reptile Awareness Program: 1st October, 2019

As a part of National Wildlife Week Celebration, around 320 students from different schools of 7 Districts of Gujarat State i.e. Bhavnagar city, Surat (Mandvi), Bharuch (Jammusar), Morbi (Halvad), Ahmedabad (Sanand), Kutch (Mandvi), and Surendranagar (Sayla) along with 70 teachers visited Sundarvan on 1<sup>st</sup> October, 2019. This visit was to mainly gain basic knowledge on Reptiles in particular and common wildlife in general. The students were briefed about the educational role of Sundarvan Nature Discovery Centre.



The topics such as general information of reptiles, snake diversity, venomous and non-venomous snakes, precaution to avoid snakebite, treatment, myths and facts and conservation importance were covered during the session of snake awareness programme followed by Nature Trail walk. The message regarding importance of cleanliness and reducing pollution by practicing use of biodegradables, green energy and discontinuation of single use of plastics, bio-fuels as far as possible was delivered to the students. The importance of resources along with 3R (Reduce, Reuse and Recycle) theme was delivered to the participants.

## b. Snake Awareness Program: 6<sup>th</sup> -7<sup>th</sup> October, 2019

Snake Awareness Program for common visitors was conducted on 6<sup>th</sup> and 7<sup>th</sup> October, 2019 as a part of National Wildlife week celebration. The topics such as general information of reptiles with special reference to snakes, snake diversity, venomous and non-venomous snakes, precaution to avoid snakebite, treatment, myths and facts and conservation importance were covered during the session of snake awareness programme followed by Nature Trail walk. The message regarding importance of cleanliness and reducing pollution by practicing use of biodegradables, green energy and discontinuation of single use of plastics, bio-fuels was delivered to the audience.



## c. Field Trip to Bakore: 6<sup>th</sup> October, 2019

Field trips are important to help bridge the gap between education and hands-on experiences. Field trips provide entertainment to students and youth. They often serve as a powerful motivator for all, stirring up excitement as the trip nears. Break from the routine life provides a fresh breeze that might



make them more focused back in the routine work. Learning and fun make a great combination. Focusing on these perspectives, Sundarvan therefore planned a field trip to Bakore, a campsite of CEE which lies into Panchmahal Forest Range and Mahisagar District.

## d. Wildlife Quiz: 8<sup>th</sup> October, 2019

Sundarvan, Ahmedabad organized Wildlife Quiz for School students on 8<sup>th</sup> October, 2019 on basic theme of Swatch Bharat Mission and Wildlife education and awareness.



10 teams from various schools i.e. St. Kabir School (Drive in Old), Shiv Ashish School, Rachana School, Mahatma Gandhi International school and Gul International School had participated in the quiz. The main aim for the quiz was to educate about environmental issues (cleanliness and reducing pollution) and Indian Biodiversity through audio and visuals questionnaire. This quiz was also aimed to spread awareness on wildlife Conservation and Nature Education. Seven teams were qualified after first round. Second round consisted of normal & rapid fire questions and visuals. Final round consisted Pictorial and buzzer round for visuals of wildlife species of India. Mahatma Gandhi International school secured first position followed by Rachana School and St. Kabir. The event concluded with prize distribution, group photo and refreshment.

#### (iii) Green Birthday celebration

Green Birthday Celebration is a unique activity of Sundarvan to build harmony and create empathy between Nature and Kids. Kids with their family and friends celebrate their birthday in a Greener way with Sundarvan's Biodiversity. Various activities like- making post cards of various wildlife creatures using their thumb impressions, feeding various birds, nature trail walk, snake awareness program, puppet show, green games, Sundarvan souvenir, and plantation were conducted during birthday celebration. In total 12 Green Birthdays were celebrated during FY 2019-20 and more than 200 kids participated.



## (iv) Summer camp- (Decathlon)

Sundarvan had organised summer night camps for kids of age 6 to 12 years during the month of April and May in partnership with Decathlon Sports India. Kids had enjoyed various activities which actually connected them with nature and animal's like- Bird feeding, wildlife movie screening, night trail walk, animal yoga, bird watching and nature trail. Around 70 Kids in 4 batches attended the camp.



## (v) Day camp for Bardoli Surat - 150 kids - October

Around 150 students from Vibrant School, Bardoli- Surat along with teachers visited Sundarvan on 17<sup>th</sup> October, 2019. Camping activities like- Bird feeding, Bat awareness, Nature trail walk, Snake awareness, Adventure games, Documentary screening were carried out followed by campfire and games. This visit was to mainly gain basic knowledge on Biodiversity. The students were briefed about the educational role of Sundarvan Nature Discovery Centre. To build harmony between nature and kids, bird feeding activity was conducted. Bat diversity, facts and myths on bats were discussed during Bat awareness program. Interesting facts and figures of various birds, plants and captive animals were discussed during Nature trail walk. The topics such as general information of reptiles with special reference to snakes, snake diversity, venomous and non-venomous snakes, precaution to avoid snakebite, treatment, myths and facts and conservation importance were covered during the session. Documentary on various wildlife conservation aspects were shown to students. Campfire with games sessions were conducted in the end, wherein they shared experiences and played various games.



## (vi) Earthian teacher training program

Earthian is Wipro's Sustainability Education Program for schools and colleges. Through this program, it is aim to help teachers to develop more meaningful sustainability education in their respective schools and connect them to the environment and biodiversity conservation. The objective was to provide an exposure to multiple perspectives, develop an interconnected

understanding of different disciplines in education and life. This helps educational institutions, its educators and students to make more informed choices about their lives and society. Total 162 Teachers from various cities like- Ahmedabad, Rajkot and Bhavnagar have participated in the training program.



## (vii) Winter camp

Sundarvan organized 6 batches of Winter Night Camp in the month of December and January. Around 150 kids participated in the event. Activities like - Bird feeding, Bat awareness, Movie night, Nigh nature trail, Campfire, Bird watching and Adventure park activities were conducted during the each camp.



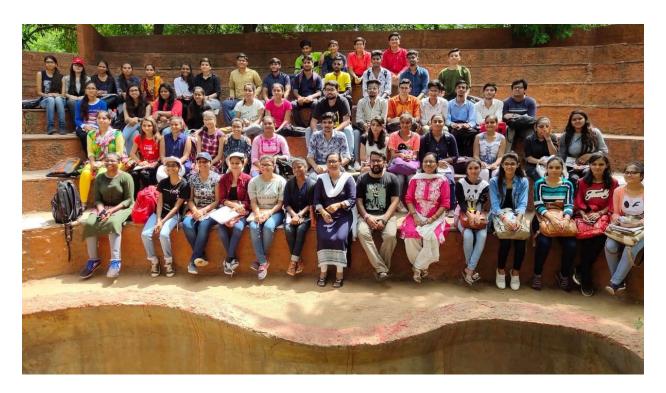
## (viii) Snake awareness Program

A session on Snake Awareness talk was conducted by Sundarvan, a Nature Discovery Centre for the students at IIT Gandhinagar, Ahmedabad on 31<sup>st</sup> July, 2019 under the Foundation Program. The students got awareness about different species of snakes with interesting and unknown facts. Everyone, including the students and the coordinators, thoroughly enjoyed the session which help them in enhancing their knowledge about various reptiles and in particular about snakes.



## (ix) Reptile awareness program

Around 56 students of B.Sc Zoology from C.U. Shah Government Science College, Ahmedabad along with faculties visited Sundarvan on 12<sup>th</sup> July 2019. This Educational visit was mainly to learn about reptiles and bats through different interactive activities. The students were briefed about the educational role of Sundarvan Nature Discovery Centre. Later, they were taken to the bat roost site. Information on Indian bats, their behavior, food items, adaptations, myths and facts and ecological role were discussed. The topics such as general information of reptiles with special reference to snakes, snake diversity, venomous and non-venomous snakes, precaution to avoid snakebite, treatment, myths and facts and conservation importance were covered during the session of snake awareness programme. In the end they were taken on a Nature trail walk to brief about animals of various enclosures.



## (x) SBI plantation drive

Plantation drive was conducted to celebrate SBI's Bank Day on 2<sup>nd</sup> July, 2019. Kartikeya Sarabhai, GM, DGM, AGM and other officers of State Bank of India attended the event and planted saplings at Sundarvan. The event was fully supported by SBI. Around 100 saplings were planted during the plantation drive.



## (xi) Plantation drive- decathlon

DACC - Decathlon Ahmedabad Cycling Community, Decathlon Sports India and Sundarvan, Ahmedabad carried out a "Cycling and plantation drive" on 2<sup>nd</sup> June, 2019, where participants cycled a distance of about 10 km and planted around 30 plants at Sundarvan campus. Later they were briefed about Sundarvan and its activities, importance and reason to celebrate World Environment Day (WED) and also were introduced to its theme for the year "Beat Air-Pollution". The participants took a pledge which aimed to work collectively towards conserving environmental resources and keep the earth clean and green.



(xii) Mom and I visit exploring the zoo for 2 to 4 years were conducted during this winter 3 times. Over 60 children and their moms were participated in these programmes.

## 15. Seasonal special arrangements for upkeep of animals

Air cooler, sprinkling water in the enclosure are carried out during summer and heater is provided during winter months for the animals to beat the adverse weather conditions.

## 16. Research Work carried out and publications

No research work carried out during this period. However, one volunteer conducted survey on spiders inside the Sundarvan.

## 17. Conservation Breeding Programme of the Zoo

There is no breeding programme happening at Sundarvan, as the animals we have are very common species that has wide distribution in India.

## 18. Animal acquisition / transfer / exchange during the year

No exchange was done during the FY 2019-20.

#### 19. Rescue and Rehabilitation of wild animals carried out by the Zoo

Our volunteers go frequently for rescue and release of snakes in the nearby localities frequently as per the request of residents of Ahmedabad.

# 20. Progress made in implementation of the conditions stipulated during the 2018 grant recognition.

Evaluation of Sundarvan Mini Zoo has recently been conducted by Shri S.P Srivastav on 30<sup>th</sup> January 2020 for the further recognition of mini zoo which had already been expired. New recognition along with new terms & condition is awaited from the end of CZA. However compliance to old terms & condition is given below:

Ref: F. No. 19-67/92-CZA(61)(Vol.I)(NS)/3030/2018, dated 01-05-2018

Sr.	Norm	Particulars of	Time period	Progress
			-	Progress
No.	Under	suggestions/recommendation	to comply	
	RZR, 2009			
Gene	eral requireme	ents		
1	10.1(3)	It should be ensured that visitors' path should not exceed 25% of the periphery of the enclosure. This is to ensure adequate withdrawal area to the animal. However, few enclosures in the zoo are in deviation.	Immediately	The landscaping is carried out in such a way to ensure the visitor pathway not exceeding 25% of the periphery of the enclosure.
2	10.1(7)	Management of solid and liquid wastes generated in the zoo is poor thus affecting the general hygiene.	Immediately	The solid and liquid waste generated in the park is very minimal.  1. The organic food waste and animal defecation (hardly anything, as most of the zoo animals are reptiles) are collected in an earthen pit away from animal facilities for decomposing.  2. Necessary arrangements are made to dispose other solid wastes generated through visiting public is disposed on daily basis and will be carried to dumping sites by the

4. Ar 3	nimal housing,	display of animals and animals enclosu The zoo should provide appropriately designed and effective	ures Immediately	municipal corporation vehicle.  3. The visitor facility liquid wastes are connected to the underground sewage line.  4. The water is pumped to plants from animal enclosure with large water areas (only two such enclosures, crocodile and turtle and frequency of water change is fortnightly) considering the recycling.
		stand-off barrier at every animal display enclosure to regulate the movement of visitors.		
5. Ur	keen and hea	althcare of animals	l	
4	10.5(2)	Zoo should send random samples of food and water for microbiological and toxicological examinations to recognized laboratory.	Immediately	The testes were carried out in May 2018. Efforts are being made to regularize such testings.
5	10.5(2)	Diet schedule be prepared and implemented.	Immediately	This is completed
6	10.5(5)	Schedule for disinfection of enclosures should be prepared and implemented.	Immediately	This is completed
7	10.5(8)	Schedule for vaccination and other prophylactic measures should be prepared and implemented.	Immediately	This is completed
8	10.5(9)	Failed to screen staff involved in upkeep of animals against zoonotic diseases. It should be complied.	Immediately and subsequently once in a year	The previous health screening was carried out on 13.02.2018 and this is being repeated every year. This year screening was done during April, 2019.
9	10.5(10)	Records specified by the Central Zoo Authority namely Animal History Card, Keeper's Diary, Daily Report and Treatment Card are not being maintained. It should be complied.	Immediately	All the necessary documents are prepared as specified by the CZA and will be maintained on regular basis.
6. Ve		Infrastructure facilities		
10	10.6(1)	Zoo should construct appropriately designed treatment room for sick and injured animals.	Within six months	Old treatment room has been restored.
9. Ac		breeding of animals		
11	10.9(4)	Singly housed animals should be paired on priority	Immediately	We had a single porcupine and Russell's viper in our collection. To pair a female Indian porcupine with us, a male was received from Kamala Nehru Zoological Garden, Ahmedabad, on 5 <sup>th</sup> July. The new animal is kept separately and will be introduced in the display enclosure in a month time. The necessary communications are

				attached here for ready reference.		
				The efforts are on to get a Russell's viper from a recognised zoo.		
11. E	ducation and	outreach activities				
12	10.11(2)	Handling of animals should not be part of the educational activity undertaken by the zoo.	Immediately	The zoo animals are not handled for education purpose.		
12. V	12. Visitor's facilities					
13	10.12(3)	The zoo should make toilets and animal facilities accessible to the physical challenged persons.	Within three months	It is being implemented		

## 21. List of free living wild animals within the zoo premises

a.	Ma	am	ma	als

i. Indian Flying Fox

ii. Short-nosed Fruit Bat

iii. Small Asian Mongoose

iv. Northern Palm Squirrel

#### b. Birds

i. House Crow

ii. Jungle Crow

iii. Common Myna

iv. Ashy Drongo

v. Black Drongo

vi. Blue Rock Pigeon

vii. Asian Collared Dove

viii. Laughing Dove

ix. Red Collared Dove

x. Grey Francolin

xi. Rufous Treepie

xii. Southern Coucal

xiii. Shikra

xiv. Black Kite

xv. Rose-ringed Parakeet

xvi. Coppersmith Barbet

xvii. Small Minivet

xviii. Grey-headed Canary

Flycatcher

xix. Paradise Flycatcher

xx. Tickell's Blue Flycatcher

xxi. Red-breasted Flycatcher

xxii. Brown Flycatcher

xxiii. Monarch Flycatcher

xxiv.Common Tailorbird

xxv. Magpie Robin

xxvi.Indian Robin

xxvii. Ashy Prinia

xxviii. Red-vented Bulbul

xxix.Lesser whistling Duck

xxx. Red-naped Ibis

xxxi.Pond Heron

xxxii. White-breasted

Waterhen

xxxiii. Yellow Wagtail

xxxiv. White-throated

Kingfisher

xxxv. Red-wattled Lapwing

xxxvi. Purple Sunbird

xxxvii. Purple-rumped Sunbird

xxxviii.Asian Koel

xxxix. Alexandrine Parakeet

xl. Yellow-legged Green

Pigeon

xli. Jungle Babbler

xlii. Small Green Bee-eater

xliii. Indian Peafowl

xliv. Black-rumped Flameback

xlv. Indian Silverbill

xlvi. Palm Swift

xlvii. Craig Martin

xlviii. Golden Oriole

## . Reptiles

i. Common Garden Lizard

ii. Brook's Gecko

iii. Northern Hose Gecko

iv. White-spotted Skink

v. Common Snake Skink

vi. Common Monitor Lizard

vii. Indian Flapshell Turtle

viii. Indian Rat Snake

ix. Spectacled Cobra

x. Common Sand Boa

xi. Common Wolf Snake

xii. Common Krait

xiii. Red eared slander turtle

#### **Media Coverage:** 22.



Ahmedabad Mirror 1st October, 2019



Divya Bhaskar 12<sup>th</sup> October, 2019



# City **NEWS**

સુંદરવનમાં રાષ્ટ્રીય વન્યપ્રાણી સપ્તાહની ઉજવણી



ભરુચ, મોરબી, કચ્છ, સુરેન્દ્રનગર અને અમદાવાદની વિવિધ શાળાઓના આશરે ૩૨૦ વિદ્યાર્થીએ ૭૦ શિક્ષકો સાથે સુંદરવનની મુલાકાત લીધી હતી. આ મુલાકાત મુખ્યત્વે વિદ્યાર્થીઓને મૂળભૂત નોલેજ મેળવવા મળે તે માટે હતી. સુંદરવન નેચર ડિસ્કરવર્રી સેન્ટરની શૈક્ષણિક ભૂમિકા વિશે પણ વિદ્યાર્થીઓને માહિત ગાર કરવામાં આવ્યા હતા. સરિસૃપની સામાન્ય માહિતી, સાપની વિવિધતા, ઝેરી અને બિન-ઝેરી સાપ, સાપના કરડવાથી બચવાની સાવચેતી, સારવાર, દંતકથાઓ, તથ્યો અને સંરક્ષણનું મહત્વ જેવા વિષયો સાપ જાગૃતિ કાર્યક્રમના સત્ર દરમિયાન આવરી લેવામાં આવ્યા હતા.

> Gujarat Samachar 11th October, 2019







રાષ્ટ્રીય વન્થપ્રાણી સપ્તાહની ઉજવણીના ભાગરૂપે ગુજરાતના ૩૨૦ જેટલા સ્ટુડન્ટ્સે શિક્ષકો સાથે સુંદરવનની મુલાકાત લીધી

# વન્યપ્રાણીઓ અને સરીસૃપ જીવો અંગે સ્ટુડન્ટ્સને માહિતગાર કરાયાં





વન્યપ્રાણી સપ્તાહની ઉજવણીના રાષ્ટ્રાય વચ્ચપાલા સંસાહતા ઉજ્વલાના ભાગરૂપે સિટીના સુંદરવન ખાતે ગુજરાત રાજ્યના આશરે ૩૨૦ જેટલા સ્ટુડન્ટ્સે શિશકો સાથે સુંદરવનની મુલાકાત લીધી હતી. જેમાં ભાવનગર, લુક્તર-પાંત્ર નુવાકાત સાતા હતા. કમાં ખાનગર, ભરૂચ, મોરબી, અમદાવાદ, કચ્છ, માંડવી, સુરે-કનગરની વિવિધ શાળાના સ્ટુડન્ટ્સે વન્યજીવન તેમજ સરીસૂપ જ્યાં અંગે માહિતી મેળવી હતી. જેમાં સરીસૂપ વિશે મૂળબુત શાન મેળવવા સ્ટુડન્ટ્સને સુંદરવનની નેચર ડિસ્કવરી સેન્ટરની શૈક્ષણિક ભૂમિકાઓ અંગે માહિતગાર કરવામાં આવ્યાં હતા. આ કાર્યક્રમમાં સરીસપની સામાન્ય

માહિતી, સર્પની વિવિધતા, ઝેરી અને બિન ઝેરી સર્પ, નાહતા, તપત્યા (યાપપતા, ઝરા અને (અન ઝરા તપ, સર્પ કરડવાથી બચવા માટે સાવચેતી તેમજ સારવાર, દંતકથાઓ અને તથ્યો તથા સંરક્ષણનાં મહત્ત્વ જેવા વિષયો પર સર્પ જાગૃતિ કાર્યક્રમના સત્ર દરમિયાન આવરી લેવામાં આવ્યાં હતા. આ ઉપરાંત આ તમામ સ્ટુડન્ટ્સને નેચર ટ્રેલ વૉક દ્વારા સુંદરવનનાં વિવિધ બર્ડ્સ અને પ્રાણીઓ અંગ માહિતગાર કરવામાં આવ્યાં હતા. આ કાર્યક્રમમાં સુંદરવન ખાતે આવેલા ૩૨૦ જેટલા સ્ટુડન્ટ્સને વિવિધ પાણીઓ, વાઇલ્ડ લાઇફ, તેમજ સરીસુપોની ડિટેઇલમાં દીપ શાહ દ્રારા માહિતી આપવામાં આવી હતી.

Sandesh 16<sup>th</sup> October, 2019

## **Sundarvan Nature Discovery Centre, Ahmedabad**

#### **Annual Inventory Report** SCH - 1 & SCH - 2 (Wildlife Protection Act) **Opening stock Closing stock** as on 1/04/2019 as on 31/03/2020 F Sr. No. Species M F U Т Birth Acquisition Disposal Death М U Т F M F U F U U М М **REPTILES** M F U Indian Cobra 1 6 6 6 6 Naja naja **Common Indian Monitor** 2 2 2 2 2 Varanus bengalensis Indian Rock Python 2 5 5 0 7 7 Python molurus Common Rat Snake 4 5 5 5 Ptyas mucosus Checkered Keelback 3 3 3 Xenocrophis piscator Russell's Viper 6 1 1 1 1 Doboia russelii **TOTAL REPTILES** 2 5 24 2 5 24 17 **17** 2 5 2 5 **TOTAL ANIMALS** 17 24 17 24

**Park Manager** 

## **Annual Inventory Report**

## SCH - 3 & SCH - 4 (Wildlife Protection Act)

		á	_	ening st n 1/04/															_	stock 1/03/2	as 020
Sl. No.	Species	М	F	U	т		Birt	h	Acq	uisit	ion	Dis	spos	sal	D	eat	h	М	F	U	т
	MAMMALS					М	F	U	М	F	U	М	F	U	М	F	U				
1	Indian Porcupine	1	1	1	3			1										2	1	1	4
	Hystrix indica																				
2	Pale Hedgehog	1	1		2													1	1		2
	Paraechinus mieropus																				
	TOTAL MAMMLAS	2	2	1	5													3	2	1	6
	REPTILES																				
3	Red Sand Boa	1	1		2													1	1		2
	Eryx johni																				
4	Common Sand Boa	1	1		2													1	1		2
	Eryx conicus																				
5	Common Indian Krait			6	6			2									3			5	5
	Bungarus caeruleus																				
6	Saw-scaled Viper	1	1		2													1	1		2
	Echis carinatus																				
7	Star Tortoise			19	19			1												20	20
	Geochelone elegans																				
	TOTAL REPTILES	3	3	25	31			3									3	3	3	25	31
	TOTAL ANIMALS	5	5	26	36			4									3	6	5	26	37

Park Manager

## **Annual Inventory Report - Exotic Animals**

			Opening stock as on 1/04/2019						_										_	stock 1/03/2	as 020
Sl. No.	Species	М	F	U	т		Birt	h	Acq	uisit	ion	Dis	spos	sal	D	eat	h	М	F	U	т
	REPTILES					М	F	U	М	F	U	М	F	U	М	F	U				
1	African Slender-snouted Crocodile	0	2	0	2													0	2	0	2
	Mecistops cataphractus																				
2	Red eared Slider Turtle	3	3	0	6													3	3	0	6
	Trachemys scripta																				
	Total Reptiles	3	5	0	8													3	5	0	8
	Birds																				
1	Cockateil			34	34			12												46	46
	Nymphicus hollandicus																				
2	Java Finch			10	10			2												12	12
	Lonchura oryzivora																				
3	Budgerigar			150	150												5			145	145
	Melopsittacus undulatus																				
4	Love Birds																				
	Agapornis roseicollis			8	8			8									2			14	14
	TOTAL REPTILES	3	5	0	8													3	5	0	8
	TOTAL ANIMALS	3	5	202	210			22									7	3	5	217	225

Park Manager