# Sundarvan Nature Discovery Centre, Ahmedabad

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

2022-23



# Sundarvan

# **A Nature Discovery Centre**

Jodhpur Tekra, S. M. Road, Ahmedabad – 380 015. Phone: 079-26923148, +91-9408752601

#### Report of the Officer-in-charge

Since its inception in 1978, Sundarvan Nature Discovery Centre has been carrying out reptile awareness programs. Regular reptile awareness and rescue programs conducted in Sundarvan have sensitized the masses of the city on the importance of these animals and their ecological role. These awareness programs have directly led to a 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 the above programs, 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 16613 students and 2121 teachers from 141 schools visited Sundarvan during this year to enhance their classroom learning.

Indian zoos are moving towards the new era to fulfill 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 external funding. Renovations of snake enclosures are being done and the earlier submitted Master Plan is being reviewed.

The lush green campus acts as a 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 programs. 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.

(Mr. Deep Shah) Park manager, Sundarvan

#### 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 organized a week-long snake awareness program 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 for the conservation of snakes and other reptiles to all the strata of the society.
- To conduct training workshops for teachers, researchers, naturalists, volunteers, corporate personnel based upon their needs of nature education and conservation of wildlife in general and snakes in particular.
- To develop model Zoo Education and Management Programme for Zoo Keepers and Zoo Administrators.

#### 3. About us

Sr.No.	Particulars	Information
Basic In	formation about the Zoo	1
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	07935708725
6	Fax Number	NA
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)	19.08.2021
11	Category of zoo	Mini-zoo

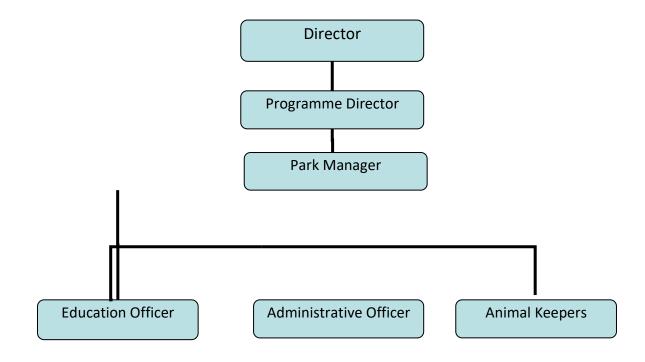
Sr.No.	Particulars	Information
12	Area (in Hectares)	1.3
13	Number of Visitors (Financial Year)	Adult : <b>62230</b>
		Children : <b>27144</b>
		Total Indian : <b>NA</b>
		Total Foreigners : <b>NA</b>
		Total Visitors: 89374
14	Visitors' Facilities Available in Zoo	Children Play area, Adventure park, Amphitheatre, Seating arrangements, Toilets and Drinking water.
15	Weekly Closure Day of the Zoo	Monday
Manage	ement Personnel of the zoo	
16	Name with designation of the Officer incharge	Mr. Deep Shah, 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 is managed by a third part agency on outsourced basis.

#### 5. Human Resources

Manpower of the Zoo\*

Sr.No.	Designation	Number of Sanctioned	Names of the	
		Posts	incumbent	
1	Park Manager	1	Mr. Deep Shah	
2	Education Officer	0	Mr. Deep Shah	
3	Administrative Assistant	1	Mr. Shailesh Patel	
4	Animal Keepers	3	Madan Sisodiya, Ratilal	
			Solanki, Jayendra	
			Dantaniya	

<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 Guards) and House Keeping- cleaning (2 People) for Sundarvan have been arranged on outsourced basis.

#### 5. Capacity Building of zoo personnel

Guidance by animal experts and veterinary doctors is given to our animal keepers regularly.

#### 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.)
2022-23	35,00,000 Apx.	33,00,000 Apx.

#### **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 boa)	Rat/chicks	One per snake	Two per snake	Fortnightly during winter and weekly during other seasons
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	Red eared Slider Turtle	Packaged food	Daily	Daily	
11	Java Finch	Soaked mung, gram, wheat, green coriander, spinach	Daily	Daily	
12	Love Birds	Maize Corn, Soaked Wheat & Gram, Green Cucumber, Tomato, Seasonal fruits	Daily as per requirement	Daily as per requirement	
13	Budgerigar	Millet, and multi seed combination (branded Budgerigar seed food), green coriander, spinach	Daily as per requirement	Daily as per requirement	
14	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:

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

#### 11. Disinfection Schedule

Sr.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

Sr.No.	Name	Designation	Date of Health Check up	Findings of Health Check up
1	Mr. Madansinh Sisodia	Animal Keeper	30-03-2022	Normal
2	Mr. Ratilal Solanki	Animal Keeper	30-03-2022	Normal

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

We have renovated Domestic Bird Section as desired by the CZA under its recommendations.

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

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 2022-23 are given below:

#### i) Reptile awareness (8th and 24th March 2022)





For Torrent Power Ltd. a one-day reptile awareness training program conducted for around 95 employees in Ahmedabad, India. The program covered general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebites, treatment, making of anti-venom, myths and facts, and conservation importance. A documentary on the Big Four venomous snakes was also screened. The participants were also taught about various tools and techniques for rescuing snakes in the wild.

#### ii) Snake awareness program (12th March 2022)



Around 15 kids from Special Support Squad, along with their parents and teachers, visited Sundarvan in Ahmedabad. They participated in a snake awareness program, which covered topics such as general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebite, treatment, making of anti-venom, myths and facts, and conservation importance. The kids also went on a trail walk and learned about various animals.

#### iii) Reptile awareness ( 11th, 12th, and 13th April 2022)



For Torrent Power Ltd. a one-day reptile awareness training program conducted for around 40 employees in Ahmedabad, India. The program covered general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebites, treatment, making of anti-venom, myths and facts, and conservation importance. A documentary on the Big Four venomous snakes was also screened. The participants were also taught about various tools and techniques for rescuing snakes in the wild.

#### iv) Summer night camp (May - June 2022)

Every year in the month of April – May, Sundarvan organizes Summer Night Camp for the kids of 6 to 12 years. Around 142 kids participated in 4 batches in winter. Kids enjoyed a lot during the overnight camp. Various activities like- Bird Feeding, Bat Awareness, Documentary screening, Night Nature Trail walk, Campfire, and, Bird Watching were being conducted for kids.







Kids fed captive Birds for building better harmony between them and the Birds. Myths and Facts, Bat diversity of India, and the Characteristics of Bats were explained during the Bat Awareness program. Echo-location concept was explained by playing a game. Documentary on Big four snakes, single-use plastic issues, and Spider web were screened and explained. Nocturnal creatures and their behaviors were explained during the Night Nature Trail walk. The importance of water conservation was explained in the form of game and also other games were played

during Campfire. Bird Watching session was conducted in the morning. Identification of Birds by various characteristics was explained during the session.

The kids had a lot of fun staying on the premises of Sundarvan. Various fun and learn activities like - Feast with the Fleet, Communication in Animals, Movie Night, Insect Watch, Outdoor games, Yoga Bingo, and Know Your Feathered Friends were organized for them.

#### v) Celebration of "World Environment Day" (5th June 2022)

On World Environment Day, Sundarvan, Ahmedabad organized a variety of activities to sensitize people about nature and the environment with an "only one earth" theme. These activities included:







Bird feeding for 13 underprivileged people and 18 volunteers from Prayaas Foundation, Nature trail walks for 31 people, Documentary screenings for 31 people, Bat awareness sessions for 100 people, where myths and facts about bats were explained, and Snake awareness sessions for 100 people, where general information about reptiles, snake diversity, and precautions to avoid snakebite were covered. A cleanliness drive on the premises of Sundarvan, where 10 kg of plastic waste was collected.

#### vi) School Visit (17th June 2022)





Around 50 students from Gajera Global School, Surat visited Sundarvan, Ahmedabad. They participated in a nature trail walk and learned about the importance of biodiversity, both in general and in urban areas. They also attended a snake awareness session, where they learned about the different types of snakes, how to identify venomous and non-venomous snakes, and how to avoid snakebites.

#### vii) Snake awareness program (6th July 2022)



Around 120 students from Aarihant Homoeopathic Medical College and Research Institutions, Kalol visited Sundarvan for a snake awareness program. The program covered topics such as general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebites, treatment, making of anti-venom, myths and facts, and conservation importance.

#### viii) Reptile Awareness Program (7<sup>th</sup> – 8<sup>th</sup> July 2022)



Around 240 B.Tech. Students from IIT Gandhinagar participated in a reptile awareness program. The program covered topics such as general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebites, treatment, making of anti-venom, myths and facts, and conservation importance.

#### ix) Snake awareness program (13th July 2022)



Around 60 students from the Department of Forensic Science at Shri Swaminarayan University in Kalol visited Sundarvan for snake awareness. The program covered topics such as general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebites, treatment, making of anti-venom, myths and facts, and conservation importance. A documentary on the Big Four Snakes was also screened for better understanding.

#### x) School Visit (22nd June 2022)



Around 25 students and teachers from Gajera Global School in Surat visited Sundarvan, Ahmedabad. They participated in a nature trail walk and learned about the importance of urban biodiversity. They also attended a snake awareness session, where they learned about the different types of snakes, how to identify venomous and non-venomous snakes, and how to avoid snakebites.

#### xi) Snake awareness session (1st August 2022)



Around 85 employees from Kotak Bank visited Sundarvan, Ahmedabad for a snake awareness session. The session covered topics such as general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebites, treatment, making of anti-venom, myths and facts, and conservation importance.

#### xii) Teacher's Training program on "Sustainability and Biodiversity" (4th and 5th August 2022)



The program was attended by around 50 school teachers from Daskroi and Banaskantha districts. The goal of the program was to raise awareness about biodiversity and conservation among students. The activities were designed in a way that students could relate them to their curriculum. The teachers participated in a nature trail walk, where they observed wildlife, prepared a checklist, made a resource map, conducted a wildlife survey, and observed wild animal homes. They also received hands-on experience with quadrate sampling, which allowed them to compare microhabitats. Group activities such as creating a seasonal calendar and discussing the future of biodiversity conservation in Ahmedabad were also held.

#### xiii) Snake awareness session (26th August 2022)



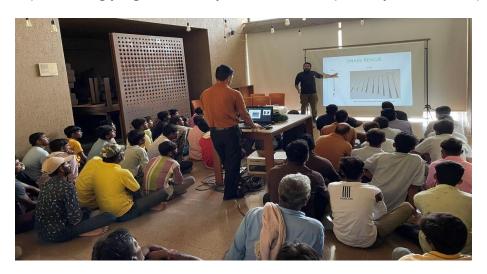
Around 110 students and teachers from Ankur International School in Ahmedabad visited Sundarvan. They participated in a snake awareness session, where they learned about the different types of snakes, how to identify venomous and non-venomous snakes, and how to avoid snakebites. The session also covered topics such as general information about reptiles, snake diversity, morphological characteristics, precautions to avoid snakebites, treatment, making of anti-venom, myths and facts, and conservation importance.

#### xiv) Snake Awareness Program (12th September 2022)



Around 15 first graders from Mahatma Gandhi International School in Ahmedabad participated in a snake awareness program at Sundarvan. The session was interactive, and the students were eager to learn about snakes. They asked questions about what snakes eat, where they live, the texture of their skin, and how old they are. The facilitator answered their questions in a simple way that was easy for the students to understand. The session also covered topics such as snake habitats, diet preferences, anatomy, sense organs, and different species of snakes.

#### xv) A Training program on "Reptile Awareness" (15th September 2022)



A Reptile awareness training program was conducted for the staff of Suryam Repose Houses. The program was attended by 65 staff members, including laborers, gardeners, security guards, and housekeepers. The topics covered in the program included general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebites, treatment, making of anti-venom, myths and facts, and conservation importance. The participants were also shown and demonstrated various tools and techniques for rescuing snakes in the wild.

#### xvi) Snake awareness program (21st September 2022)



Around 50 third-year professional BAMS students from Aarihant Ayurvedic Medical College and Research Institute in Gandhinagar visited Sundarvan for a snake awareness program. The program was part of their FMT subject, which includes a chapter on snakes and toxicity. The session was very educational, and the students learned about a variety of topics related to snakes, including general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebite, first-aid and treatment, making of anti-venom, myths and facts, and conservation importance. The

students were very engaged in the session and asked follow-up questions. They were also allowed to see and interact with some of the snakes that are housed at Sundarvan.

#### xvii) School Visit (26th September 2022)



Students of Junior KG, Senior KG, Grade 1, and Grade 2 of Kenalily School in Ahmedabad visited Sundarvan for a half-day field trip. They participated in various activities, including bird feeding, nature trail, and snake awareness. The students thoroughly enjoyed their visit to Sundarvan and learned a lot about the natural world. They were especially excited to see the different types of snakes and learn about their importance in the ecosystem.

#### xviii) National Wildlife Week Celebration (2<sup>nd</sup> to 8<sup>th</sup> October 2022)

#### a) Photography competition







Sundarvan hosted an online photography competition as part of National Wildlife Week. The competition was open to all photographers, and the theme was "Capturing the Wildlife". There were four categories: Birds, Mammals, Butterflies, and Reptiles. The competition was a great success, and it helped to raise awareness of the importance of wildlife conservation.

#### b) Cleanliness drive and snake awareness program (2<sup>nd</sup> October 2022)



Cleanliness drive: Around 15 students from Scouts and Guides from Thaltej Primary School, along with volunteers and the Sundarvan team, collected approximately 12 kg of waste from the Sundarvan premises.

Snake awareness program: Around 100 visitors participated in the talk, where topics such as snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebite, first-aid and treatment, making of anti-venom, myths and facts, and conservation importance were covered.

The cleanliness drive and snake awareness program were both successful in raising awareness about the importance of wildlife conservation and the need to protect our environment

#### c) Snake Awareness Session (6th- 7th October 2022)





Sundarvan conducted a snake awareness session for 3rd year BHMS and BAMS students of Government Akhandanand Ayurvedic College and for 80 employees of Torrent Power Limited. The session covered a wide range of topics related to snakes, including their biology, diversity, and how to avoid being bitten. The students also learned about the importance of conservation

and how they can help to protect snakes. The program also included documentaries on the Big Four Venomous Snakes and's and Don'ts in case of a snakebite. The participants were also shown and demonstrated various tools and techniques for rescuing snakes in the wild. The program was well-received by the participants, and they learned a lot about snakes and how to stay safe around them

#### xix) School Visit (14<sup>th</sup> November 2022)



Around 200 students from SKUM School visited Sundarvan as part of the Children's Day celebrations. The students enjoyed a puppet show, followed by a snake awareness session where they learned about different morphological characteristics, habitats, food preferences, species diversity, and precautions to avoid snake bites. They also enjoyed bird feeding, where they fed a variety of birds, including ducks and geese. The day was a memorable one for all the students.

#### xx) School Visit (2<sup>nd</sup> December 2022)





Around 70 toddlers from Planet Discovery Centre in Ahmedabad visited Sundarvan. They participated in various activities, including bird feeding, trail walking, and snake awareness.

#### xxi) Snake Awareness Session (24th January 2023)



Sundarvan conducted a snake awareness program for students at Sharda Mandir School in Nadiad. The program covered topics such as general information about reptiles, snake diversity, morphological characteristics, venomous and non-venomous snakes, precautions to avoid snakebites, treatment, and making anti-venom. The program also covered do's and don'ts in case of snakebite and busting common myths about snakes.

#### xxii) Winter Night Camp at Sundarvan:

Every year in the month of December – January, Sundarvan organizes Winter Night Camp for the kids of 6 to 12 years. Around 163 kids participated in 6 batches in winter. Kids enjoyed a lot during the overnight camp. Various activities like- Bird Feeding, Bat Awareness, Documentary screening, Night Nature Trail walk, Campfire, and, Bird Watching were being conducted for kids.







Kids fed captive Birds for building better harmony between them and the Birds. Myths and Facts, Bat diversity of India, and the Characteristics of Bats were explained during the Bat Awareness program. Echo-location concept was explained by playing a game. Documentary on Big four snakes, single-use plastic issues, and Spider web were screened and explained. Nocturnal creatures and their behaviors were explained during the Night Nature Trail walk. The importance of water conservation was explained in the form of game and also other games were played

during Campfire. Bird Watching session was conducted in the morning. Identification of Birds by various characteristics was explained during the session.

#### xxiii) Green Birthday Celebration:





Green Birthday Celebration is a unique activity of Sundarvan to build harmony 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 postcards 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 are being conducted during the Birthday Celebration. Total of 12 Green Birthdays were celebrated in this financial year.

#### 15. Seasonal special arrangements for the upkeep of animals

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

#### 16. Research Work carried out and publications

- 1. Shah D, Gangwar K and Patel K (2022). The Diversity of Mantis (Insecta: Mantodea) in Sundarvan-A Nature Discovery Centre, Ahmedabad, Gujarat, India, Prithivya: An Official Newsletter of WCB Research Foundation and WCB Research Lab. Vol 2(1) 5-11
- 2. Shah D. and Gangwar k. (2022). Unique band pattern in Common Krait (Bungarus caeruleus) recorded in Ahmedabad, Gujarat. Prithivya, An Official Newsletter of WCB Research Foundation and WCB Research Lab. Vol 2(3) 1-3.
- 3. Shah D. (2023). Sighting of Brown-breasted Flycatcher (Muscicapa muttui) at Sundarvan, Ahmedabad. Flamingo Gujarat. ISSN: 2583-2050. Vol. VI 1 Jan Mar, 2023 13-14.

#### 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 Animal acquisition / transfer / exchange happened during the year

#### 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 B.S. Bonal on 19<sup>th</sup> August, 2021 for the further recognition of mini zoo which had already been expired. New recognition along with new terms & condition has been received awaited from the end of CZA. However compliance to the given terms & condition is given below:

Ref: F. No. 19-67/92-CZA(61)(Vol.I) (E), dated 12-01-2021

Sr. No	Norm No. under RZR, 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regard to compliance of the conditions as submitted by the Officer-incharge of the Zoo
1. G	eneral req	uirements:			
1.	1.6(b)	Boundary wall of residence of zoo incharge may be camouflaged by plantation.	Six months	12.01.2021	New Snake Enclosures have been designed in such manner that residence of zoo in- charge cannot be seen.
2.	10.1(2)	Zoo should do proper efforts to make landscapes	Within six months	09.04.2013	Proper pathways, green fencing and railings have been prepared. A bridge on jungle pond with artificial water stream

3. 1.2(i) Landscaping, plantation along pathway which will attract butterfly is useful for two putposes. Food for butterfly and Beauty for area  4. 1.2(ii) Trees plantation near wall with creepers help to hide wall and building  5. 1.2(iii) Need tall plantation with creepers to hide wall and human habitation.  5. 1.2(iii) Need tall plantation with creepers to hide wall and human habitation.  6. 1.6 Zoo should increase the height of existing wall to separate residential colony from zoo.  7. 28.01.2015 Raising pathway has been carried out.  8. 28.01.2015 Sundarvan has got very good vegetation cover that hide the most part of the boundary walls and nearby buildings.  8. About 4 feet height plants of tall growing Asopalary Polyathria long(folial were planted in a row close to the boundary wall that separate the height plants of the boundary wall that separate from this, already many other flowering tree species have also been planted in this area five years back.  8. Zoo should increase the height of existing wall to separate residential colony from zoo.  8. 1.6 Within six of the boundary wall that separate residential area is not seen.						also has been
1.2(i)   Landscaping, plantation along pathway which will attract butterfly is useful for two purposes. Food for butterfly and Beauty for area						
4. 1.2(ii) Trees plantation near wall with creepers help to hide wall and building  Trees plantation near wall with creepers to building  1.2(iii) Need tall plantation with creepers to hide wall and human habitation.  The same trees are planted in the gaps.  About 4 feet height plantation with creepers to hide wall and human habitation.  The same trees are planted in the gaps.  About 4 feet height plantation of tall growing Asopalav Polyathia longifolia were planted in a row close to the boundary wall that separate the human habitation during the 2015 rainy season. Apart from this, already many other flowering tree species have also been planted in this aready many other flowering tree species have also been planted in this area five years back.  The same tree planted in the same also been planted in this area five years back.  Within six months  Op.04.2013 It has been resolved by constructing new snake enclosures. Now residential area is not seen.	3.	1.2(i)	pathway which will attract butterfly is useful for two purposes. Food for	One year	28.01.2015	Raising plants along sides of the pathway has been carried
5.   1.2(iii) Need tall plantation with creepers to hide wall and human habitation.   Immediately hide wall and human habitation.   About 4 feet height plants of tall growing Asopalav Polyalthia longifolia were planted in a row close to the boundary wall that separate the human habitation during the 2015 rainy season. Apart from this, already many other flowering tree species have also been planted in this area five years back.   O9.04.2013   It has been resolved by constructing new snake enclosures. Now residential area is not seen.	4.	1.2(ii)	creepers help to hide wall and	Six Months	28.01.2015	Sundarvan has got very good vegetation cover that hide the most part of the boundary walls and nearby buildings. New trees are planted in the
6. Zoo should increase the height of existing wall to separate residential colony from zoo.  Within six months  09.04.2013 It has been resolved by constructing new snake enclosures. Now residential area is not seen.	5.	1.2(iii)		Immediately		About 4 feet height plants of tall growing Asopalav Polyalthia longifolia were planted in a row close to the boundary wall that separate the human habitation during the 2015 rainy season. Apart from this, already many other flowering tree species have also been planted in this area five years
	6.	1.6	existing wall to separate residential		09.04.2013	It has been resolved by constructing new snake enclosures. Now residential area is not
4. Aummen auve and Stammy Pattern	2. A	dministrat	tive and staffing pattern		1	

7.	2.1	Adequate financial powers has to be delegated for effective management.	Within six months	09.04.2013	In-charge now has sufficient financial power
3. D	evelopmen	t and Planning			
8.	3.1	Master Plan of the zoo should be submitted to the CZ A.	Immediately	28.01.2015	Layout plan has already been approved in 2009. Master plan need to be submitted afresh for approval.
9.	10.30)	Animal Collection Plan is integral part of the Master Plan should be prepared and submitted for approval of the C.Z.A.	Three months	12.01.2021	Animal collection plan under master plan is under preparation
		ng, display of animals and animal enc			
10.	10.4(1)	Zoo should construct nature immersing enclosures as per approved Master Plan	Within two years	09.04.2013	Efforts are being made in this direction
11.	10.4(6)	Zoo should make efforts to enrich enclosure environment	Within three months	09.04.2013	Efforts are being made in this direction
12.	10.4(2)	Except that of Rat snakes & Russell's viper, enclosures of snakes should be redesigned having due regard to their behaviour.	One year	12.01.2021	New snake enclosures have been constructed as per CZA guidelines.
13.	10.4(6)	Many other enclosures like birds and snake enclosures need enrichment.	Six months	28.01.2015	It has been implemented
14.	4(5)	The zoo should provide appropriately designed and effective standoff barrier at every animal display enclosure to regulate the movement of visitors.	Six months	09.04.2013	It has been implemented
15.	4.1	All animal enclosure should be nature immersing.	One year	28.01.2015	Efforts are being made in this direction
16.	10.4(10)	Signage needs to be more informative about biology, behaviour, population status of animals and there should be uniformity in size and colour.	Six months	09.04.2013	Suitable signage's have been provided.
17.	4.2	The design and dimensions of every enclosure in the zoo should as per the prescribed standards and norms of CZA and should mee the biological behavior of the animals. Snake enclosure require to change.	One year	28.01.2015	It has been implemented
18.	10.4(10)	Interpretation facilities should be developed.	One year	12.01.2021	Efforts are being made

					in this direction
5. II	nkeen and	healthcare of animals:	<u> </u>		direction
19.	5.3	Food storage room needs to be kept clean, its floor should be repaired and refrigerator should be in proper working condition.	Three months	12.01.2021	It has been implemented
20.	5.2	Frequency of testing of food and water samples be increased.	Immediately	12.01.2021	It will be implemented
21.	5.2(6)	Zoo should send random sample of food and water for microbiological and toxicological examinations to recognized laboratory.	With immediate effect	09.04.2013	The tests for food were carried out on 18 <sup>th</sup> May 2018 from Public Health Laboratory, Ahmedabad and for water, it was done on 7 <sup>th</sup> May 2018 by Central Laboratory Ahmedabad (AMC Mahanagar Sewa Sadan).
22.	5.10	Keeper's Diary should be maintained.	Immediately	12.01.2021	All the necessary documents are prepared as specified by the CZA
6. V	eterinary a	and infrastructure facilities:			
23.	6.1	Treatment room should have water supply.	Three months	12.01.2021	It has been implemented
24.	6.1(c)	The zoo should provide a treatment room with basic facilities for treatment of animals.	Within six months	09.04.2013	It has been implemented
25.	6.6	Formal linkages through MoU on healthcare, preventive health management, surgical interventions, clinical tests etc. be established.	Three months	12.01.2021	We have established linkage with Disease Surveillance Department of State Animal Husbandry Department and seek their guidance time to time. We also have assistance from Kamala Nehru Zoological garden, Ahmedabad for Animal

					Health Management.					
7. P	ost Mortem	and disposal of carcasses of animal	ls							
26.	7.1	The Zoo should get the post-mortem of every animals died I the zoo and record should be maintained as per CZA format and all reports should be preserved for minimum six year.	With immediate effect	09.04.2013	Implemented and this is being followed.					
9. A	9. Acquisition and breeding of animals:									
27.	9.10	Disaster management plan should be prepared	Three months	12.01.2021	Our zoo is categorized as a mini-zoo and it receives very few visitors however we have a plan for Disaster Management if occurs.					

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

a. Mammals	xvi. Coppersmith Barbet	xxxv. Red-wattled Lapwing
i. Indian Flying Fox	xvii. Small Minivet	xxxvi. Purple Sunbird
ii. Short-nosed Fruit Bat	xviii. Grey-headed Canary	xxxvii. Purple-rumped Sunbird
iii. Small Asian Mongoose	Flycatcher	xxxviii.Asian Koel
iv. Northern Palm Squirrel	xix. Paradise Flycatcher	xxxix. Alexandrine Parakeet
	xx. Tickell's Blue Flycatcher	xl. Yellow-legged Green
b.Birds	xxi. Red-breasted Flycatcher	Pigeon
i. House Crow	xxii. Brown Flycatcher	xli. Jungle Babbler
ii. Jungle Crow	xxiii. Monarch Flycatcher	xlii. Small Green Bee-eater
iii. Common Myna	xxiv.Common Tailorbird	xliii. Indian Peafowl
iv. Ashy Drongo	xxv. Magpie Robin	xliv. Black-rumped Flameback
v. Black Drongo	xxvi.Indian Robin	xlv. Indian Silverbill
vi. Blue Rock Pigeon	xxvii. Ashy Prinia	xlvi. Palm Swift
vii. Asian Collared Dove	xxviii. Red-vented Bulbul	xlvii. Craig Martin
viii. Laughing Dove	xxix.Lesser whistling Duck	xlviii. Golden Oriole
ix. Red Collared Dove	xxx. Red-naped Ibis	
x. Grey Francolin	xxxi.Pond Heron	c. Reptiles
xi. Rufous Treepie	xxxii. White-breasted	i. Common Garden Lizard
xii. Southern Coucal	Waterhen	ii. Brook's Gecko
xiii. Shikra	xxxiii. Yellow Wagtail	iii. Northern House Gecko
xiv. Black Kite	xxxiv. White-throated	iv. White-spotted Skink
xv. Rose-ringed Parakeet	Kingfisher	v. Common Snake Skink

- vi. Common Monitor Lizard
- vii. Indian Flap shell Turtle
- viii. Indian Rat Snake
- ix. Spectacled Cobra
- x. Common Sand Boa
- xi. Common Wolf Snake
- xii. Common Krait
- xiii. Red-eared slider turtle

#### **Media Coverage:**



endrophiles, listen up! Summer vacays have begun and if you haven't planned any getaways yet, here's a camp you can enroll your children in. If your "little nature monsters" love to "explore magical things which happen between the months of May and June", book a seat at this night

camp at Sundarvan. Activities at the camp include: Feast with the fleet, communication in animals, movie night, insect watch, different outdoor games, yoga bingo, know your feathered friends, among others. Need more reasons, go on, book now!

Summer Night Camp\_Ahmedabad mirror coverage\_19<sup>th</sup> May 2022

# Sundarvan

## નાઇટ કેમ્પ દરમિયાન ખુલ્લા આકાશ નીચે બાળકોએ ઇન્સેક્ટ વોચ અને આઉટડોર ગેમ્સની મજા માણી



છેલ્લા બે વર્ષથી સુંદરવન ખાતે સમર વેકેશન દરમિયાન સમર નાઇટ કેમ્પ યોજાય છે. આ વર્ષે પણ દથી ૧૨ વર્ષના બાળકો માટે નાઇટ કેમ્પ યોજાયો છે. આ અંગે વાત કરતા મેન્ટોર દીપ શાહે કહ્યું કે, સુંદરવનમાં નાઇટ કેમ્પનું આ બીજુ વર્ષ છે. બાળકો સુંદરવનમાં ત્રીનરી વચ્ચે નાઇટ આઉટ કરે, વિવિધ એક્ટિવિટી સાથે ફન ગેમ્સ રમે અને રાતના સમયે વૃક્ષો અને પશુ-પક્ષીઓના જીવનનો રોમાંચક અનુભવ મેળવે તે માટે આ પ્રકારના નાઇટ કેમ્પનું આયોજન કરાયું છે. જેમાં બાળકોને ખુલ્લા આકાશની નીચે ફિસ્ટ વિથ ધ ફ્લીટ, કમ્યુનિકેશન ઇન એનિમલ,મૂવી નાઇટ, ઇન્સેક્ટ વૉચ, અલગ અલગ આઉટડોર ગેમ્સ, યોગા બિન્ગો અને નો યોર ફેઝર ફ્રેન્ડસ જેવી એક્ટિવિટી કરાવી રહ્યા છે.

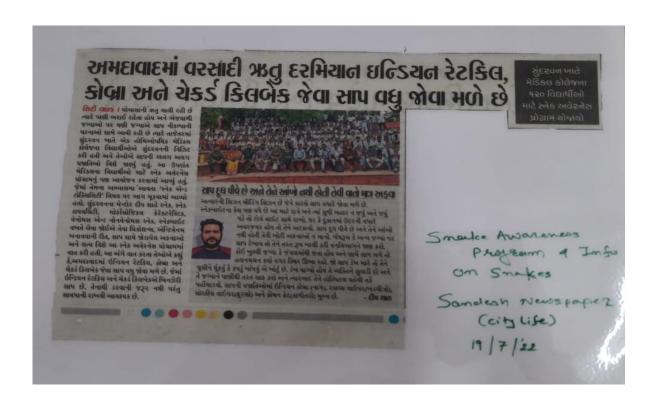
Summer Night Camp Sandesh coverage 19th May 2022



Snake Awareness Program\_Sandesh coverage\_15<sup>th</sup> July 2022



Snake Awareness Program\_Divya Bhaskar coverage\_16<sup>th</sup> July 2022



Snake Awareness Program\_Sandesh coverage\_19<sup>th</sup> July 2022





Sundarvan new look\_Ahmedabad mirror coverage\_8<sup>th</sup> August 2022



Sundarvan renovation\_Divya bhaskar coverage\_3<sup>rd</sup> November 2022



Winter Camp\_Ahmedabad mirror coverage\_23<sup>rd</sup> December 2022



Winter Night Camp\_Ahmedabad mirror coverage\_7<sup>th</sup> January 2023

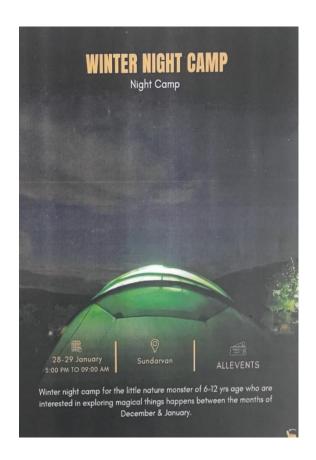
# સુંદરવન ખાતે કિક્સ માટે વિન્ટર નાઈટ કેમ્પ યોજાશે

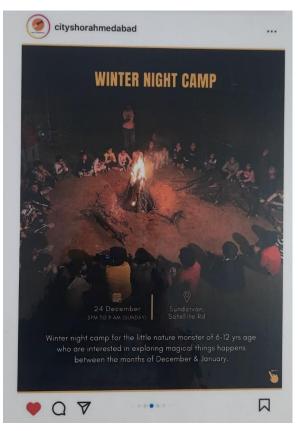
અમદાવાદ: સુંદરવનમાં 6થી 12 વર્ષના બાળકો માટે 21મી જાન્યુ.ના સાંજે 5થી રિવ. સવારે 9 વાગ્યા સુધી વિન્ટર નાઈટ કેમ્પ યોજાશે. બાળકો નેચર સાથે જોડાય તથા આઉટડોર એક્ટિવિટી એક્સપિરિયન્સ કરે માટે આ કેમ્પ યોજાશે. જેમાં કોમ્યુનિકેશન વિય એનિમલ, મૂવી નાઈટ, ઈન્સેક્ટ વૉચ, કેમ્પ ફાયરનું આયોજન કરાશે.

Winter Night Camp\_Divya bhaskar coverage\_20 January 2023



Winter Night Camp\_Ahmedabad mirror coverage\_20 January 2023





Winter Night Camp\_City shor ahmedabad\_December 2022-January 2023

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

#### **Annual Inventory Report** SCH - 1 & SCH - 2 (Wildlife Protection Act) **Closing stock Opening stock** as on 1/04/2022 on 31/03/2023 F Disposal F Sr. No. Birth Acquisition М **Species** М U Т Death U Т **REPTILES** M F U M F M F U M F U 1 Indian Cobra 6 6 6 6 Naja naja Bengal Monitor Lizard 2 2 2 2 2 Varanus bengalensis 2 4 3 3 Indian Rock Python 0 6 1 2 0 5 Python molurus Common Rat Snake 6 4 6 6 6 Ptyas mucosus Checkered Keelback 5 3 3 3 Xenocrophis piscator Russell's Viper 2 2 6 2 2 Doboia russelii **TOTAL REPTILES** 19 25 2 19 24 2 4 3 19 25 1 2 19 **TOTAL ANIMALS** 24

## **Annual Inventory Report**

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

			Opening stock as on 1/04/2022																	ng sto 1/03/	
Sl. No.	Species	М	F	U	т		Birth		Acq	uisit	ion	Disposal		al		Death		М	F	U	т
	MAMMALS					М	F	U	М	F	U	М	F	U	М	F	U				
1	Indian Porcupine	2	1	1	4													2	1	1	4
	Hystrix indica																				
2	Pale Hedgehog	0	0		0													0	0		0
	Paraechinus mieropus																				
	TOTAL MAMMLAS	2	1	1	4													2	1	1	4
	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			5	5															5	5
	Bungarus caeruleus																				
6	Saw-scaled Viper	1			1													1			1
	Echis carinatus																				
7	Star Tortoise			20	20															20	20
	Geochelone elegans																				
8	Common Trinket Snake		1																1		1
	Coelognathus helena																				
	TOTAL REPTILES	3	3	25	30													3	3	25	31
	TOTAL ANIMALS	5	4	26	34													5	4	26	35

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

			Opening stock as on 1/04/2022									Closing stock as on 31/03/2023										
Sl. No.	Species	М	F	U	т		Birt	h	Acqı	uisit	ion	D	ispos	al		Deatl	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			49	49															49	49	
	Nymphicus hollandicus																					
2	Java Finch			27	27			13												40	40	
	Lonchura oryzivora																					
3	Budgerigar			145	145															145	145	
	Melopsittacus undulatus																					
4	Love Birds			14	14															14	14	
	Agapornis roseicollis																					
	TOTAL REPTILES	3	5	0	8			0										3	5	0	8	
	TOTAL ANIMALS	3	5	217	225			13										3	5	248	256	