

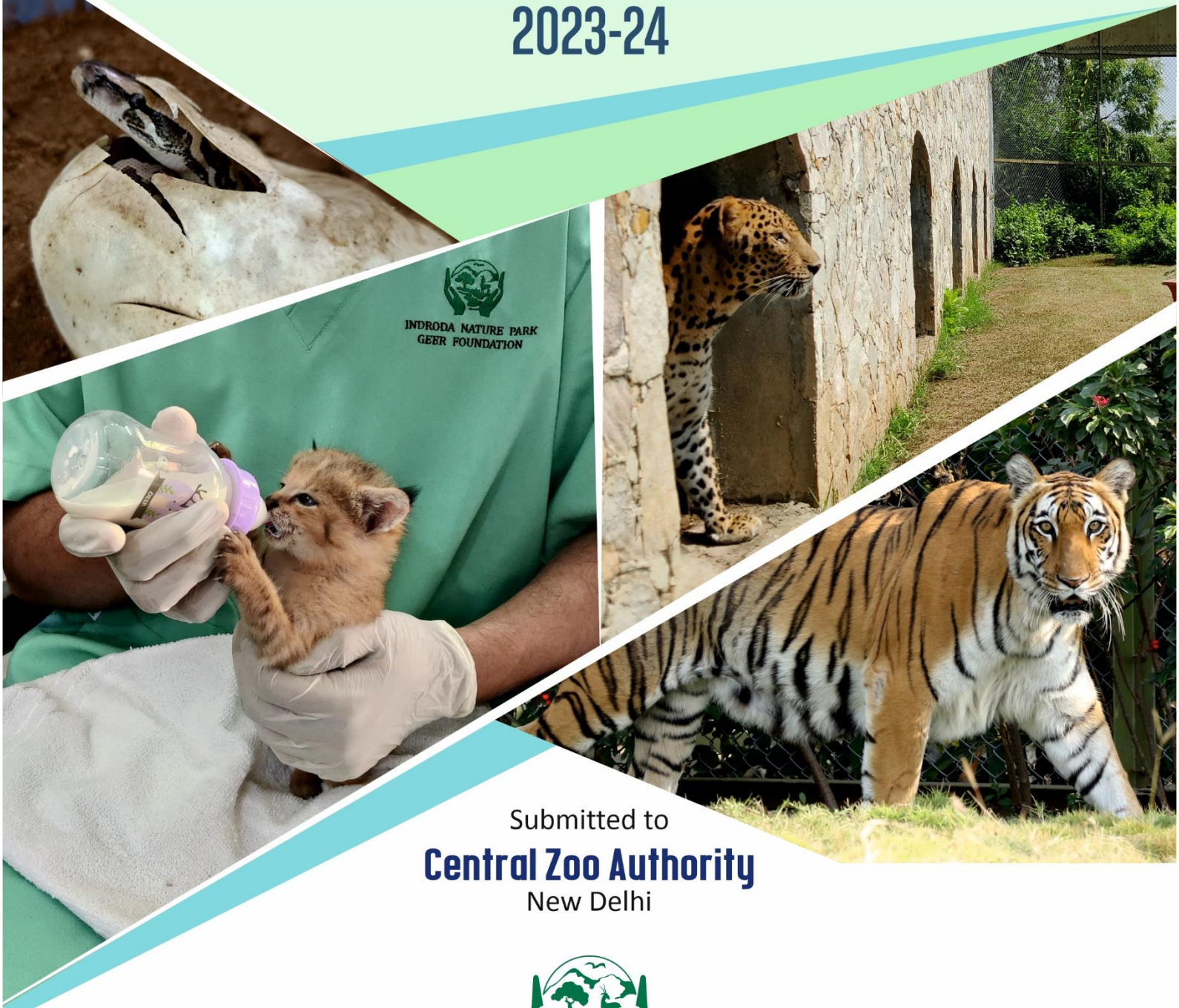


सत्यमेव जयते
Government of Gujarat

INDRODA NATURE PARK ZOO

Annual Report

2023-24



Submitted to

Central Zoo Authority

New Delhi



Gujarat Ecological Education and Research (GEER) Foundation

Indroda Nature Park, P. O. Sector-7, Gandhinagar - 382007, Gujarat, INDIA



INDRODA NATURE PARK ZOO

Annual Report

2023-24



**Gujarat Ecological Education and Research
(GEER) Foundation**

June -2024

FROM THE DIRECTOR'S DESK



Indroda Nature Park, a prominent modern attraction in Gandhinagar, has its roots in a visionary initiative dating back to 1977. Initially it was conceived as a "Wildlife Park and Natural History Museum" complex. Then the project took shape with the establishment of a Deer Park ("Haranodyan") in December 1978. This park aimed to raise public awareness about wildlife and biodiversity as part of the Gandhinagar Capital Project which was inaugurated by the then Hon'ble Governor of Gujarat State.

Over time, the Gujarat Ecological Education and Research (GEER) Foundation, formed in June 1982 by the Forests and Environment Department of the Government of Gujarat, expanded upon the original deer park. Numerous wild animal enclosures and open moats were added to accommodate a diverse array of wild mammals, reptiles, and birds. Today, this site is known as the "Indroda Nature Park Zoo," recognized as a medium category zoo by the Central Zoo Authority (CZA) of India. Presently, visitors can enjoy a natural setting at the zoo, explore the Botanical Garden and travel through time at the Dinosaur and Fossil Park. Additionally, the GEER Foundation is also introducing a new feature in the park called "Nagar Van," an urban forest. It will offer citizen a chance to immerse themselves in the peaceful ambiance of a forest close to the city.

The GEER Foundation has always remained steadfast in its dedication to animal welfare and fostering a love for nature among people. Through continuous efforts, the Foundation ensures the ongoing development of Indroda Nature Park Zoo and conservation of wild flora and fauna. I am pleased to introduce our annual report for the past year, titled "Indroda Nature Park Zoo Annual Report 2023-24," which highlights the initiatives and activities undertaken. This report emphasizes the strategies employed to fulfill the zoo's goals and mission. Furthermore, it provides valuable insights into the organizational framework and the diverse amenities within and around Indroda Nature Park Zoo.

Over the course of the past year, significant developmental works have been initiated for housing and display of variety of new wild animals. Adding in to the public amenities, the foundation has initiated construction of a new block of public toilets and a cloakroom in parking area. The GEER Foundation has commenced the construction of modern infrastructure for a veterinary hospital within the park. This facility will provide all essential healthcare services to the rescued wildlife of the North Gujarat region apart from zoo animal healthcare. In the reporting year, Approvals of enclosure designs from the Central Zoo Authority for enclosures for Fox, Jackal, Hyaena, Wolf, and Sloth Bear have been obtained. The said enclosure development

work has already been started. Renovation and repair work in the Dinosaur and fossil section has commenced, aimed at preserving its most precious elements that are original fossils and ensuring uniformity in their display.

Our attainment of the highest standards in healthcare and animal husbandry is attributed to the unwavering dedication of our zoo veterinary officer, invaluable guidance from the health advisory committee, and external support from Kamdhenu University and the Department of Animal Husbandry on critical healthcare matters. In the reporting year, The Veterinary Officer of GEER Foundation, Dr. Aniket Patel was selected as a mentor from the wildlife sector of Gujarat state for the Pilot batch of SectorConnect programme by the National Center for Disease Control (NCDC), New Delhi and Department of Animal Husbandry (DoAH), Government of Gujarat. In the reporting year, to further improve the skills of our animal care team, we have implemented capacity-building programs dedicated to the zoo keepers and subordinate staff through engaging wildlife and veterinary experts. Certificates were presented on Independence Day and Republic Day to staff members who have shown exceptional performance throughout the year to uplift their morale. The staff members of zoo have been medically screened for zoonotic or contagious diseases. In the reporting year, the Indroda Nature Park had acquired a pair of Asiatic Lion and leopard. The acquired leopard was set in the display of visitors in the event of Wildlife Week Celebration -2023. Conservation breeding of Indian Rock Python, House sparrow, Painted stork and marsh crocodile have successfully carried out in the year 2023-24. The Veterinary Officer along with his team had, on various demands, was deployed to assist department of forest in human-wildlife conflict cases and rescue operations.

Throughout the 2023-24 year, a variety of educational activities were conducted, such as commemorating World Wetlands Day, World Wildlife Day, World Environment Day, International Tiger Day, World Lion Day, and Wildlife Week. Additionally, there were exhibitions of wildlife photography and a state-level Eco-fair organized during this period. These events offered visitors opportunities to participate in conservation initiatives and enhance their appreciation of the natural environment.

Moving forward, the zoo has ambitious plans for the coming year, including the construction of modern enclosures for Wild Asses, Snakes, Crocodiles-Gharyals, Tortoise-Turtles, Indigenous birds, and exotic birds. The design phase for these enclosures has been finalized.

I want to thank the officials of the Gujarat Forest Department for their consistent guidance and support in the ongoing development of the zoo. Additionally, I applaud the efforts of the Deputy Director (R&D) of the GEER Foundation and all the committed zoo staff who contribute to the welfare of captive animals and the conservation of endangered species through ex-situ efforts.



R. K. Sugoora, IFS
Director
GEER Foundation

CONTENTS

Sr. No	Section	Page No.
1.	History of the Zoo	1
2.	Vision	1
3.	Mission	1
4.	Objective	1
5.	About us	4
6.	Organizational Chart	9
7.	Human Resources	9
8.	Capacity Building of the zoo personnel	13
9.	Zoo Advisory Committee	16
10.	Health Advisory Committee	16
11.	Statement of income and expenditure of the Zoo	18
12.	Daily feed Schedule of animals	19
13.	Vaccination Schedule of animals	23
14.	De-worming Schedule of animals	23
15.	Disinfection and Hygiene Protocol of INP Zoo	24
16.	Health check-up of officers and employees of INP	26
17.	Developmental Works carried out in the INP during the year 2023-24	28
18.	Education and Awareness programmes during the year	28
19.	Important Events and happenings	44
20.	Seasonal special arrangements for upkeep of animals and Zoo Animal care & Veterinary Section	47
21.	Research Work carried out and Publications	54
22.	Conservation Breeding Programme of the Zoo	56
23.	Animal acquisition / transfer / exchange during the year	59
24.	Rescue and Rehabilitation of the wild animals carried out by the zoo	60
25.	Annual Inventory of animals of INP Zoo	62
26.	Mortality Report of animals.	66
27.	Status of compliance of conditions stipulated by Central Zoo Authority vide letter F. No.19-33/92-CZA(72) (Vol.V)(E) /147868 dated 11-01-2021	67
28.	List of free living wild animals within the zoo premises	71

1. History of the Zoo

INDRODA NATURE PARK (INP)

In pursuance of its objectives, Indroda Nature Park (INP), Gandhinagar initiated INP development works with the ecological insight, planning and management skills. From Mid 1970s, the Gujarat Forest Department had initiated plantation works in degraded Sabarmati River Banks as ravine reclamation works. Today, such afforestation has attained the shape of a dense forest. INP is now inhabited by a good number of birds, trees, shrubs, herbs, reptiles and mammals. The undulating terrain, with a background of a low-lying river provides for great scenic beauty.

Development of INP is aimed at imparting nature education to spread awareness about environmental conservation, providing opportunities of experiencing wilderness and protecting the rare and endangered species of animals and birds.

A **“Deer Park”** was established by the Gujarat Forest Department during the year 1978. Later a snake park, crocodile pits and tortoise pits were developed in 1980. After the establishment of the GEER Foundation and its Indroda Nature Park, it was decided that the INP will have initially a Small and subsequently a Medium category Zoo. Accordingly, various existing animal enclosures were grouped as the INP Zoo Section of Western Part of the Park. The INP Zoo was, recognized as a Medium Zoo, by the Central Zoo Authority on 20/02/97. During the Year 2006-07, it was decided to extent INP Zoo area to the East Bank by creating Safari Park.

2. Vision

“Indroda Nature Park Zoo to be a part of overall Indroda Nature Park (West Bank & Aranya Udhyan on East Bank) as a MEDIUM CATEGORY ZOO for the purposes of (i) Research, (ii) Captive conservation breeding and (iii) Education of general public for the subject of wild animals and their role in natural ecosystem”

3. Mission

“Participate in National Endeavour for conservation of threatened wild animals through captive conservation, captive breeding, research and education of general public”.

4. Objectives

The main objective of the Indroda Nature Park (INP) Zoo, in accordance to the National Zoo Policy, 1998, is to complement and strengthen the National efforts in conservation of wild fauna.

Detailed objectives of the INP Zoo are as under:

1. Conservation:

Ex-situ captive conservation of the protected wild animals to strengthen the national efforts in conservation of wild fauna.

2. Captive Conservation Breeding:

Captive conservation breeding of selected and prioritized wild ungulates for supporting in-situ conservation of these species and their associate fauna through participating in planned introduction, re-introduction and enrichment of wild ungulates in Protected Areas (PAs).

3. Research and studies:

Providing opportunities for scientific studies and research useful for conservation of wild animals in captivity.

4. Conservation Education and Awareness:

Providing opportunities to zoo visitors in order to (a) get inspiration for empathy towards wild animals, (b) learn, understand and be aware about the life cycle, habitat requirement and ecology of wild animals and (c) get inspired for holistic nature conservation.

➤ **STRATEGY FOR ACHIEVING THE OBJECTIVES**

1. Indroda Nature Park will continue to provide natural environment including adequate natural environment sections in the INP Zoo Section of the Park in order to provide adequate opportunity to visitors to experience such natural environment.
2. INP Zoo will give priority to endangered species of wild animals in its Collection Plan and wild animals will be acquired and maintained as per the Collection Plan approved by the Central Zoo Authority (CZA).
3. INP Zoo will endeavour to modify old animal enclosures and construct new animal enclosures for providing better housing, upkeep, health care and any special requirements such as shelters, perches, withdrawal areas, wallow, drinking water etc. of wild animals. The INP Zoo will have two types of wild animal enclosures viz. (a) traditional modern enclosures where visitors can view wild animals from outsides and (b) safari type [topsy-turvy zoo] Herbivores / Wild Ungulate Park in the Eastern Section of the INP Zoo wherein, visitors will be allowed in a highly regulated manner inside the Herbivores / Wild Ungulate Safari Park in appropriate Four-Wheel silent / less noisy vehicles.

4. The wild animals will be provided adequate space for their natural behaviour including their social & breeding requirements and protect them from adverse climate and visitor disturbance influences.
5. The INP Zoo will endeavor to provide for adequate nutrition in the form of proper diet and a veterinary health care. Overall hygiene and sanitation shall be maintained as measures for better health of animals and disease prevention.
6. The INP Zoo will endeavor to procure and maintain adequate breeding stock of wild ungulates including (a) Spotted Deer; (b) Sambar; (c) Black Buck; (d) Barking Deer, (e) Chinkara and (f) Chausingha for supporting captive conservation breeding at INP Zoo as well as at identified PAs.
7. The INP Zoo is a part of overall organization set up of the Gujarat Ecological Education and Research (GEER) Foundation, Gandhinagar. The primary / main objectives of the GEER Foundation are (a) Ecological Research and (b) Ecological Education. The GEER Foundation, as part of pursuing its primary / main objectives, shall endeavour to promote research in the INP Zoo with a focus on ecology and conservation of endangered species.
8. The GEER Foundation, as part of pursuing its primary / main objective of ecological education, shall endeavour to promote studies and education on the subjects of ecology and conservation of endangered species.
9. The INP Zoo will endeavour to modernize its signage to make it (a) appropriately informative and (b) compatible to the natural surroundings of the INP.
10. The INP Zoo will endeavour to provide adequate and suitable visitor amenities including (a) proper entry and walking foot paths in display areas; (b) drinking water and other services; (c) proper resting places; (d) directional signages; (e) passive interpretation service through an orientation centre / reception centre and (f) active interpretation service through recognized guides / nature educators.
11. The GEER Foundation will endeavour to maintain high standards of security and safety of the INP including INP Zoo as well as of the visitors visiting the INP and INP Zoo.

The overall strategy of INP Zoo Management will be to properly integrate it with the overall INP management, which has ongoing plans for development of other sections, in specially designated different areas, including Botanical Garden, Earth Exhibits, Fossil Exhibits, Dinosaur Park, Nature Education Camp Sites, etc.

5. About Us

5.1 Basic and administrative information

Sr. No.	Particulars	Information
Basic Information about the Zoo		
1	Name of the Zoo	Indroda Nature Park Zoo
2	Year of Establishment	1978
3	Address of the Zoo	Indroda Nature Park, P.O. Sector-7, 'J' Road, Gandhinagar- 382007, Gujarat, India
4	State	Gujarat
5	Telephone Number	+91-7923977300, 23977311
6	Fax Number	-
7	E-mail address	dir-geer@gujarat.gov.in dydir-geer@gujarat.gov.in
8	Website	www.geerfoundation.gujarat.gov.in
9	Distance from nearest	Airport: Ahmedabad - 17 kms
		Railway Station: Gandhinagar (W.R.) - about 10 km; Ahmedabad (W.R.) - 30 kms
		Bus Stand: Gandhinagar (Gujarat State Road Transport Corporation) - about 4 km
10	Recognition Valid upto (Date)	19/08/2022 The evaluation of the Central Zoo Authority for recognition renewal has been conducted in the month of February, 2024

Sr. No.	Particulars	Information																																																																																																						
11	Category of zoo	Medium Zoo																																																																																																						
12	Area (in Hectares)	428 Hectares (157 ha- Western bank and 271 ha. - Eastern bank of river Sabarmati)																																																																																																						
13	<p>Number of Visitors (2023-24):</p> <p>Indroda Nature Park attracts visitors from Gandhinagar and Ahmedabad city. The annual footfall of Indroda Nature Park zoo in the year 2023-24 remained 5.25 lakh visitors.</p> <p>The detailed information about visitation is given in table below</p> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Month</th> <th>Adults</th> <th>Children</th> <th>Students</th> <th>Complimentary to the Divyangs and others</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>April-2023</td> <td>30489</td> <td>4194</td> <td>532</td> <td>99</td> <td>35314</td> </tr> <tr> <td>2</td> <td>May- 2023</td> <td>36193</td> <td>7753</td> <td>258</td> <td>104</td> <td>44308</td> </tr> <tr> <td>3</td> <td>June-2023</td> <td>29785</td> <td>4300</td> <td>1273</td> <td>79</td> <td>35437</td> </tr> <tr> <td>4</td> <td>July-2023</td> <td>29607</td> <td>3291</td> <td>1092</td> <td>33</td> <td>34023</td> </tr> <tr> <td>5</td> <td>August-2023</td> <td>35140</td> <td>4190</td> <td>2482</td> <td>277</td> <td>42089</td> </tr> <tr> <td>6</td> <td>September-2023</td> <td>27123</td> <td>3377</td> <td>3423</td> <td>99</td> <td>34022</td> </tr> <tr> <td>7</td> <td>October-2023</td> <td>14744</td> <td>1572</td> <td>1775</td> <td>645</td> <td>18736</td> </tr> <tr> <td>8</td> <td>November-2023</td> <td>55175</td> <td>12072</td> <td>4199</td> <td>303</td> <td>71749</td> </tr> <tr> <td>9</td> <td>December-2023</td> <td>45956</td> <td>7386</td> <td>12934</td> <td>1870</td> <td>68146</td> </tr> <tr> <td>10</td> <td>January-2024</td> <td>32242</td> <td>4006</td> <td>24754</td> <td>1048</td> <td>62086 (NRI;- A-29 C-07)</td> </tr> <tr> <td>11</td> <td>February-2024</td> <td>26826</td> <td>3095</td> <td>15911</td> <td>609</td> <td>46457 (NRI:- A-16)</td> </tr> <tr> <td>12</td> <td>March-2024</td> <td>25960</td> <td>3115</td> <td>3502</td> <td>370</td> <td>32974 (NRI: A-27)</td> </tr> <tr> <td>Total</td> <td>2023-24</td> <td>389240</td> <td>58351</td> <td>72135</td> <td>5536</td> <td>525341 (NRI-A-72 C-07 =79)</td> </tr> </tbody> </table>						Sr. No.	Month	Adults	Children	Students	Complimentary to the Divyangs and others	Total	1	April-2023	30489	4194	532	99	35314	2	May- 2023	36193	7753	258	104	44308	3	June-2023	29785	4300	1273	79	35437	4	July-2023	29607	3291	1092	33	34023	5	August-2023	35140	4190	2482	277	42089	6	September-2023	27123	3377	3423	99	34022	7	October-2023	14744	1572	1775	645	18736	8	November-2023	55175	12072	4199	303	71749	9	December-2023	45956	7386	12934	1870	68146	10	January-2024	32242	4006	24754	1048	62086 (NRI;- A-29 C-07)	11	February-2024	26826	3095	15911	609	46457 (NRI:- A-16)	12	March-2024	25960	3115	3502	370	32974 (NRI: A-27)	Total	2023-24	389240	58351	72135	5536	525341 (NRI-A-72 C-07 =79)
Sr. No.	Month	Adults	Children	Students	Complimentary to the Divyangs and others	Total																																																																																																		
1	April-2023	30489	4194	532	99	35314																																																																																																		
2	May- 2023	36193	7753	258	104	44308																																																																																																		
3	June-2023	29785	4300	1273	79	35437																																																																																																		
4	July-2023	29607	3291	1092	33	34023																																																																																																		
5	August-2023	35140	4190	2482	277	42089																																																																																																		
6	September-2023	27123	3377	3423	99	34022																																																																																																		
7	October-2023	14744	1572	1775	645	18736																																																																																																		
8	November-2023	55175	12072	4199	303	71749																																																																																																		
9	December-2023	45956	7386	12934	1870	68146																																																																																																		
10	January-2024	32242	4006	24754	1048	62086 (NRI;- A-29 C-07)																																																																																																		
11	February-2024	26826	3095	15911	609	46457 (NRI:- A-16)																																																																																																		
12	March-2024	25960	3115	3502	370	32974 (NRI: A-27)																																																																																																		
Total	2023-24	389240	58351	72135	5536	525341 (NRI-A-72 C-07 =79)																																																																																																		

Sr. No.	Particulars	Information
14	Visitors' Facilities Available in Zoo	1) Drinking water kiosks at 3 different places 2) Toilet blocks at 3 different places 3) Souvenir shop 4) Resting areas, gardens and benches 5) First aid kits 6) Fruit kiosk 7) Wheel chairs for "Divyang Jan"
15	Weekly Closure Day of the Zoo	The Zoo remains closed for visitors on Monday every week.
Management Personnel of the zoo		
16	Name with designation of the Officer in-charge	1) Shri R.K. Sugoora, Director & Additional Principal Chief Conservator of Forest, Gujarat Ecological Education and Research (GEER) Foundation 2) Shri R.P. Gelot, Dy. Director (R &D), GEER Foundation 3) Shri R.B. Solanki, Dy. Director (E. E), GEER Foundation
	Name of the Veterinary Officer	Dr. Aniket B. Patel
	Name of the Curator	Post of the curator is vacant the work of curator is being carried out by the Park Warden (R.F.O.)- Shri. A.C. Dodia
	Name of the Biologist	Dr. Sandeep Munjpara (i/c)
	Name of the Education Officer	Shri Alap Pandit (i/c)
	Name of the Compounder/ Lab Assistant	Shri Hitesh S. Desai
Owner / Operator of the Zoo		
17	*Name of the Operator	Shri R.P. Gelot,
18	Address of the Operator	Dy. Director (R & D), GEER Foundation, Indroda Nature Park, P.O.-Sector-7, 'J' Road, Gandhinagar- 382007, Gujarat, India.
19	Contact details/Phone number of Operator	Phone: +91-79-23977302, +91-79-23977300
20	E-mail address of Operator	dydir-geer@gujarat.gov.in

Sr. No.	Particulars	Information	
21	Other Information		
	Entry Fees	Category	Ticket Rates (INR)
		Child below 5 years of age	Free entry
		Child between 5-12 years of age	15.00
		Person above 12 years of age	30.00
		School and college students (on educational tour)	08.00
		Physically challenged (Divyangs)	Free entry
		Institutional/ general/ life members of GEER Foundation	Free entry
		Two wheeler parking	15.00
		Four wheeler parking	30.00
		Heavy motor vehicles- bus, truck etc. (on educational tour)	90.00
		Heavy motor vehicles- bus, truck etc.	120.00
		Filming (up to four hours)	6000.00
		Filming (for more than four hours in a day)	12000.00
		Amateur Camera for Photography (except mobile)	40.00
		Amateur Camera for Videography (except mobile)	125.00
		Professional Camera for Photography (S.L.R/D.S.L.R)	200.00
		Professional Camera for Videography (S.L.R/D.S.L.R)	3500.00
		NRI/OCI/FOREIGNER (Ticket Rates (INR))	
		Child below 5 years of age	Free entry
		Child between 5-12 years of age	100.00
	Person above 12 years of age	200.00	
	Zoo Timings	08.00 am to 05.30 pm	

5.2 Information pertaining to different sections of the INP:

5.2.1 INP Forest

The entire land of the park on the western bank of river Sabarmati supports over 1.33 lakhs indigenous trees, interspersed with several ornamental exotic trees. Over 136 species of trees have been recorded in the wilderness park.

5.2.2 Earth Section

In this section, exhibits of genesis of solar system and earth, geological evolution of earth and its continents, biogeography of the world, India and Gujarat are presented.

5.2.3 Dinosaur and Fossil Section

Gujarat boasts of having one among the most abundant of dinosaur hatcheries in the world at Rahioli in Kheda district. This unique natural history of occurrence of dinosaur eggs, bones, skin impressions etc. suggest a widespread presence of dinosaurs in ancient geological time. A Dinosaur & Fossil Section has been established at INP.

5.2.4 Botanical Garden

The Botanical Garden at INP has been developed to increase public awareness about plant science and medicinal plants. It aims at collecting, compiling, translating and publishing popular science works. At present, the Botanical Garden has a collection of about 800 plant species. It also provides a wonderful out-of-classroom experience for learning about plants to school students. It comprises of following 4 sections.

Arboretum is a collection of tree species, in the form of plantation with proper display of botanical details of the plant. There are 327 tree species identified in Gujarat state. The arboretum plot in the botanical garden is spread over an area of 2.5 ha. So far 250 tree species have been planted in this plot.

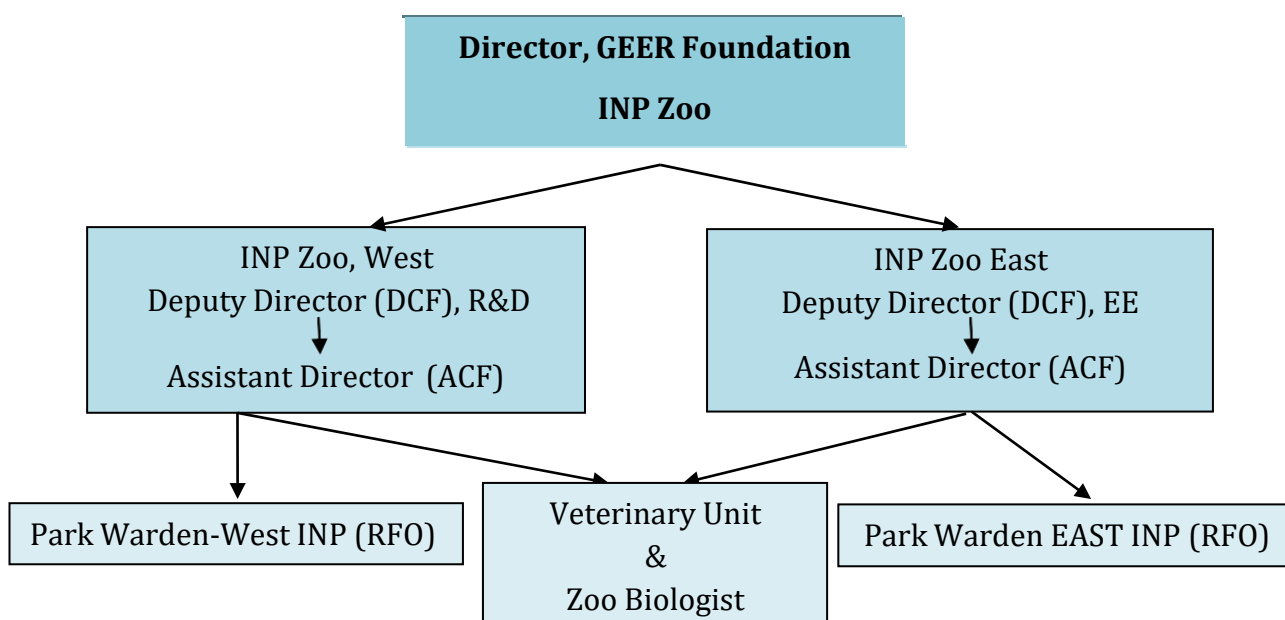
Cactus house contains more than 80 species of these succulent plants. The information about species, habitat, etc. is displayed for the knowledge of the visitors. The beautiful flowery plants are one of the major attractions.

Bamboo collection has all six species of bamboo found in Gujarat. It is being developed to raise all the species occurring in Western India and a few other species.

Medicinal plant and grass section has about 250 species of plant species having medicinal and / or livelihood values.

6 Organizational chart

The INP Zoo is part of overall Organization of the Gujarat Ecological Education and Research (GEER) Foundation. The GEER Foundation Administrative Office is the Office of the Director, GEER Foundation and is located near to the Main Entrance and Ticket Window in a separate sub campus of administrative and other research and education facilities. At present there are two Deputy Directors, viz. (i) Deputy Director, Research and Development (R&D) and (ii) Deputy Director, Ecological Education (EE). They, besides their other duties, are in charge of development and management of INP Zoo sections West and East, respectively. For the purpose of the INP Zoo administration as part of overall GEER Foundation Administration, following administrative organization is established:



7. Human Resource

INP Zoo is, and it will continue to be the part of the INP under the administrative control of the GEER Foundation. The GEER Foundation will continue its endeavour to manage and develop the INP Zoo towards (a) its overall mandate of ecological education and ecological research, (b) its mission to contribute to conservation, restoration and enrichment of ecosystem and natural heritage and (c) to the national vision for conservation of threatened wild animals through captive conservation, captive conservation breeding, research and education.

The GEER Foundation is an autonomous society and public trust constituted and currently under the administration of the Forests & Environment Department,

Government of Gujarat. For the purpose of administrative linkages with the Government of Gujarat, the GEER Foundation is partially under the administrative control of the Wildlife Wing of the Gujarat Forest Department. The Foundation receives Operations & Management as well as Development grant as a Grant-in-Aid from the Government of Gujarat through the Forests & Environment Department and the Gujarat Forest Department. Accordingly, one of the units of the GEER Foundation, INP Zoo is also under the administration of the Government of Gujarat as a part of an autonomous Foundation.

At present, GEER Foundation has following human resources for effective administration of Indroda Nature Park.

Table - 7.1: Details of the posts of officer cadre

Sr. No.	Designation	Number of Sanctioned Posts	Names of the incumbent
1	Director and Addl. Principal Chief Conservator of Forests	1	Shri R.K. Sugoora
2	Dy. Director (R & D) and Dy. Conservator of Forests	1	Shri R.P. Gelot
3	Dy. Director (EE) and Dy. Conservator of Forests	1	Shri R.B. Solanki
4	Assistant. Director and ACF	2	Shri R.P. Gelot (i/c)
5	Veterinary Officer	1	Dr. Aniket B. Patel
6	Park Warden cum Range Forest Officers	2	Shri A.C. Dodia Shri M.R.Dataniya

Table-7.2: Details of the posts of employee cadre

Sr. No.	Name of Cadre	No. of Post Sanctioned	Names of the Incumbent
INP Zoo Western part			
1	Forester	1	Shri R.R. Makwana
2	Snake Cum Wildlife Park Keeper	1	Vacant Shri Hitesh Desai (i/c)
3	Asstt. Snake Cum Wildlife Park Keeper	1	Vacant Shri Hitesh Desai (i/c)
4	Veterinary Assistant	1	Shri Hitesh S. Desai
5	Head Animal Keeper	1	Vacant
6	Forest Guard	1	Shri V.S. Thakor Addl. Proposed post-1

7	Sweeper cum keeper	1	Shri Baldevbhai S. Vaghela
8	Accountant	1	Vacant Shri Baldevbhai B. Parmar (i/c)
9	Bird Breeder	1	Vacant Shri Irshad N. Theba (i/c)
10	Driver	1	Vacant Addl. Proposed posts-2 Shri Sendhaji Parmar (i/c)
11	Zoo Education Guide	0	Proposed posts-3 Shri Tusharbhai J.Dave (i/c) Smt. Ksumben Suthar (i/c)
12	Ticket Window Clerk	0	Proposed posts- 2 Shri Jagdishbhai Prajapati (i/c) Shri Anil Prajapati (i/c)
13	Ticket Checker	0	Proposed posts-2 Shri Bhagwangiri M. Gosai (i/c)
14	Store clerk	0	Proposed posts-1 Shri Shailesh G. Solanki (i/c)
15	Plumber Cum Pump Operator	1	Vacant Shri Juhaji L. Makwana (i/c)
16	Watchman	1	Vacant Addl. Proposed posts-3
17	Watchman Cum Mali	1	Post to be accounted for different section of INP other than zoo Shri Pratapji K. Solanki (i/c)
18	Welder Cum Attendant	1	Post to be accounted for different section of INP other than zoo
19	Watchman Cum Camp Attendant	1	Post to be accounted for different section of INP other than zoo
20	Nature Education Assistant	1	Post to be accounted for different section of INP other than zoo Shri Alap Pandit (i/c)
21	Artist	1	Post to be accounted for different section of INP other than zoo Shri Mehul Joshi (i/c)
22	Kitchen Manager Cum Supervisor	1	Post to be accounted for different section of INP other than zoo
23	Library Attendant	1	Post to be accounted for different section of INP other than zoo Shri Himanshu Chavda (i/c)

24	Animal keepers	Permanent/ fix labours	Shri Sardarji Gandaji Thakor Shri Ranjitji Ataji Makawana Shri Gabhabhai Jagabhai Raval Shri Narsinhji Udaji Thakor Shri Bharatji Amaraji Thakor Shri Maheshkumar B. Thakor Shri Kanubhai Bhalabhai Raval Shri Govaji Masangji Thakor Shri Bhagvanji R. Makawana Shri Sureshkumar G. Thakor Shri Alkeshkumar R. Kori Shri Punabhai Vahjibhai Raval Shri Dashrathji R. Thakor Shri Amrutbhai I. Prajapati Shri Manojkumar P. Thakor Shri Pravinji Viraji Makawana
25	Night Watchmen and reliver	Permanent/ fix labours	Shri Kirankumar Bhalaji Thakor Shri Rameshji Maganji Thakor Shri Lalaji Bhalaji Thakor Shri Ramdhiraj Rambadal Kori Shri Jugaji Bakaji Thakor Shri Karmanbhai R. Desai Shri Balvantji J. Thakor Shri Baldevji Ataji Makwana
INP Zoo Eastern part			
1	Accountant	1	Vacant Shri Jagdishbhai Chauhan (i/c)
2	Forest Guard	1	Shri V.S. Thakor (i/c)
3	Zoo Education Guide	0	Proposed posts- 2
4	Sweeper Cum Keeper	0	Proposed posts-2
5	Driver	0	Proposed posts-1
6	Watchman	0	Proposed posts-2

8. Capacity Building of the zoo personnel

A. Subject specific capacity building programmes

Sr. No.	Name and designation of the zoo personnel	Subject matter of Training	Period of Training	Name of the Institution where the Training attended
01	Dr. Aniket Patel	Workshop on approaches and advancements in "Ex-situ" Management of wild animals	16- 18 October, 2023	Van Vihar National Park & Zoo, Bhopal, Madhyapradesh- CZA organized workshop
02	Shri Natvarsinh A Rathod	Capacity Building Program for Zoo Keeper of Western Region	13-15 September 2023	Sakkarbaug Zoological Park, Junagadh - CZA organized training
03	Shri Alkesh R Kori			
04	Dr. Aniket Patel	Field Epidemiological Training Programme- Contact session-I	05-08 December, 2023	Kevadiya, Gujarat (organized by National Center for Disease Control & Department of Animal Husbandry)
05		Field Epidemiological Training Programme- Contact session-II	09-11 January, 2024	Baroda, Gujarat (organized by National Center for Disease Control & Department of Animal Husbandry)
06		Field Epidemiological Training Programme- Contact session-III	January, 2024	Surat, Gujarat (organized by National Center for Disease Control & Department of Animal Husbandry)



Pic.1: INP Veterinary Officer at Workshop on approaches and advancements in "Ex-situ" Management of wild animals organized by CZA and VVNP, Bhopal



Pic. 2: INP Veterinary Officer at Field Epidemiological Training Programme Contact Session-I at Kevadiya organised by National Center for Disease Control, GoI, New Delhi

B. Zoo specific capacity building programme for Zoo staff

Sr. No.	Name and designation of the zoo personnel	Subject matter of Training	Period of Training	Name of the Institution where the Training attended
1	All zoo keepers of Indroda Nature Park & subordinate zoo staff of Indroda Nature Park	Tools and techniques of Restraint and capture methods for wild animals for treatment & translocation.	24-07-2023	Indroda Nature Park Subject expert: Dr. Milan Chudasama, Assistant Professor Kamdhenu University
2		Innovative scientific approaches in routine operations of keepers, neonatal care of wild young ones, breeding and reproduction strategies		Indroda Nature Park Subject expert: Shri Ravi Patel Zoo Biologist, Sakkarbaug Zoo, Junagadh.
3	All zoo keepers of Indroda Nature Park & subordinate zoo staff of Indroda Nature Park	Basic understanding about micro-organisms, their importance, pathogenic microorganisms and the diseases caused by them.	28-08-2023	Indroda Nature Park Subject expert: Dr. D.J Vatalia Veterinary Officer, Dept. of Animal Husbandry, GoG, Gandhinagar.
4		Quality assurance of wild animal's feed and fodder, timing and seasonal changes in feed, feed intake documentation, visitor's education and awareness		Indroda Nature Park Subject expert: Shri Bharatsinh Vihol Education officer Kamla Nehru Zoological Garden Ahmedabad
5	All zoo keepers of Indroda Nature Park & subordinate zoo staff of Indroda Nature Park	Various diseases prevalent in wildlife, their symptoms and various care and measures for their prevention	06-11-2023	Indroda Nature Park Subject expert: Dr. S.B. Dabhi, Assistant Director, Dept. of Animal Husbandry, GoG, Gandhinagar.
6		Understanding of physiological and physiological needs		Indroda Nature Park Subject expert: Dr. Disant

Sr. No.	Name and designation of the zoo personnel	Subject matter of Training	Period of Training	Name of the Institution where the Training attended
		of wildlife, development of communication skill, knowledge sharing in wildlife diversity and Importance of zoo.		Parasharya, Senior curator, Science city, Ahmedabad
7	All zoo keepers of Indroda Nature Park & subordinate zoo staff of Indroda Nature Park	Common signs of wildlife health and unusual signs of illness, deworming, need for vaccination, various behavioral issues to be recorded by the keeper	26-02-2024	Indroda Nature Park Subject expert: Dr. R.H. Bathani, Panel Veterinary Officer, Indroda Nature Park, Gandhinagar

The staff members of Indroda Nature Park were also provided periodical exposure of fire safety mock drill and preventive techniques of large scale fire by various subject experts.



Pic. 3,4 and 5: In-house capacity building programme for zoo keepers and staff at INP Zoo

9. Zoo Advisory Committee -

A. Date of constitution: The Zoo Advisory committee is constituted vide GEER Foundation's order no.: EST/1/A792228, Date: 28/02/2023.

B. Members: The details of the committee members are as under.

Sr. No.	Name	Designation	Appellation in committee
1.	Shri M.J. Parmar	APCCF (Rtd), Gujarat Forest Department	Chairman
2.	Dr. K.K. Hadiya	Hospital Superintendent Cum Associate professor Anand College of Vet. Science & A.H Kamdhenu University	Member
3.	Dr. C.B. Patel	Veterinary Officer (Rtd.) of Baroda Zoo, Baroda	Member
4.	Shri R.P. Gelot	Dy. Director (R&D)GEER Foundation	Member
5.	Dr. A.B. Patel	Veterinary Officer GEER Foundation	Member
6.	Shri A.C. Dodiya	Park Warden cum R.F.O Indroda Nature Park, Gandhinagar	Member Secretary

C. Date on which Meetings held during the year: 14/03/2023.

10. Health Advisory Committee-

A. Date of constitution: The Health Advisory committee is constituted vide GEER Foundation's order no.: WLP/T-6/B- 7609-11, Date: 14/02/2023.

B. Members: The details of the committee members are as under.

Sr. No.	Name	Designation	Office	Appellation in committee
1	Dr. D. B. Patil	Director (Research) & Dean PG Studies	Kamdhenu University, Gandhinagar	Chairman
2	Dr. Amit Kanani	Dy. Director	Animal Disease Investigation Office, Department of Animal Husbandry	Member
3	Dr. K. J. Patel	Asst. Director	Veterinary Polyclinic, Sector-21, Dept. of Animal Husbandry, Gandhinagar	Member
3	Dr. R. F. Kadivar	Veterinary Officer	Sakkarbaug Zoo, Junagadh	Member
4	Dr. Aniket Patel	Veterinary Officer	GEER Foundation, Gandhinagar	Coordinator

C. Date on which Meetings held during the year: 18/03/2023.



Pic. 6: Health Advisory Committee meeting at INP Zoo

➤ **The Central Zoo Authority Evaluation of Indroda Nature Park Zoo for renewal of recognition:**

The evaluation committee constituted for evaluation of the Indroda Nature Park Zoo conducted an on-site visit and meeting of the zoo on February 20th and 21st, 2024. The members of the evaluation committee were:

- 1) Dr. Rashmi Kant Shukla (IFS Rtd.), Former PCCF, Uttar Pradesh
- 2) Dr. M.Navin Kumar, Former Deputy Director, Nehru Zoological Park, Hyderabad.



Pic. 7 and 8: Visit of CZA evaluation committee members at INP Zoo

11. Statement of income and expenditure of the Zoo

Sr. No.	Budget head	Allocated budget from GoG (Amount in Lakhs) INR	Utilization of allocated budget (Amount in Lakhs) INR (Audited amount)	Utilization of budget in percentage
1	Provision for wild animal feed and nutrition related requirements of INP Zoo	94.00	95.30	101.38%
2	Provision for Prophylactic measures to be taken for prevention and control of diseases and disorders in captive wild animals of INP Zoo	1.00	0.33	33.00%
3	Provisions for capacity building of Officers and employees of INP Zoo, First aid training, health check up camps etc..	2.00	0.84	42.00%
4	Provision for awareness of nature conservation to visitors	1.00	3.15	315.00%
5	Provision for procurement of medicines and feed supplements, veterinary equipment's, rescue instruments etc.. for veterinary hospital	22.00	10.93	49.68%
6	Provision for Salary of the employees working in the zoo	70.00	66.50	95.00%
7	Maintenance of Gardens of INP	95.00	98.56	103.75%
8	Protection works and Fencing maintenance	72.00	65.12	90.44%
9	Water Supply and electricity bills	35.00	24.77	70.77%
10	General maintenance	25.00	26.81	107.24%
11	Vehicle maintenance and vehicle on rent	6.00	1.01	16.83%
12	Office expense	12.00	14.85	123.75%
Income received from sale of tickets and other sources				
Sr. No.	Particulars	Amount in Indian Rupees		
1	Entry Fees, Indroda Nature Park, Gandhinagar	1,57,93,719.00		
2	Rent for Aahar Kendra	30,000.00		
3	Sale of Publication Park	40,680.00		
4	Tender Form Fees/Sale of old Materials/Other	93,195.00		
	Total	1,59,57,594.00		

12. Daily feed Schedule of animals

Mammals:

(A) Carnivore animals

Sr. No	Animal	Feed	Quantity/animal/day (Kg)	
			Winter	Summer
1	Royal Bengal Tiger (<i>Panthera tigris tigris</i>)	Buffalo meat	8	6-7
1	Asiatic Lion (<i>Panthera leo persica</i>)	-----do-----	8	6-7
2	Leopard (<i>Panthera pardus</i>)	-----do-----	3.0	2-2.5
3	Indian Grey Wolf (<i>Canis lupes pallipes</i>)	-----do-----	2.0	1.5
4	Jackal (<i>Canis aureus</i>)	Poultry meat	0.5	0.5
5	The Indian Fox (<i>Vulpes bengalensis</i>)	-----do-----	0.3	0.3
6	Striped Hyaena (<i>Hyaena hyaena</i>)	-----do-----	1.0	1.0

Note: Animals mentioned above are kept on fast for one day in a week on Monday.

(B) Herbivore Animals

Sr. No.	Animal	Quantity of Feed/Animal/day (Kg)			
		Green Grass	Dry roughage	Chick pea	Concentrate mixture
1	Sambar (<i>Cervus unicolor</i>)	10	1	0.2	0.7
2	Spotted Deer (<i>Axis axis</i>)	5	0.8	0.2	0.3
3	Black Buck (<i>Antilope cervicapra</i>)	4	0.7	0.1	0.2
4	White Black Buck (<i>Antilope cervicapra</i>)	4	0.7	0.1	0.2
5	Chinkara (<i>Gazella gazella bennetti</i>)	3	0.5	0.1	0.2
6	Chousingha / Four-horned Antelope (<i>Tetraceros quadricornis</i>)	3	0.5	0.1	0.2
7	Barking Deer (<i>Muntiacus muntjak</i>)	4	0.7	0.1	0.2
		Feed/Animal/day (Kg)			
Rodentia		Chick pea		Fruits and Vegetables	
1	Indian porcupine (<i>Hystrix indica</i>)	0.5		1	

Note: The feed to above mentioned animals is offered all days in a week without fasting.

Aves:

Sr. No.	Bird	Quantity of Feed/Bird/day (Kg)			
		Grains/legume seeds	Vegetable / Fruit	Meat	Fish
1	Crane Common (<i>Grus grus</i>)	0.40			
2	Crane Sarus (<i>grus antigone</i>)	0.30			
3	Duck Pintail (<i>Anas acuta</i>)	0.15			
4	Goose Bar-Headed (<i>Anser indicus</i>)	0.15			
5	Parakeet Alexandrine (<i>Psittacula eupatria</i>)	0.01	0.15		
6	Teal Lesser Whistling (<i>Dendrecygn a bicolor</i>)	0.15			
7	Dove little Brown(<i>spilopelia senegalensis</i>)	0.05			
8	Duck Comb (<i>Sarkidiornis melanotos</i>)	0.20			
9	Cocketil (<i>Nymphicus palustris</i>)	0.03			
10	White Peafowl (<i>Pavo cristatus</i>)	0.20	0.20		
11	Silver pheasant(<i>Lophura nycthemera</i>)	0.10	0.20		
12	Heron Night (<i>Nycticorax nycticorax</i>)				0.34
13	White Ibis (<i>Threskiornis acthiopica</i>)				0.34
14	Owl Indian Greater horned(<i>Bubo virginianus</i>)			0.25	
15	Rosy Pelican / White (<i>Pelecanus onocrotalus</i>)				1.00
16	Painted Stork (<i>Mycteria leucocephala</i>)				0.50
17	Steppe Eagle(<i>Aquila nipalensis</i>)			0.50	
18	Cormorant little (<i>phalacrorax niger</i>)				0.30
19	Brahminy Kite - (<i>Tadorna ferruginea</i>)			0.25	
20	Barn Owl (<i>Tato alba</i>)			0.25	
21	White Spoonbill (<i>Platalea leucorodia</i>)				0.30
23	White Stork (<i>Ciconia ciconia</i>)				0.50

Note: carnivore birds are kept on fast once in a week on Monday

Reptiles:

Sr. No.	Animal	Quantity of feed /Animal		
		Dressed Meat (kg/week)	Vegetables (kg/ Day)	Other feed grams/Week
1	Indian Cobra(<i>Naja naja</i>)			200
2	Marsh Crocodile (Mugger) (<i>Crocodylus palustris</i>)	0.700		
3	IndianRock Python (<i>Python molurus molurus</i>)			1000
4	Indian Rat Snake /Dhaman (<i>Pryas mucosus</i>)			200
5	Russel's Viper (<i>Vipera russellii</i>)			200
6	Common Indian Krait (<i>Bungarus caeruleus</i>)			100
7	Common Sand Boa (<i>Eryx johini</i>)			150
8	Red Sand Boa(<i>Eryx conicus</i>)			150
9	Indian Star Tortoise (<i>Geochelone elegans</i>)		0.150	
10	Ganges Soft-shell Turtle (<i>Aspiderates gangeticus</i>)	0.500		

Note: The feeding regimen for above said animals is adjusted according to the seasonal physiological needs.

In addition to feed mentioned above, essential macro & micro- minerals viz. calcium, phosphorus manganese, sulphur, copper, zinc, sodium, molybdenum, iron, chloride, Vitamins viz. Vitamin-A, Colecalciferol, Thiamine, Riboflavin, Pyridoxine, Cyanocobalamin, Nicotinamide, Ascorbic acid, Biotin, Carbohydrate, Salt is offered to animals by mixing it into daily concentrate feed for herbivores and into meat for carnivores. Taurine supplementation of meat is also done for carnivore animals of felid species. Hepato-protectant is also added to the diet of herbivore animals in form of powder to enhance the functional capacity of the liver.



Pic. 9: Photo plate showing variety of feed provided to the animals and birds of Indroda Nature Park Zoo

13. Vaccination Schedule of animals

Sr. No.	Species	Disease vaccinated for	Name of the Vaccine and dosage/ quantity used	Periodicity
1	Felines	Feline Rhino tracheitis, Feline panleucopenia, Feline calicy virus	Fel-O-Vac PCT	Cubs of two month of age and booster dose every year
2	Canines	(a) Anti Rabies (b) Parvo Virus (c) Leptospira (d) Canine distemper (e) Herpes virus (f) Parainfluenza	Vanguard 5L4	Pups at 45 days of age and booster dose every year
3	Aves	New Castle Disease	-	If need arises in case of epidemics.

14. De-worming Schedule of animals

Sr. No.	Species	Drug used	Month
1	Carnivores except canines	Ivermectin and Fenbendazole (alternative) Praziquantel, Pyrantel Pamoate	February, May, August, November
2	Canines	Praziquantel, Pyrantel Pamoate, Fenbendazole	December, March, June, September
2	Herbivores	Ivermectin and Fenbendazole (alternative)	December, March, June, September

15. Disinfection and Hygiene Protocol of INP Zoo

Sr. No.	Species	Type of enclosure	Activities	Disinfectants used	Frequency
1	Carnivore (Feline, Canine, Reptiles, Aves)	Night shelter/ Cubicle	Removal of the animal excreta and leftover feed followed by cleaning with clean water. Change of	-	Daily
			Disinfection of the floors	Glutaraldehyde	Daily
2	Carnivore (Feline, Canine, Reptiles, Aves)	Loafing ground/ Kraal	Disinfection of the enclosure/Loafing Ground by spraying safe disinfectant	Glutaraldehyde	Every Monday
3	Carnivore (Feline, Canine, Reptiles, Aves)	Night shelter/ Cubicle	Ecto-parasites such as ticks, mites, etc. crevices in civil construction should be burnt with the flame stove.	-	Quarterly
4	Herbivores	Loafing ground and shed	Disinfection of the enclosure/Loafing Ground by spraying safe disinfectant	Glutaraldehyde	Every Monday
5	Reptiles and aves	Ponds	Cleaning and sanitation of pond and addition of water sanitizer (safe for aqua culture)	Sokrena	<ul style="list-style-type: none"> • Small ponds- fortnightly, • Medium ponds- monthly, • Large ponds- quarterly.
6	All animals	All enclosures	Proper disposal of both liquid and solid wastes generated in the zoo, far away from the animal enclosure.	-	Daily

Sr. No.	Species	Type of enclosure	Activities	Disinfectants used	Frequency
7	All animals	All enclosures	Dry organic garbage burning, far away from animal enclosure		Once in a week
8	All animals	All enclosures	All leftover food items, animal excreta and garbage removal from every enclosure and safe disposal into garbage pit		Daily
9	All animals	All enclosures	Disposal of dead animal carcass by Burning/burial method with utmost care to prevent the spread of disease to other animal		When need arises
10	Herbivores	Open enclosures	Cleaning of water troughs of enclosure		Every alternate day

16. Health check-up of officers and employees of INP

Sr. No	Name	Designation	Date of Health Check up	Findings of Health Check up
01	Shri Riteshkumar P. Gelot	Dy. Director (R&D)	04/12/2023	Individual health check up of all staff members revealed following results: no any major abnormalities or contagious disease detected in any of the staff member in said health screenings
02	Dr. Aniket Patel	Veterinary Officer	04/12/2023	
03	Shri Anupsinh C.Dodiya	Park Warden	04/12/2023	
04	Shri Rajesh R.Makwana	Forester	04/12/2023	
05	Shri Hiteshkumar S.Desai	Veterinary Assistant	04/12/2023	
06	Shri Vikram S. Thakor	Bit guard	04/12/2023	
07	Shri Baldevbhai Vaghela	Sweeper cum keeper	04/12/2023	
08	Shri Irshad N.Theba	Permanent labour	04/12/2023	
09	Shri Natvarsinh A. Rathod	Permanent labour	04/12/2023	
10	Shri Alkeshkumar R. Kori	Permanent labour	04/12/2023	
11	Shri Amrutbhai I. Prajapati	Permanent labour	04/12/2023	
12	Shri Sardarji Gandaji Thakor	Permanent labour	04/12/2023	
13	Shri Ramdhiraj Rambadar Kori	Permanent labour	04/12/2023	
14	Shri Govaji Masangji Thakor	Permanent labour	04/12/2023	
15	Shri Bhagvanji R. Makawana	Permanent labour	04/12/2023	
16	Shri Lalaji B. Thakor	Permanent labour	04/12/2023	
17	Shri Pravinji V. Makawana	Permanent labour	04/12/2023	
18	Shri Ranjitji Ataji Makawana	Permanent labour	04/12/2023	
19	Shri Bharatji A. Thakor	Permanent labour	04/12/2023	
20	Shri Dashrathji R. Thakor	Permanent labour	04/12/2023	
21	Shri Mohanbhai J.Raval	Permanent labour	04/12/2023	
22	Shri Kirankumar B. Solanki	Permanent labour	04/12/2023	
23	Shri Jugaji Bakaji Thakor	Permanent labour	04/12/2023	
24	Shri Sureshkumar G. Thakor	Permanent labour	04/12/2023	
25	Shri Rameshji M.Thakor	Permanent labour	04/12/2023	
26	Shri Gabhabhai J. Raval	Permanent labour	04/12/2023	
27	Shri Maheshkumar B. Thakor	Permanent labour	04/12/2023	

28	Shri Narsinhji Udaji Thakor	Permanent labour	04/12/2023
29	Shri Punabhai V. Raval	Permanent labour	04/12/2023
30	Shri Kanubhai B.Raval	Permanent labour	04/12/2023
31	Shri Manubhai Kalaji Makwana	Permanent labour	04/12/2023
32	Shri Maheshkumar K.Raval	Permanent labour	04/12/2023
33	Shri Amrutji Raybhanji Thakor	Permanent labour	04/12/2023
34	Shri Balwantji Jalamaji Thakor	Permanent labour	04/12/2023
35	Shri Somaji Abhuji Thakor	Permanent labour	04/12/2023
36	Shri Kamleshkumar T.Rathod	Permanent labour	04/12/2023
37	Shri Karmanbhai R. Desai	Permanent labour	04/12/2023
38	Shri Baldevji A. Makwana	Permanent labour	04/12/2023



Pic.10: Photo plate of Annual Health check up of INP Zoo Staff through empaneled SMVS Hospital at Gandhinagar

17. Developmental works carried out in the Indroda Nature Park during the year 2023-24.

In current year, GEER Foundation has initiated redevelopment of Indroda Nature Park as per the approved master plan of the zoo. The developmental activities carried out in the year 2023-24 are as under:

- 1) Visitor amenities: construction of new block for the public toilet and cloak room is initiated.
- 2) Development of construction of new veterinary hospital has been initiated
- 3) Approval of enclosures for Fox, Jackal, Hyaena, Wolf and Sloth bear has been obtained from the Central Zoo Authority. The enclosure development work orders have been allotted after e-tendering procedures.
- 4) Renovation of dinosaur and fossil section of Indroda Nature Park has been initiated.
- 5) Repainting work in the enclosures of the Lion, Leopard and Tiger enclosures.
- 6) Refurbishing the hexagonal bird enclosure with artwork featuring natural scenery.

18. Education and Awareness programmes during the year

18.1 Education activity:

(a) Nature Education Camps: Indroda Nature Park invites school students for nature education camp of three days from different regions of Gujarat state. A batch of around 45-50 school students along with their faculty members are provided accommodation and food at the cost of GEER Foundation. The students are taught and given exposure about ecosystem, ecology, importance of nature and natural resources, wildlife etc. during nature trails, zoo visit, birding exercise, expert interactions in these three days span. The Indroda Nature Park has skilled staff i.e. nature educators to conduct these Nature Education Camps. The details of Nature Education Camps organized and conducted in Indroda Nature Park in the financial year 2023-24 are as follows:

Sr. No.	Section	No. of camps	Participants		Total
			Students	Faculty members	
01	Indroda Nature Park (East Part)	24	1154	89	1243



Pic. 11: Photo plate showing various activities conducted under Nature Education Camp organised by INP

b) One day programme for organised tours of trainees or college students:

On request of any educational or training institute/ academy, Indroda Nature Park under the supervision of GEER Foundation conducts special one-day exposure programme for the Forest Officer trainees (Indian Forest Services and State Forests Services), subordinate forest staff trainees and college students. This programmes focus on visit of various sections of INP and interactions with the field officers i.e. Veterinary Officer (Zoo & Wildlife), Park warden and managerial officers i.e. Dy. Director and

Director. The details of organised one day programme conducted in the financial year 2023-24 are given in following table.

Sr. No	Date	Detail	Number of participants
1	02-09-2023	Gujarat Tour of Kozhikode Jilla Panjayath from Gandhi Padam Thedi, Kerala (Students from various schools in Kozhikode, Kerala along with the teachers (Total 110 members)	110
2	02-11-2023	Students of 7 th Semester (B.Sc. Forestry) from College of Forestry, Navsari Agricultural University, Navsari along with the faculties (Total 38 members)	38
3	16/12/2023	Officers and staff of Chetak Cammando Force Magodi- Special batch for snake awareness	80
4	21-12-2023	Forest Guard Training Batch from Kakrapar Forest Training Institute Batch 66/67 (96 Participants Male)	96
5	28-12-2023	Forest Guard Training Batch from Kakrapar Forest Training Institute Batch 65 (62 Participants Female)	62
6	21-01-2024	Students from SciKnowTech, Ahmedabad (35 Students, 25 Parents)	60
7	21-01-2024	State Forest Service Trainees from Central Academy for State Forest Academy (CASFOS), Dehradun (Total 45, 25M+20F)	45
8	25-01-2024	State Forest Service Trainees from Central Academy for State Forest Service (CASFOS), Coimbatore (Total 51, 31M + 19F)	51
9	13-03-2024	Forest Range Officers Trainees from Kundal Academy of Development, Administration and management (Forests), Kundal (Total 42, 32M + 10F)	42
10	23-03-2024	Forest Range Officers Trainees from from Chandrapur Academy of Development, Administration and Management, Chandrapur (Total 36, 26M + 16F)	36



Pic. 12: Photo plate: The pictures showing the visit of students, RFO Trainees and Chetak Commandos to the INP Zoo

a) Bird Watching Programme:

Indroda Nature Park organises a birding programme namely “Appreciation training programme on bird ecology and conservation” popularly known as “Bird watching programme”. This programme held on 4 Sundays of every month in winter season. The programme is conducted in the premise of Indroda Nature Park and Thol Bird Sanctuary. This programme is of special kind wherein, any person of any age can participate. The terrestrial bird watching is done in woodlands of Indroda Nature Park and session of wetland bird watching is conducted in the Thol bird sanctuary. The bird watching is followed by interpretative presentations of ornithologists and field experts. The bird watching programme is functionally operated by trained, skilled and experienced staff of Indroda Nature Park. The participants are charged nominal fees for the formal registration process and in return, the participants are provided hard copy of study materials, soft copy of study materials in CD-Rom. Light breakfast is provided to the participants on all four days.

In the year 2023- 2024, total two batches of January and February were conducted. Total 90 participants obtained benefits by this programme.



Pic.13: Photo plate showing various activities in Bird Watching Programme conducted in INP Zoo

b) Awareness activities:

- 1) World Earth Day:** World Earth Day: On the 22nd of April month the World earth day is celebrated worldwide. This year too, the GEER Foundation has organised an awareness programme on 22/04/2023 to celebrate the World Earth Day 2024. The GEER Foundation organised Plastic Waste Awareness cum Cleanliness Drive at Indroda Nature Park with the volunteers from Vanashree Foundation and Creative use of Plastic Waste activities at Indroda Nature Park.
- 2) World Migratory birds Day:** On 14/05/2023, the world migratory bird day was celebrated in Indroda Nature Park in association with Camera Club of Karnavati, Ahmedabad. The Indroda Nature Park had organized a bird walk in the park. Total 55 participants took part in the event. The participants were taken on a trail for observing various terrestrial birds of the park. In which their identification, behaviour, ecology and importance of birds in the eco system were discussed by the educators. Bird nest distribution was also

organized on the same day and more than 200 nests were distributed to the visitors of Indroda Nature Park.

3) World Environment Day: In continuation of celebration of world environment day every year, various activities related to environment conservation were carried out at Indroda Nature Park. These activities are:

Plantation Drive at Aranya Udhyan (Indroda Nature Park – East Part): In this drive more than 200 volunteers from Home Guard Gandhinagar Unit and Nehru Yuva Kendra Sangathan and staff members of the GEER Foundation did a mega plantation at Aranya Udhyan on 05-06-2023.

One Day Seminar: This year, the GEER Foundation organized a One Day Seminar on the World Environment Day focusing the Sustainable Lifestyle. Total 92 students from Govt. Science College, Gandhinagar and Govt. Commerce College, Modasa participated in the Seminar. During the seminar the participants were given information on various subjects like Plastic Recycling and up – cycling by Shri Mr. Aditya Shukla, Entrepreneur and Water conservation in Urban Ecosystem by Shri Mr. Lokendra Balasaria, Architect, Urban Ecologist. Participants also explored local biodiversity during the field exposure visit Indroda Nature Park.

4) World Snake Day: World Snake Day is an important day when it comes to increasing awareness about the different species of snake all around the world. Snakes tend to have a negative connotation. A lot of people are scared of snakes, and of course, we can definitely understand the reasons why! No one likes the thought of being gobbled up by a snake, do they? However, snakes are great creatures and they are so important to the world that we live in. They are our friend as they control harmful animals around us. Also they help in keeping our ecosystem healthy by playing a vital role in the food chain. To increase awareness about snakes at local level, the Indroda Nature Park- GEER Foundation has arranged one day workshop on World Snake Day 2023 (11-08-2023). The workshop with the topic of “Understanding snakes and snakebite” targeting local farmers, village residents of Gandhinagar district, snake rescue volunteers and college students was successfully organized. More than 70 villagers, 20 snake rescue volunteers and 20 college students participated into the programme. Participants were given information on subjects like Basics of Snakes and addressing blind faith of

Snakebite Envenomation, Snakebite Management, a brief about basic and advanced level treatment of snake bites, treatment facilities for envenomation in Gandhinagar district. The participants were also provided the field exposure visit at Indroda Nature Park zoo snake house.



Pic.14: Photo plate of One day workshop on “Understanding snakes and snakebite” at GEER Foundation, Gandhinagar.

5) World Lion Day: The GEER Foundation also celebrated the World Lion Day 2023 on 10-08-2023 with 97 students of Balram Anudanit Ashram Shala, Gandhinagar and Adarsh Kanya Shala, Gandhinagar. Awareness activity included the visit to carnivorous section at INP Zoo for understanding the big cats like Asiatic Lion and expert talk. During the programme, the students learnt many things about Asiatic Lions such as their habitat and its conservation, importance of apex predators, importance of Asiatic Lions in Gir Forest ecosystem etc.



Pic. 15: Photos of World Lion Day celebration

6) Wildlife week: Indroda Nature Park under guidance and supervision of GEER Foundation organizes various activities during the Wildlife Week every year. For the Wildlife Week 2023 too, Indroda Nature Park organized following activities:

INTRODUCTION

From time immemorial, our wildlife has been closely associated with our legendary beliefs and our folklores, with our epics and our history. Our lives would be very much poorer without these varied forms that build up the balance of nature. Wildlife preservation in fact implies active and planned wildlife management under which all forms of life would progress side by side with human progress, each in its own sphere of influence and utility and without any detriment to human interests. In fact, it is with this end in view that wildlife sanctuaries and national parks have been established and developed in suitable localities all over the country. Therefore, in order to create a general awakening in the common man in favour of protection of wildlife, the Indian Board for wildlife decided to observe the Wildlife Week during October 2-8 every year. Since then, every year during October 2 to 8, governments, environmentalists, activists, educators organize different activities to accelerate the awareness of wildlife conservation among people.

Being Ecological Education one of its primary mandate the GEER Foundation organizes various wildlife awareness programmes every to celebrate the Wildlife Week. For the Wildlife Week 2023 too, the Foundation organized various activities for spreading awareness on wildlife conservation. This year the theme for the Wildlife Week was “Recovering key species for ecosystem restoration” In Indroda Nature Park, The GEER Foundation, Gandhinagar organised various activities like;

- Free entry into Indroda Nature Park and Aranya park, Gandhinagar
- Bird Walk and Expert Talk on Birds of Gujarat
- One Day Training for students on Fundamentals of Habitat
- Distribution of various resource materials
- Field Exposure visits
- Wildlife Photography Competition for wildlife photographers of Gujarat
- Wildlife Photography and Painting Exhibition at Indroda Nature Park

- Students workshops and trainings
- Training of frontline staff of forest department
- Wildlife photographers workshop etc.

ACTIVITIES AT GANDHINAGAR (INDRODA NATURE PARK, ARANYA UDHYAN)

October 02-08, 2023

Free Entry to Indroda Nature Park and Aranya Udhyan during the Wildlife Week 2023

During the Wildlife Week 2023, the visitors were given free entry into Indroda Nature Park and Aranya Udhyan to create mass awareness on Wildlife Conservation. Following are the details of the visitors during the Wildlife Week 2023.

Sr. No.	Place	Adults	Children	Total
1	Indroda Nature Park	5004	2048	7052
2	Aranya Udyan	108	09	117
	Total	5112	2057	7169

October 02, 2022

Bird Walk – Knowing birds around us

A special “Bird Walk” was organized on 02-10-2023. Participants include 35 bird enthusiast from Gandhinagar. Shri R.B. Solanki, Dy. Director (EE), GEER Foundation interacted with the participants and talked about importance of co-existence with wildlife and also had a bird watching trail guided by Shri Alap Pandit, Programme Officer (EE), and Shri Irshad Theba at Indroda Nature Park.

October 03, 2023

Fundamentals of Habitat – One Day Training for College Students

During the Wildlife Week 2023, the GEER Foundation organized One Day Training for College Students on “Fundamentals of Habitat”. Dr. Sandeep Mujnpara, RA provided information on Fundamentals of Habitats and Types of Habitats, Dr. Devanshi Joshi, RA (Fauna) provided information on Important Wildlife Habitats of Gujarat and practical sessions on use of GPS & RS GIS in Habitat Conservation along with the visit of Environment Monitoring and Research Laboratory at GEER Foundation was also organized. Total 83 participants from Govt. Science College, Bavla (Ahmedabad) and Govt. Science College, Gandhinagar participated in the program.

October 04, 2023

Exploring the Wildlife Around Us

A special nature exploration visit “Exploring the Wildlife Around Us” was organised on 04-10-2023 at Indroda Nature Park. More than 50 students of Navabobha Primary School Kapadvanj participated into the program with great enthusiasm.

**October 06-08, 2023
Wildlife Photography Exhibition**

An exhibition on wildlife photography was organised as a part of Wildlife week celebration between 06-08 October, 2023. The visitors visiting the Indroda Nature Park took advantage of the photography exhibition.



Pic.16: Photoplate showing pictures of Wildlife Photography Exhibition and Leopard display release ceremony organised at INP Zoo



Pic. 17: Bird Walk as a part of Wildlife week celebration at INP Zoo



Pic. 18: Exploring wildlife around us – Wildlife week at INP Zoo



Pic. 19: Showcasing the shortlisted wildlife photos from the exhibition to Hon. Chief Minister of Gujarat Shri Bhupendra Patel and Principal Secretary, Forest Department, Gujarat Shri Sanjeev Kumar, IAS.

Mass mobilization of Mission LiFE:

The Ministry of Environment, Forest and Climate Change (MoEF & CC), Government of India envisages to celebrate the World Environment Day 2023 with a thrust on the Mission LiFE. The concept of Mission LiFE, introduced by the Hon'ble Prime Minister of India, aims to promote sustainable living by encouraging individuals to make changes in their lifestyles and emphasizes responsible and conscious use of resources to safeguard and conserve the environment.

To generate widespread awareness and advocacy for LiFE across India, a month-long

mass mobilization campaign on Mission LiFE was organized across the country. The GEER Foundation had organized various activities during 05-05-2023 to 05-06-2023 to spread the message of Mission LiFE – Lifestyle for Environment to the community in Indroda Nature Park. Numbers of visitors and students had actively participated in various activities under Mission LiFE. Various activities were carried out as per the directions of Central Zoo Authority and the details were regularly updated on dedicated online portal of Mission LiFE.

Activities carried out by GEER Foundation (05-05-2023 to 05-06-2023)

SN	Date	Theme	Activity
1.	05-05-2023 to 05-06-2023	Healthy Lifestyle Adopted	Dissemination of information on Eco-friendly wedding concept to the visitors of Indroda Nature Park
2.	05-05-2023 to 05-06-2023	Single Use Plastic Reduces	Enforcing ban on Single use Plastic in Indroda Nature Park / Aranya Udhyan /Hingolghadh Sanctuary
3.	05-05-2023 to 05-06-2023	Mission LiFE	Co-branding Mission Life through banners & standees at Indroda Nature Park
4.	05-05-2023 to 05-06-2023	Healthy Lifestyle Adopted	Lifestyle for Environment Pledge Point for visitors at Indroda Nature Park
5.	07-05-2023	Single Use Plastic Reduces	Plastic waste clean up drive at Indroda Nature Park boundary. Bring back waste from nature. Celebration along with volunteers of TCS and Aditya trust under mass mobilization of Mission LiFE - Lifestyle For Environment
6.	08-05-2023 to 14-05-2023	e-Waste Reduces	E-waste collection from public and disposal in scientific way activity at Indroda Nature Park. A collection centre for e-waste was created jointly by the GEER Foundation and Nisarg Science Community Center at Indroda Nature Park, Gandhinagar
7.	09-05-2023	Mission LiFE	Taking Oath under Mission LiFE to live the life in accordance with environment by the staff members of Indroda Nature Park and GEER Foundation at pledge point of Indroda Nature Park .
8.	14-05-2023 to 04-05-2023	Mission LiFE	Donate old Books Campaign: Unused book donation and distribution of donated books to the needful person. A collection and distribution centre was created at Indroda Nature Park
9.	11-05-2023	Mission LiFE	One Day Workshop on Sustainable Lifestyle for Talati cum Mantri. The batch was given the Green Talk By Keeper and Guide.
10.	14-05-2023	Healthy	Bird walk & awareness on bird conservation

SN	Date	Theme	Activity
		Lifestyle Adopted	under Mission LiFE
11.	14-05-2023	Mission Life	Bird Nest and water pot distribution
12.	14-05-2023	Healthy Lifestyle Adopted	Awareness campaign on promoting Millets in diet. Importance of incorporation of various Millets in the diet was disseminated to the visitors of Indroda Nature Park. The visitors could see, touch and explore the varieties of millets at the kiosk.
13.	20-05-2023	Mission LiFE	Cycle Rally and awareness campaign on Mission LiFE at Gandhinagar
14.	21-05-2023	Healthy Lifestyle Adopted	Eco Art activity at Indroda Nature Park
15.	23-05-2023	Mission LiFE	Wildlife Awareness Tour at Indroda Nature Park jointly with Gujarati Forest Department, Training Division
16.	24-05-2023	Mission LiFE	Green Talk By Keeper and Guide. The visitors coming in the Indroda Nature Park Zoo were introduced to Mission Life and its importance by Keeper and Guide. The information on initiative taken by zoo keeper were disseminated to the visitors
17.	28-05-2023	Healthy Lifestyle Adopted	Eco friendly clay work & pottery at Indroda Nature Park
18.	28-05-2023	Healthy Lifestyle Adopted	Awareness Campaign on medicinal plants and its importance in sustainable lifestyle practices
19.	04-06-2023	Healthy Lifestyle Adopted	Seed ball making at Indroda Nature Park
20.	04-06-2023	Healthy Lifestyle Adopted	Plastic waste reuse (Greening Your Home) at Indroda Nature Park
21.	04-06-2023	Mission LiFE	Street Play by GPCB Team at Indroda Nature Park (Two Times: Fore Noon / After Noon)
22.	04-06-2023	Healthy Lifestyle Adopted	Eco Art Activity at Indroda Nature Park
23.	05-06-2023	Mission LiFE	One Day Workshop on Sustainable Lifestyle under Mission LiFE
24.	05-06-2023	Healthy Lifestyle Adopted	Plantation at Aranya Park
25.	05-05-2023 to 05-06-2023	Mission LiFE	Stamping of Mission Life Logo on tickets at the Entry check points of Indroda Nature Park under Mission LiFE from 5 th May,2023 to 5 th June, 2023 to spread awareness on Mission LiFE.

Activities carried out under Mission LIFE



Pic. 20 and 21: Bird Nest Distribution at INP Zoo



Pic. 22 and 23: Plastic Waste collection drive at INP Zoo



Pic. 24 and 25: Eco Art Activity at INP Zoo



Pic. 26 and 27: Green Talk by keeper and staff at INP Zoo



Pic. 28: Green Talk by keeper and staff- Talati Batch at INP Zoo

Social Media Outreach

The GEER Foundation continued to spread public awareness on nature, forests, protection of environment, wildlife, natural history and conservation through various modes and methods. During the year 2023-24, Indroda Nature Park and GEER Foundation started its connection to general public through social media. The information of celebration of days and weeks, important events and activities were intimated to general public through online posts on various online platforms such as Instagram (indrodapark), Twitter (FoundationGeer) and YouTube Channel (oikos-theearth4539) to create environmental awareness and sensitize citizens as well as visitors. The glimpses of the posts are given below. In the year 2023-24 total 224 online posts were created on instagram handle and 73 on Twitter.



indrodapark



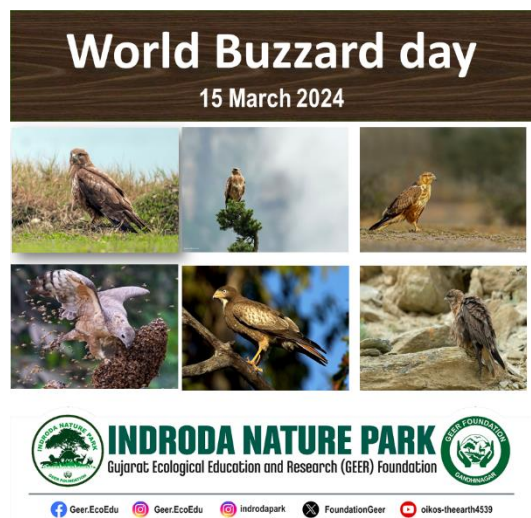
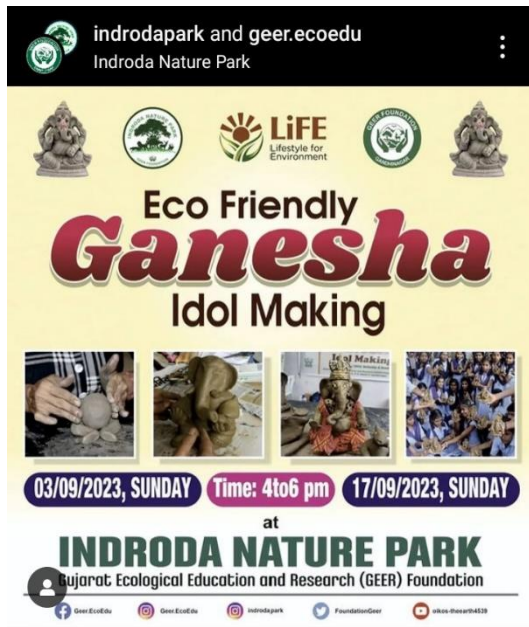
FoundationGeer



oikos-theearth4539



Pic. 29 and 30: Social media outreach posts



Pic. 31,32,33,34,35 and 36: Social media outreach posts

19. Important Events and happenings

Wildlife Photography Exhibition:

The GEER Foundation hosted a Wildlife Photography competition for passionate photographers in Gujarat under the theme "Click the Wild." The competition featured five categories: Butterflies, Birds, Landscapes, Mammals, and Reptiles, and received over 265 entries. Selected submissions were showcased at the Wildlife Photography Exhibition, alongside a curated selection of over 100 photographs by distinguished wildlife photographers from Gujarat.

Highlighting the exhibition were Best Out of Waste articles crafted by Eco Club schools, with more than 70 exceptional pieces on display.

Display release ceremony of new leopard pair:

Indroda Nature Park welcomed a pair of leopards from Sakkarbaug Zoo, Junagadh in August 2023. Following the completion of their quarantine period, the leopards were introduced to visitors on October 6, 2023. The ceremony was conducted in presence of Shri S. K. Chaturvedi, Principal Chief Conservator of Forests (Head of the Forest Force) of Gujarat State, Shri N. Srivastava, Principal Chief Conservator of Forests (Wildlife) and Chief Wildlife Warden of Gujarat State, and Shri R. K. Sugoer, Director of the GEER Foundation.

State level Eco-fair:

The state level eco fair was organized with the objective of depicting the activities of eco clubs from 09 and 10 March, 2024 at Indroda Nature Park, Gandhinagar. Total 25 teachers and 50 students from 21 schools from 13 different districts participated in the Eco fair. The eco clubs exhibited various eco models and activities of eco clubs in the exhibition. More than 3000 visitors got the benefit from the eco fair.



Pic.37 and 38: Photos showing state level Eco-Fair at INP Zoo



Pic.39 and 40: Photos showing state level Eco-Fair at INP Zoo

➤ **Events organized for staff members.**

i. **Certificate awarding on the Independence Day, 2023:** Certificates were awarded to outstanding officers/employees, including zoo keepers, on Independence Day. The details are as follows:

1. Shri Amrutbhai I. Prajapati, Rojamdar Shramyogi
2. Shri Alkesh R. Kori, Rojamdar Shramyogi
3. Shri Vishnuji B. Thakor, Rojamdar Shramyogi
4. Shri Jagdishbhai S. Prajapati, Rojamdar Shramyogi
5. Shri Lalaji Govindji Thakor, Rojamdar Shramyogi

ii. **Certificate awarding on the Republic Day, 2024:** Certificates were awarded to outstanding officers/employees, including zoo keepers, on the republic day. The details are as follows:

1. Shri Natvarsinh A. Rathod, Rojamdar Shramyogi
2. Shri Ranjitji A. Makwana, Rojamdar Shramyogi
3. Shri Maheshkumar K. Raval, Rojamdar Shramyogi
4. Shri Bharatsinh R. Rathod, Rojamdar Shramyogi
5. Shri Ajitji Bhikhaji Makwana, Rojamdar Shramyogi
6. Shri Kalubhai Jotibhai Dindor, Rojamdar Shramyogi
7. Shri Karanji A. Thakor, Rojamdar Shramyogi



Pic.41: Photoplate showing Award ceremony for INP Zoo staff at GEER Foundation Office.

20. Seasonal special arrangements for upkeep of animals and Zoo Animal care & Veterinary Section:

Indroda Nature Park Zoo ensures the well-being of its captive wild animals through various measures tailored to seasonal challenges:

- Winter:
 - During winter, the quantity of feed for carnivore animals are increased.
 - Canvas/Gunny bag curtains are draped on the doors and windows of night shelters to shield against cold winds and prevent hypothermia.
 - Dry crop straw is stacked inside animal shelters for insulation.
 - Nylon net curtains are placed around aviary enclosures for added warmth.
 - Hiding dens are created in the reptile enclosures.
 - Heating bulbs with earthen pots are placed in the snake house.
- Summer:
 - Sprinklers have been installed in the enclosures of carnivore animals for periodical spraying of mist in the animal enclosures to cool down the ambient temperature.
 - Water-based air coolers are employed during peak heat hours.
 - Carnivore animals are provided the ice popsicles in summer season as a part of food enrichment
 - Khus curtains are hung around enclosures and regularly sprayed with water to lower the temperature.
 - Rehydrating supplements are mixed into the animals' drinking water and feed.
 - Continuous spray of water surrounding the enclosures provides relief from the high temperature.
- Monsoon:
 - Feeding cubicles and night shelters are kept clean and dry.
 - Animals are sheltered inside cubicles during heavy rain to prevent continuous wetting.
 - Quick lime powder is sprayed to minimize disease risks associated with the monsoon season.



Pic.42 and 43: Photos showing Summer Management activities



Pic. 44 and 45: Photos showing Winter management activities

➤ **Zoo Animal care and Veterinary Section:**

Indroda Nature Park Zoo is currently undergoing significant redevelopment in accordance with an approved master plan. In the near future, the zoo will introduce multiple new species of carnivores, herbivores, birds, and reptiles. With the increasing cases of human-wildlife conflicts day by day, there is an urgent need for experienced wildlife personnel to focus on their rescue and rehabilitation. The rescued animals require proper care and rehabilitation facilities. Indroda Nature Park will serve as a referral center for wildlife care and rehabilitation. Due to the growing demand, there is a need to establish a new, modern veterinary hospital. The Government of Gujarat has approved the budget for establishing this hospital at Indroda Nature Park. The GEER foundation has already begun developing state-of-the-art infrastructure for the veterinary hospital on the park's premises. This upcoming hospital will also cater services to the rescued wildlife of the North Gujarat region.

The new veterinary hospital will be equipped with all necessary infrastructure, equipment, and instruments to conduct minor and major surgical interventions, diagnostic procedures, treatments, and rehabilitation. It will also provide short-

and long-term care for rescued wild animals, as well as neonatal care for young wild animals.

The present veterinary hospital of Indroda Nature Park was established to take care of captive wild animals of Indroda Nature Park with following facilities. (1) Treatment room, (2) Medicine and equipment store room (3) Veterinary Officer's chamber. The unit has a post-operative isolation ward, an open yard, avian enclosure and treatment/trap cages of various sizes for the treatment and post treatment holding of the wild animals and birds at the hospital. The unit is well cordoned with compound wall to secure the sick animals and birds. The unit is taken care of by full time Veterinary Officer, Veterinary Assistant and Hospital/field assistant. Veterinary hospital is equipped with following equipment and instruments:

Sr. No.	Instrument/ Equipment	No. of units
01	Hydraulic operation table	01
02	Syringe projector	01
03	Dart gun	01
04	Blow pipe	01
05	Portable stretcher on wheel	01
06	Multiparameter monitor	01
07	Electro cautery	01
08	Suction apparatus	01
09	Operation theatre halogen light apparatus	01
10	Compound light microscope	01
11	Fumigator	01
12	Small animal surgery kit	01
13	Large animal surgery kit	01
14	Nursing trolley	01
15	Medicine storage and instrument cupboards	02
16	Reference books store cupboards	01
17	Refrigerator	01
18	Instrument sterilizer	01
19	Formalin chamber	01
20	Autoclave	01
21	Weighing scale (Digital) (500kg capacity)	01
22	Centrifuge machine	01

Apart from above said instruments and equipment, veterinary hospital keeps sufficient stock of various drugs, medicines and feed supplements for treatment of the captive wild animals of the zoo. For specialized veterinary interventions, Veterinary Officer of the zoo obtains help of Department of Animal Husbandry (Govt. of Gujarat), Kamdhenu University (Veterinary Division) and Veterinary College (Anand Agricultural University).

The glimpses of important veterinary interventions of Indroda Nature Park during the year 2023-24 are as under:

2. Indroda Nature Park had developed protocol for artificial incubation of python

eggs. This year, one female indian rock python had laid eggs which was successfully incubated to hatching of 14 beautiful baby rock pythons. The young babies were provided neonatal care just after their birth. After few days of their birth the babies started dying all of a sudden followed by their first ecdysis procedure. The immediate veterinary intervention saved total 11 young ones from deadly neonatal respiratory infection. The python babies were taken in to intensive post-natal care for 3-4 months. The babies were provided sufficient healthy diet, hiding areas, floor bedding and suitable environment. Such intensive care contributed to normal growth and nearly tripling of their body weight in just 4 months.

3. The lion named Sutra, aged approximately 16 years, was diagnosed with irreversible hepatic insufficiency in December 2022. The animal's condition deteriorated severely between February and April 2023. Intensive care and treatment were provided, including one and a half months of intravenous fluid and medication infusions as life support. Thanks to this dedicated care, the lion recovered significantly from the illness. However, due to his advanced age, the clinical signs of hepatic insufficiency reappeared with greater severity in August. Despite the best efforts of the veterinary team at Indroda Nature Park, Sutra collapsed and unfortunately succumbed to his condition. Sutra was the first Asiatic Lion at Indroda Nature Park Zoo.
4. The 20-year-old tigress, Srushti, developed a pyometra condition last year, which was cured successfully. Despite her advanced age, she continued to undergo a normal estrus cycle. After completing 3-4 months of her estrus cycle, she again developed pyometra in month of May, 2023. With intensive treatment and care, she was successfully cured of pyometra. However, due to multiple senile degenerative changes, the tigress passed away in November 2023 at the age of 20 years.
5. On June 20, 2023, the veterinary team of Indroda Nature Park Zoo assisted the Department of Forests, Government of Gujarat, during the Rathyatra procession in Ahmedabad city. A total of 15 Asian elephants (14 females and 1 male) were part of the procession throughout the day along the designated route. Approximately 25 lakh devotees participated in this sacred procession. The team provided assistance to ensure the elephants' participation was safe and without incident, preventing any mishaps or accidents during the event.
6. Indroda Nature Park Zoo received a pair of orphaned Jungle Cat young ones at approximately 3-4 weeks of age, requiring neonatal care from Mahesana Division of Forest Department. Followed by failure of all efforts of local staff to reunite mother & babies, the kittens were shifted to Indroda Nature Park for neonatal care. The babies received round-the-clock attention, including timely feeding of appropriate food, suitable housing, floor bedding, and preventive healthcare measures. Out of the pair, one male Jungle Cat survived and grew to become a sub-adult.

7. The Veterinary Officer of GEER Foundation, Dr. Aniket B. Patel was selected as a mentor from the wildlife sector of Gujarat state for the Pilot batch of SectorConnect programme jointly organized by the National Center for Disease Control (NCDC), New Delhi and Department of Animal Husbandry (DoAH), Government of Gujarat. SectorConnect was a three-month in-service educational program focused on field epidemiological training using a One Health approach. Dr. Patel successfully completed his mentorship in this course.
8. Every year on January 14-15, the Makar Sankranti festival is celebrated throughout the state of Gujarat. Unfortunately, during this festival, many birds are injured by kite threads. To address this issue at Gandhinagar, Indroda Nature Park organizes a bird treatment and rehabilitation camp. This year, in collaboration with the local forest division, the park hosted the camp at the Urja Range nursery premises at Ch-0 circle. From January 13 to 17, the entire veterinary staff dedicated themselves to this noble cause. The camp successfully treated and reintroduced several important bird species such as black kite, sotted owlet, mynah, Asian koel, rose ringed parakeet back into their natural habitat.
9. The Veterinary Officer of GEER Foundation was deputed to 52nd Airforce wing at Deesa, Banaskantha district by the Chief wildlife warden of Gujarat state as Boma expert to safely capture the large herbivore- bluebills. The veterinary officer has successfully provided his inputs in designing the framework of boma and plan out the strategy to safely capture the animal and their secure shifting to other place leveraging his experience and knowledge. Using the boma technique, the forest department had successfully captured around 200 bluebills and shifted to secured place.
10. The Central Zoo Authority has established norms and guidelines for the scientific management of zoos nationwide, emphasizing regular checks on the quality of feed and water provided to the animals, which are crucial for maintaining wild animals' good health. Indroda Nature Park, has been instructed to conduct pre-slaughter pathological tests on the food animals. Accordingly, the tender terms specify that meat suppliers may only provide meat from animals slaughtered at the Municipal Corporation slaughterhouse of Ahmedabad. Here, the Veterinary Officer (AMC) examines and permits the slaughter, and suppliers must submit daily slips to Indroda Nature Park indicating payment of slaughter fees. Additionally, since March 2023, Indroda Nature Park has implemented a random testing protocol to ensure further compliance with these guidelines.

In order to ensure top-notch meat production and processing for the carnivores at Indroda Nature Park zoo, a structured protocol has been implemented. This protocol includes conducting random ante-mortem examinations of buffaloes and gathering samples for pathological testing at a government laboratory. The laboratory promptly delivers results, which are used to instruct suppliers to provide meat sourced from healthy, disease-free animals. This process is carried

out biweekly. Veterinary personnel, in collaboration with the veterinary officer, visit the Ahmedabad slaughterhouse every fifteen days to perform ante-mortem examinations, collect samples, and submit them to the Animal Disease Investigation Office in Ahmedabad for further analysis. Based on the findings from the laboratory, instructions are then issued to ensure that disease-free meat is supplied by the vendor.

11. The veterinary team of Indroda Nature Park has conducted successful translocation of a pair of leopard and a pair of lion from sakkarbaug Zoo Junagadh in the month of August, 2023 and March ,2024 respectively.
12. The Veterinary Officer had successfully conducted and coordinated annual meeting of health advisory committee in the month of March, 2023.
13. This year, the GEER Foundation established a significant partnership with Kamdhenu University aimed at enhancing healthcare services for wildlife. The collaboration was formalized through a Memorandum of Understanding (MoU) signed on February 1, 2024. This agreement marks a proactive step towards leveraging the expertise of subject matter specialists from Kamdhenu University in veterinary science and animal husbandry for the benefit wild animals

Apart from these activities, the veterinary hospital carries out prophylactic measures to prevent various diseases and disorders by means of annual vaccination deworming at every three months interval. Routine sanitation measures i.e. cleaning of enclosures, debris and leftover removal & disposal, disinfection are supervised by the veterinary hospital. Aquatic ponds in the enclosures are routinely emptied, cleaned and refilled with clean potable water at regular interval to prevent water borne infections in animals and birds.



Pic.46 and 47: Photos of Veterinary Intervention at INP Zoo



Pic. 48: Veterinary hospital at INP Zoo

Pic. 49: Treatment of infection in python babies



Pic. 50: Photoplate showing treatment & care of wild animals at hospital and ante mortem examination of feed animals

21. Research Work carried out and publications

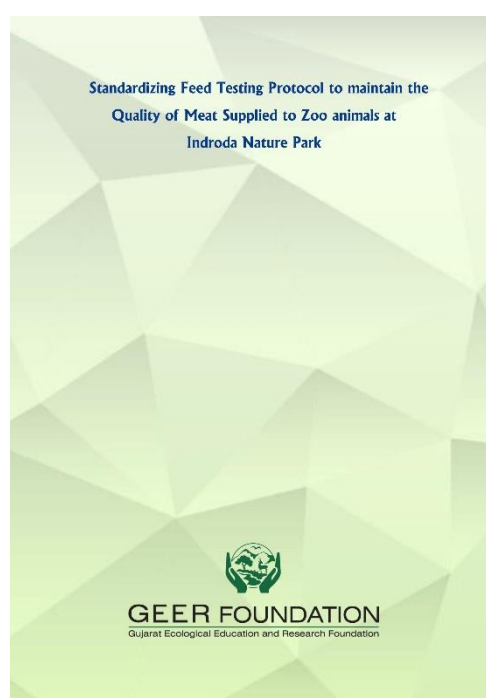
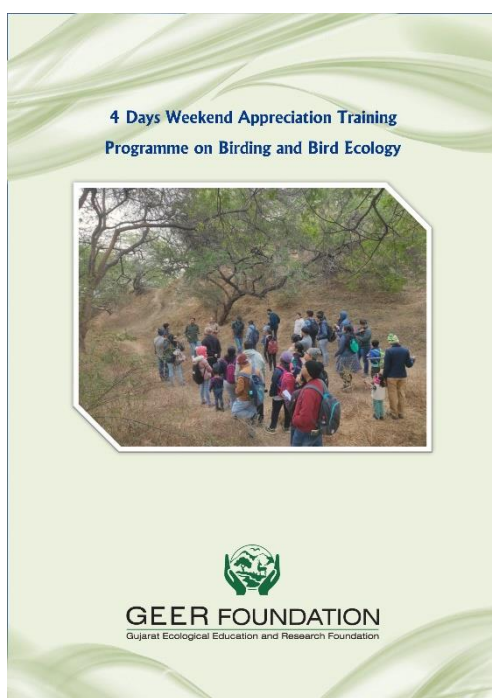
21.1 Research work:

In the year 2023-24, the following research/ scientific articles/ short notes have been prepared on “Best practices adopted by the zoo”.

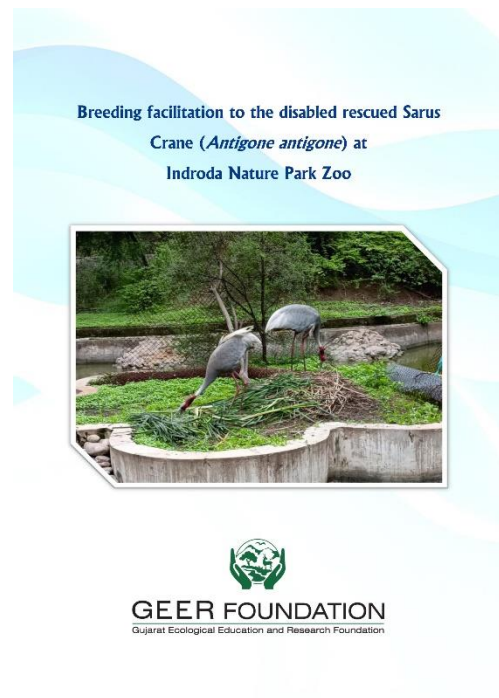
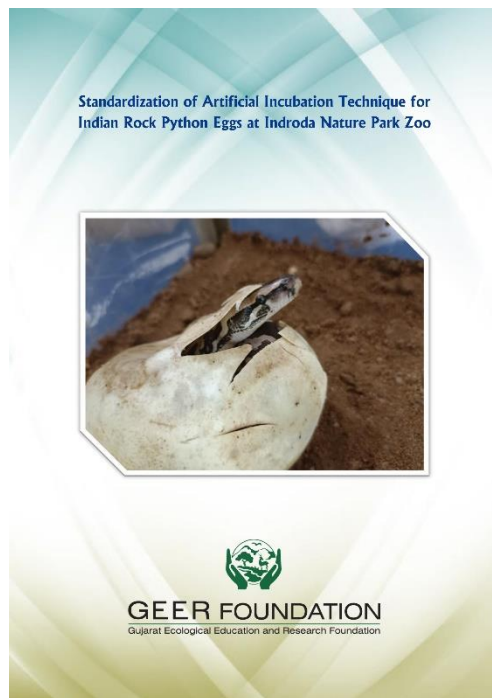
Sr. no.	Topic of research/scientific article/short note
01	Standardization of Artificial Incubation Technique for Indian Rock Python Eggs at Indroda Nature Park Zoo
02	Standardizing Feed Testing Protocol to maintain the Quality of Meat Supplied to Zoo animals at Indroda Nature Park
03	4 Days Weekend Appreciation Training Programme on Birding and Bird Ecology
04	Breeding facilitation to the disabled rescued Sarus Crane (<i>Antigone antigone</i>) at Indroda Nature Park Zoo

The aforesaid notes were submitted to the Central Zoo Authority for its publication in the compendium of best practices adopted by the zoo.

In the current year 2023-24, a short-term studies within zoo areas was undertaken by students pursuing their postgraduate studies and doing dissertation in GEER Foundation. A significant study focused on the behaviour of free-ranging Hanuman Langurs (*Semnopithecus entellus*) in and around the Indroda Nature Park Zoo was conducted. A detailed report of this study is under preparation for submission.



Pic. 51 and 52: Scientific Shortnotes submitted to CZA for compendium



Pic. 53 and 54: Scientific Shortnotes submitted to CZA for compendium

21.2 Publication:

The GEER Foundation has published two important publication in the year 2023-24. The details are as under:

- **A Field Guide of Birds of Indroda Nature Park:**

With over 55% of the global population residing in urban areas, there is a growing emphasis on enhancing the well-being of individuals within these environments. This focus is manifesting through the safeguarding of natural surroundings and the biodiversity they encompass. Urban biodiversity, encompassing animal and plant species within city settlements, is now recognized as a gauge of the urban ecosystem's health.



Gujarat, an exponentially developing state, is endowed with numerous

greenspaces in its urbanized areas. Among these, Indroda Nature Park stands out as a verdant gem in Gandhinagar, the greenest city in Gujarat. Situated amidst the built environment of the state capital, this 428-hectare wilderness oasis provides visitors with a vibrant natural experience. The richness of trees, plants, and a myriad of bird species contribute to the park's wilderness ambiance, filling the air with melodious songs and colorful plumage of diverse avian fauna. While bird watching has gained momentum as a hobby, bird photography has also surged in popularity. In this rapidly changing landscape, more visitors are drawn to promising birding locations like Indroda Nature Park.

In Indroda Nature Park, total of 212 species of birds have been recorded out of which about 105 have been found to nest in the Park. Identifying bird species is a challenge eagerly embraced by every bird watcher and nature enthusiast. To facilitate this, a comprehensive and well-illustrated field guide for the region becomes essential. Recognizing the palpable need for such a guide in Indroda Nature Park, this book aims to assist bird watchers, school-college students, front-line staff of the forest department, naturalists, ornithologists and any nature enthusiast in identifying avian species. The guide is poised to be a valuable resource for birders exploring every nook of Indroda Nature Park.

22. Conservation Breeding Programme of the Zoo

22.1: Indian Rock Python conservation breeding:

Indroda Nature Park houses Indian Rock Python for display to the visitors. In the year 2023, before starting of breeding season, potential male and female pythons were kept together for breeding. Successful mating of python resulted in laying of eggs by a female python on 18/05/2023. This time the female had laid two different clutches of eggs, both had 07 eggs. Out of two clutches, the female started incubating clutch—comprising of seven eggs. The remaining clutch-2 comprising of seven more eggs was abandoned. The clutch-2 was taken in to artificial incubation wherein, the incubation chamber was made as protocol set in the year 2015 by Indroda Nature Park Zoo. Humidity and temperature was maintained regularly and it was monitored by the HTC HD-303 temperature and humidity meter. After completion of 45 days of incubation period the clutch of

artificial incubation was checked for vitality through egg candling. All eggs were showing development of blood vessels and two eggs were showing foetal movements inside.

On other side, the female python was provided all comfort and care during natural incubation of the eggs of clutch-1. After 50 days, the female left out the eggs after completing more than 80% of incubation. The clutch-1 was also taken in to artificial chamber for remaining incubation and hatching. All eggs of clutch were examined and appeared healthy and viable. No dead egg with saprophytic organism (fungus, mould) growth was observed.

The clutch-1 (natural + artificial) hatched out on 20/07/2023. Total 7 python babies were born in the batch-1. The clutch-2 (completely artificial) hatched out 22/07/2023. In this batch-2, total 7 more younglings of python were born. All 14 babies were provided neonatal care and kept in the veterinary hospital for observation and further care for initial days.

As a part of conservation breeding programme, the permission to release the young babies of Indian Rock Python was obtained from the Chief Wildlife Warden and all 11 survived young ones were release in to nature till their disappearance and hiding in their habitat after.



Pic.: 55: Photo plate showing hatchlings of Indian rock python at the time of birth at INP Zoo

22.2: Free range House Sparrow conservation breeding:

The observation of depletion in numbers of free ranging house sparrow have been done in the premise of Indroda Nature Park before three-four years. In the current year, the plan for conservation breeding of common house sparrow was taken in to consideration and implementation as under:

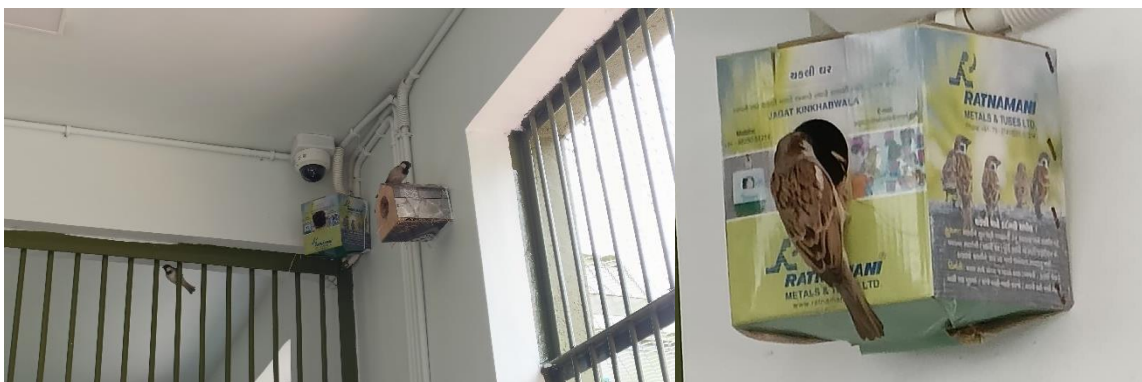
1. Identification of potential and safe sites for placement of bird nests
2. Secure placement of bird nests at identified sites
3. Continuous distant observation of bird's involvement in creating nest for egg laying

and incubation.

4. Provision of high protein diet to the chick rearing birds.
5. Securing breeding birds and chicks from the predators.

Through employing aforesaid plan, this year total more than 37 chicks were successfully born and entered in their natural habitat. The details of placement of bird nests and hatching success is given in the below mentioned table:

Sr. No.	Nest Placement site	Successfully chick birth	Remarks
1	Lion cage	04 chicks	More than 37 chicks successfully grown up.
2	Tiger cage	04 chicks	
3	Leopard cage	07 chicks	
4	Park office	01 chick	
5	Rest house	01 chick	
6	Crocodile point	01 chick	



Pic.: 56: Photo plate showing free range House sparrow breeding at INP Zoo

22.3 Painted stork conservation breeding:

During the year 2023-24, the Painted stork successfully bred and given two hatchling on 24/11/2023. The parent birds reared the chick. Both the chick successfully grown up.



Pic.: 57: Photo plate showing breeding of Painted stork at INP Zoo

22.4 Marsh crocodile conservation breeding:

During the year 2023-24, various crocodile females have given birth to 34 young ones. The young ones were kept in the maternal care for 6-8 months and weaned after completion of winter and shifted to the neo natal care unit for the marsh crocodiles.

23. Animal acquisition / transfer / exchange during the year

A.	Animals arriving in the Zoo				
	House No.	Species	Number (M:F)	From which Zoo	Date of arrival in the zoo
	Leopard enclosure	Leopards	M	Sakkarbaug zoological park, junagadh	01-09-2023
	Leopard enclosure	Leopards	F	Sakkarbaug zoological park, junagadh	01-09-2023
	Lion enclosure	Lion	M	Sakkarbaug zoological park, junagadh	28-03-2024
	Lion enclosure	Lion	F	Sakkarbaug zoological park, junagadh	28-03-2024
	Nil				
B.	Animals going from the zoo				
	H.NO.	Species	Number (M:F:U)	Going to which Zoo	Date of disposition from the zoo
	Nil				

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

Rescue operations and rehabilitation works carried out in the year 2023-24				
Sr. No.	Date	Species, (M:F:U), Number of animals	Place	Details of operations
1	02/08/2023	Jackal 1(M)	Bolundra village of Idar Dist:- Sabarkantha	The Animal was rescued by the Forest department and brought to Indroda Nature Park for Intensive Care.
2	07/09/2023 to 08/09/2023	Leopard (M)	GAIL Processing unit, Rosa Tankariya village Dist:- Bharuch	Planning to trap the male leopard from the campus of Gas Authority of India Limited (GAIL). Knowledge sharing to the staff and officers of GAIL about the procedure for safe capture of leopard.
3	16/11/2023	Jungle cat 2 : (1 M, 1 F)	Morvad village, Vijapur Dist:- Mehsana	The Animal was rescued by the Forest department and brought to Indroda Nature Park for “Neo Natal Care”.
4	21/12/2023	Leopard (F)	At Modhuka Village, Dist. Sabarkantha	Successful rescue of female leopard entered in the human dominated area. Immediately after rescue, the female leopard was subjected to the surgical intervention on account of major injury caused by the mob of villagers. After recovery, the forest department had reintroduced the animal back in to its natural habitat.
5	22/12/2023	Leopard	At Kadjodara Village, Taluka: Dahegam, Dist. Gandhinagar	The free ranging leopard entered in the agricultural farms of village. The animal had injured multiple villagers. Despite of whole day dedicated efforts by the Indroda Nature Park team and forest department, the animal couldn't be captured. The animal disappeared towards forest areas in night hours.



Pic.58: Photo plate showing wildlife rescue and post rescue surgical intervention by INP Veterinary Officer and team

25. Annual Inventory of animals of INP Zoo

ANNUAL INVENTORY REPORT OF APRIL-2023 TO MARCH-2024																					
INDRODA NATURE PARK, GEER Foundation, Gandhinagar, GUJARAT																					
Sr. No.	Animal Name / Scientific Name	Opening stock				Birth			Acquisition			Disposal			Death			Closing stock			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
Other than endangered species Birds																					
1	Northern Pintail (<i>Anas acuta</i>)	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
2	Grayleg Goose (<i>Anser anser</i>)	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
3	Bar-Headed Goose (<i>Anser indicus</i>)	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	2
4	Sarus Crane (<i>Antigone antigone</i>)	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
5	Lesser Whistling Duck (<i>Dendrocygna javanica</i>)	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
6	Little Egret (<i>Egretta garretta</i>)	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
7	Common Crane (<i>Grus grus</i>)	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
8	Brahminy Kite (<i>Haliastur indus</i>)	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
9	Little Cormorant (<i>Microcarbo niger</i>)	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
10	Painted Stork (<i>Mycteria leucocephala</i>)	1	2	6	9	0	0	2	0	0	0	0	0	0	0	0	0	3	6	2	11
11	Black crowned Night Heron (<i>Nycticorax nycticorax</i>)	0	0	20	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20
12	Great White Pelican (<i>Pelecanus onocrotalus</i>)	1	1	3	5	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	5
13	Alexandrine Parakeet (<i>Psittacula eupatria</i>)	10	13	0	23	0	0	3	0	0	0	0	0	0	0	0	0	10	13	3	26
14	Rose-ringed Parakeet (<i>Psittacula krameri</i>)	2	4	0	6	0	0	1	0	0	0	0	0	0	0	0	0	2	4	1	7
15	Knob-billed duck (<i>Sarkidiornis sylvicolas</i>)	3	2	17	22	0	0	0	0	0	0	0	0	0	0	3	3	2	14	19	
16	Black-headed Ibis (<i>Threskiornis melanocephalus</i>)	2	2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4
17	Common Barn Owl (<i>Tyto alba</i>)	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
	Total Birds	23	28	61	112	0	0	6	0	0	0	0	0	0	0	5	25	32	56	113	

ANNUAL INVENTORY REPORT OF APRIL-2023 TO MARCH-2024																					
INDRODA NATURE PARK, GEER Foundation, Gandhinagar, GUJARAT																					
Sr. No.	Animal Name / Scientific Name	Opening stock				Birth			Acquisition			Disposal			Death			Closing stock			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
Other than endangered species Mammals																					
1	Sambhar Deer (<i>Rusa unicolor</i>)	9	24	3	36	0	0	5	0	0	0	0	0	0	2	0	9	22	8	39	
2	Spotted Deer (<i>Axis axis</i>)	25	56	3	84	0	0	5	0	0	0	0	0	1	1	0	24	55	8	87	
	Total Mammals...	34	80	6	120	0	0	10	0	0	0	0	0	1	3	0	33	77	16	126	
Other than endangered species Reptiles																					
1	Common Krait (<i>Bungarus caeruleus</i>)	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
2	Red Sand Boa (<i>Eryx johini</i>)	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
3	Common Sand Boa (<i>Gongylophis conicus</i>)	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
4	Indian Star Tortoise (<i>Geochelone elegans</i>)	3	4	23	30	0	0	0	0	0	0	0	0	0	1	0	3	3	23	29	
5	Saw scaled viper (<i>Echis carinatus</i>)	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	
	Total Reptiles...	3	4	30	37	0	0	0	0	0	0	0	0	0	1	0	3	3	30	36	
	Total Animals (birds + mammals +reptiles)...	60	112	97	269	0	0	16	0	0	0	0	0	1	4	5	61	112	102	275	

ANNUAL INVENTORY REPORT FROM APRIL-2023 TO MARCH-2024																					
INDRODA NATURE PARK, GEER Foundation, Gandhinagar, GUJARAT																					
Endangered Species																					
Sr. No.	Animal Name / Scientific Name	Opening stock				Birth			Acquisition			Disposal			Death			Closing stock			
		M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	M	F	U	T
BIRDS																					
1	Peafowl (leucistic) (<i>Pavo cristatus</i>)	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
2	Eurasian Spoonbill (<i>Platalea leucorodia</i>)	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
3	Steppe Eagle (<i>Aquila Nipalensis</i>)	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
4	Tawny Eagle (<i>Aquila rapax</i>)	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	Total Birds	2	1	2	5	0	0	0	0	0	0	0	0	0	0	0	1	2	1	1	4
MAMMALS																					
1	Black Buck (<i>Antelope cervicapra</i>)	53	55	3	111	0	0	2	0	0	0	0	0	0	3	2	0	50	53	5	108
2	Black Buck (leucistic/white) (<i>Antelope cervicapra</i>)	15	28	4	47	0	0	3	0	0	0	0	0	0	0	2	0	15	26	7	48
3	Chinkara (<i>Gazella bennetti</i>)	2	2	1	5	0	0	1	0	0	0	0	0	0	1	0	0	2	1	2	5
5	Leopard (<i>Panthera pardus</i>)	2	0	0	2	0	0	0	1	1	0	0	0	0	1	0	0	2	1	0	3
6	Indian Crested Porcupine (<i>Hystrix indica</i>)	3	3	2	8	0	0	0	0	0	0	0	0	0	0	0	0	3	3	2	8
7	Asiatic Lion (<i>Panthera leo persica</i>)	1	1	0	2	0	0	0	1	1	0	0	0	0	1	0	0	1	2	0	3
8	Tiger (leucistic/white) (<i>Panthera tigris</i>)	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8	Bengal Tiger (<i>Panthera tigris tigris</i>)	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	Total Mammals...	77	90	10	177	0	0	6	2	2	0	0	0	5	6	0	74	86	16	176	
REPTILES																					
1	Spectacled Cobra (<i>Naja naja</i>)	2	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3
2	Marsh Crocodile (<i>Crocodylus Palustris</i>)	5	8	5	18	0	0	34	0	0	0	0	0	0	0	0	4	5	8	35	48
3	Indian Rock Python (<i>Python molurus</i>)	7	5	0	12	0	0	14	0	0	0	0	0	11	0	0	3	7	5	0	12
4	Common Rat Snake (<i>Ptyas mucosa</i>)	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3

ANNUAL INVENTORY REPORT FROM APRIL-2023 TO MARCH-2024																					
INDRODA NATURE PARK, GEER Foundation, Gandhinagar, GUJARAT																					
5	Russel's Viper (<i>Daboia ruselii</i>)	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
6	Indian softshell Turtle, Ganges Softshell (<i>Nilssonia gangetica</i>)	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	Total Reptiles...	15	13	11	39	0	0	48	0	0	0	0	0	11	1	0	7	14	13	41	68
	Total ANIMALS (Birds + Mammals + Reptiles)...	94	104	23	221	0	0	54	2	2	0	0	0	11	6	6	8	90	100	58	248

26. Mortality Report of animals

INDRODA NATURE PARK, GANDHINAGAR, GUJARAT. (1st April-2023 to 31st March-2024)

Sr.	Species	Date	Sex	Cause of death as diagnosed through P.M.
Birds				
1.	Brahminy kite	13/07/2023	U (F)	Multiple senile complications (old age)
2.	Knob-billed duck	01/12/2023	U (M)	Fatty liver disease
3.	Knob-billed duck	13/12/2023	U (M)	Caecal coccidiosis
4.	Goose Bar headed	06/01/2024	U (M)	Respiratory failure
5.	Knob-billed duck	08/03/2024	U (M)	Multiple senile complications (Old age)
6.	Tawney eagle	22/03/2024	U (M)	Multiple senile complications (Old age)
Mammals				
1.	Spotted deer	16/05/2023	Male	Old age-senile complications
2.	Blackbuck	22/05/2023	Male	Entero-hepatic insufficiency
3.	Blackbuck	05/08/2023	Male	Multiple senile complications- old age
4.	Lion	17/08/2023	Male	Irreversible hepatic insufficiency due to old age
5.	White blackbuck	27/08/2023	Female	Respiratory tract infection due to old age
6.	Blackbuck	02/09/2023	Female	Post dystocia prolapse and complications
7.	Blackbuck	12/09/2023	Male	Multiple senile complications (old age)
8.	Sambar deer	04/10/2023	Female	Multiple senile complications (old age)
9.	White blackbuck	13/10/2023	Female	Post partum toxemia
10.	Tiger	05/11/2023	Female	Senile (old age) complications
11.	Chinkara	05/11/2023	Female	Infight trauma
12.	Spotted deer	18/12/2023	Female	Old age-senile complications
13.	Leopard	26/01/2024	Male	Multiple senile complications
14.	Sambar deer	31/01/2024	Female	Multiple senile complications (old age)
15.	Blackbuck	07/03/2024	Female	Spleeno-respiratory insufficiency
REPTILES				
1.	Marsh Crocodile Juvenile	06/05/2023	U (M)	Renal failure and gout
2.	Turtle softshell ganges	08/06/2023	Male	Old age- multiple senile complications
3.	Indian Rock Python baby	28/07/2023	U	Acute respiratory distress syndrome
4.	Indian Rock Python baby	28/07/2023	U	Acute respiratory distress syndrome
5.	Indian Rock Python baby	16/09/2023	U	Congenital anomaly of pulmonary hypoplasia
6.	Star Tortoise	30/09/2023	F	Old age complications
7.	Marsh Crocodile Juvenile	07/03/2024	U (M)	Multiple organ failure
8.	Marsh Crocodile Juvenile	07/03/2024	U (F)	Multiple organ failure
9.	Marsh Crocodile Juvenile	07/03/2024	U (M)	Multiple organ failure

27. Status of compliance of conditions stipulated by Central Zoo Authority vide letter F. No.19-33/92-CZA(72)(Vol.V)(E) /147868 dated 11-01-2021

S. No.	Norm No.	Condition Stipulated	Status
1. General Requirements			
1.	10.1	Planted saplings should be protected from langurs and bluebull	Complied. Indroda Nature Park had developed Miyawaki forest in past two years by intensive protection of the saplings through cage type tree guards and round the clock human guarding.
2.	10.1(7)	A nallah from adjoining locality enters the zoo and across the zoo. This nallah has sewage of the locality. It should be diverted outside the zoo or sewer line should be laid.	The nallah is a natural drain line for the rain water. Sewage pumping station of the adjoining locality was in non-functional condition at the time of visit. Hence the sewage water was passing through the nallah. The office of GEER Foundation had repeatedly requested to repair the pump of the station to the executive engineer of Patnagar Yojana Bhavan, Municipal corporation and Collector of Gandhinagar in past five years. In this context, the sewage pumping station of Indroda Village is functional at present and no sewage water is passing through the nallah. The foundation is vigilant in the same to prevent the entry of swage in the nallah.
3.	10.1(9)	Necessary arrangements be made to stop the entry of dogs and cattle into zoo premise	The GEER Foundation has started constructing boundary wall around Indroda Nature Park on the eastern boundary at river side. Once the boundary gets completed, the dogs shall automatically be restricted to enter in the premise.

S. No.	Norm No.	Condition Stipulated	Status
2.Administrative and Staffing pattern			
4.	10.2(2)	Posts of the curator, the education officer and the Biologists be sanctioned and recruitments be made.	The work of curator is carried out by the Park Warden whereas Dr. Sandeep Munjapara, I/C Scientist was given the charge of Zoo biologist for Indroda Nature Park Zoo vide office order no.: EST/1/B-6226, Date: 08/12/2010. He regularly attends the training programme for the capacity building conducted by the Central Zoo Authority. Shri Alap Pandit, Programme officer of ecological education wing of GEER Foundation looks after the work of zoo education Officer by conducting public awareness programmes as per the direction of CZA from time to time.
4.Animal Housing, display of animals and animal enclosures			
5.	10.4(2)	Enclosures of exotic birds are small. They shall be made as per design and dimension prescribed by the CZA	As a part of redevelopment of Indroda Park Zoo as per approved master plan (Government accepted all development works as suggested in master plan and made the provision in the budget) designing of Aviary for exotic birds has been completed and is under progress of tender stage.
6.	10.4(8)	Design for jackal enclosure not yet submitted to the CZA. Design be submitted to the CZA for approval.	Complied. The design for Jackal enclosure is submitted and approved by the Central Zoo Authority vide letter no.:147868, Date:07/12/2023. The construction work has been started as per the approved design
8.	10.4(10)	Interpretation facilities should be made interactive.	The old interpretation facilities are planned to make interactive by use of innovative technology in the redevelopment work of Indroda Nature Park zoo. Work is under progress.

S. No.	Norm No.	Condition Stipulated	Status
5.Upkeep & health care of animals			
9.	10.5(2)	Pre-slaughter pathological test of animals should be done.	<p>Complied. The feed for the wild animals of Indroda Nature Park is supplied by the vendor who is registered and authorized by the Municipal corporation of Ahmedabad. Slaughter of the buffalo is carried out at the municipal corporation slaughter house after pre slaughter examination of the same by the Veterinary Officer of Municipal Corporation of Ahmedabad. Municipal corporation provide slip of slaughter fees. The said slip is submitted by the vendor to the Indroda Nature Park on daily basis.</p> <p>To ensure double safety in the good quality & disease free meat production and processing, the veterinary officer of GEER Foundation goes for ante-mortem examination of buffaloes and to collect samples for pre slaughter pathological tests. The said samples are submitted to the government laboratory (Animal Disease Investigation Office, Ahmedabad) for laboratory analysis. Based on the laboratory results, the supply of meat is regulated. Meat of only disease free animal is accepted for consumption of zoo animals at Indroda Nature Park. Regular feed checking system has also been established by the order from the desk of Director, GEER Foundation.</p>
10.	10.5(10)	Records pertaining to visual observation on daily pattern of activity and healthcare should be seen daily by the Curator/Veterinary Doctor.	Complied
11.	10.5(10)	Zoo Keeper's Diary should be maintained by the zoo keepers.	Complied

S. No.	Norm No.	Condition Stipulated	Status
6. Veterinary and infrastructure facilities:			
12	10.6(1)	Appropriate footbath is also required at the entry of the hospital.	Complied
13.	10.6(1)	The hospital should have a proper operation theatre.	Establishment of new modern veterinary hospital in Indroda Nature Park has been started. The foundation for the infrastructure has been constructed till the month of june, 2024.
14.	10.6(3)	Quarantine facility should be established.	The new & modern veterinary hospital will have a quarantine section as well to take care of- newly arrived animals as well as rescued animals. Work is under progress
15.	10.6(6)	MoU should be signed on healthcare, preventive health management, surgical interventions, clinical tests, etc.	This office has signed MoU on 01/02/2024 with Kamdhenu University for healthcare, preventive health management and surgical interventions for the period of 5 years for the date of execution.
16.	10.9(1)	There is only one pair of Lion. The female is medically unfit for breeding. Zoo shall ensure self-sustaining population of the species.	Indroda Nature Park has acquired a potential breeding pair of lion on date 28/03/2024.
9. Acquisition and breeding of animals			
17	10.9(4)	Singly housed Jackal should be paired	At present, there is no jackal in the stock of Indroda Nature Park zoo. However, it was included in our collection plan and will be implemented once the enclosure is ready.
12. Visitors' facilities:			
18	12.1	Cloak rooms for visitors should be provided.	Complied. GEER office has started the work of constructing clock room in Indroda Nature Park vide letter no.: STR/10/C-6369-72, Date: 28/11/2023. Construction Work is under progress.

28. List of free living wild animals and butterflies within the zoo premises

Sr. No.	Common Name	Scientific Name
1	2	3
Mammals		
1	Hanuman Langur	<i>Presbytis entellus</i>
2	Indian Hare	<i>Lepus nigricollis</i>
3	Jackal	<i>Canis aureus</i>
4	Indian Porcupine	<i>Hystrix indica</i>
5	Grey Mongoose (Common Mongoose)	<i>Herpestes edwardsii</i>
6	Pale Hedgehog	<i>Hemiechinus micropus</i>
7	Blue bull	<i>Boselaphus tragocamelus</i>
8	Rusty-Spotted cat	<i>Prionailurus rubiginosus</i>
9	Five-striped Palm squirrel	<i>Funambulus palmarum</i>
10	Small Indian civet	<i>Viverricula indica</i>
Reptiles		
1	Indian Cobra	<i>Naja naja</i>
2	Common Krait	<i>Bungarus caeruleus</i>
3	Common San boa	<i>Gongylophis conicus</i>
4	Red San-Boa	<i>Eryx johnii</i>
5	Indian Rock Python	<i>Python molurus</i>
6	Common Cat Snake	<i>Boiga trigonata</i>
7	Small-banded Kukri Snake	<i>Oligodon fasciolatus</i>
8	Common Worm Snake	<i>Typhlina bramina</i>
9	Bronze back tree snake	<i>Dendrelaphis gorei</i>
10	Russel's Viper	<i>Daboia russelii</i>
11	Saw-scaled viper	<i>Echis carinata</i>
12	Trinket Snake	<i>Elaphe helena</i>
13	Indian Wolf Snake	<i>Lycodon capucinus</i>
14	Barred Wolf Snake	<i>Lycodon striatus</i>
15	Checkered keel-back	<i>Xenochrophis piscator</i>

16	Common Garden Lizard	<i>Calotes versicolor</i> (Daudin)	
17	Common Indian Monitor	<i>Varanus Bengalensis</i>	
18	Fan-Throated Lizard	<i>Sitana ponticeriana</i>	
19	Brahminy Skink	<i>Mabuya carinata</i>	
20	Indian Flapshell turtle	<i>Lissemys punctata</i>	
21	Indian star tortoise	<i>Geochelone elegans</i>	
22	Northern house Gecko	<i>Hemidactylus flaviviridis</i>	
23	Termite hill Gecko	<i>Hemidactylus triedrus</i>	
Birds			
Sr. No.	Common Name	Scientific name	Status code
Status code: 'R': Resident, 'M': Migratory, 'RM': Resident- Migratory, 'V': Vagrant			
1.	Alexandrine Parakeet	<i>Psittacula eupatria</i>	R
2.	Alpine Swift	<i>Tachymarptis melba</i>	R
3.	Ashy Drongo	<i>Dicrurus leucophaeus</i>	M
4.	Ashy Prinia	<i>Prinia socialis</i>	R
5.	Ashy-crowned Sparrow-Lark	<i>Eremopterix griseus</i>	R
6.	Asian Brown Flycatcher	<i>Muscicapa dauurica</i>	M
7.	Asian Green Bee-eater	<i>Merops orientalis</i>	R
8.	Asian Koel	<i>Eudynamys scolopaceus</i>	R
9.	Asian Openbill	<i>Anastomus oscitans</i>	R
10.	Asian Palm Swift	<i>Cypsiurus balasiensis</i>	R
11.	Asian Woolly-necked Stork	<i>Ciconia episcopus</i>	R
12.	Bank Myna	<i>Acridotheres ginginianus</i>	R
13.	Barn Swallow	<i>Hirundo rustica</i>	M
14.	Barred Buttonquail	<i>Turnix suscitator</i>	R
15.	Baya Weaver	<i>Ploceus philippinus</i>	R
16.	Bay-backed Shrike	<i>Lanius vittatus</i>	R
17.	Black Drongo	<i>Dicrurus macrocercus</i>	R
18.	Black Kite	<i>Milvus migrans</i>	R
19.	Black Redstart	<i>Phoenicurus ochruros</i>	M
20.	Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	R
21.	Black-headed Cuckooshrike	<i>Lalage melanoptera</i>	RM
22.	Black-headed Ibis	<i>Threskiornis</i>	R

		<i>melanocephalus</i>	
23.	Black-headed Munia	<i>Lonchura malacca</i>	R
24.	Black-hooded Oriole	<i>Oriolus xanthornus</i>	R
25.	Black-naped Monarch	<i>Hypothymis azurea</i>	R
26.	Black-winged Kite	<i>Elanus caeruleus</i>	R
27.	Black-winged Stilt	<i>Himantopus himantopus</i>	R
28.	Blue Rock Thrush	<i>Monticola solitarius</i>	M
29.	Blue-cheeked Bee-eater	<i>Merops persicus</i>	M
30.	Blue-Rock Pigeon	<i>Columba livia</i>	R
31.	Blue-tailed Bee-eater	<i>Merops philippinus</i>	R
32.	Bluethroat	<i>Luscinia svecica</i>	M
33.	Booted Eagle	<i>Hieraaetus pennatus</i>	M
34.	Booted Warbler	<i>Iduna caligata</i>	M
35.	Brahminy Starling	<i>Sturnia pagodarum</i>	R
36.	Chestnut-shouldered Petronia	<i>Gymnoris xanthocollis</i>	R
37.	Citrine Wagtail	<i>Motacilla citreola</i>	M
38.	Clamorous Reed Warbler	<i>Acrocephalus stentoreus</i>	M
39.	Common Babbler	<i>Argya caudata</i>	R
40.	Common Barn Owl	<i>Tyto alba</i>	R
41.	Common Chiffchaff	<i>Phylloscopus collybita</i>	M
42.	Common Crane	<i>Grus grus</i>	M
43.	Common Greenshank	<i>Tringa nebularia</i>	M
44.	Common Hawk Cuckoo	<i>Hierococcyx varius</i>	R
45.	Common Hoopoe	<i>Upupa epops</i>	M
46.	Common Iora	<i>Aegithina tiphia</i>	R
47.	Common Kestrel	<i>Falco tinnunculus</i>	M
48.	Common Kingfisher	<i>Alcedo atthis</i>	R
49.	Common Moorhen	<i>Gallinula chloropus</i>	R
50.	Common Myna	<i>Acridotheres tristis</i>	R
51.	Common Pochard	<i>Aythya ferina</i>	M
52.	Common Quail	<i>Coturnix coturnix</i>	R
53.	Common Redshank	<i>Tringa totanus</i>	M
54.	Common Rosefinch	<i>Carpodacus erythrinus</i>	M

55.	Common Sandpiper	<i>Actitis hypoleucos</i>	M
56.	Common Snipe	<i>Gallinago gallinago</i>	M
57.	Common Tailorbird	<i>Orthotomus sutorius</i>	R
58.	Common Teal	<i>Anas crecca</i>	M
59.	Common Woodshrike	<i>Tephrodornis pondicerianus</i>	R
60.	Coppersmith Barbet	<i>Psilopogon haemacephalus</i>	R
61.	Crested Bunting	<i>Emberiza lathami</i>	R
62.	Crested Hawk Eagle	<i>Nisaetus cirrhatus</i>	R
63.	Crested Lark	<i>Galerida cristata</i>	R
64.	Crested Serpent Eagle	<i>Spilornis cheela</i>	R
65.	Desert Wheatear	<i>Oenanthe deserti</i>	M
66.	Dusky Crag Martin	<i>Ptyonoprogne concolor</i>	R
67.	Eastern Cattle Egret	<i>Bubulcus coromandus</i>	R
68.	Eurasian Collared Dove	<i>Streptopelia decaocto</i>	R
69.	Eurasian Coot	<i>Fulica atra</i>	RM
70.	Eurasian Cuckoo	<i>Cuculus canorus</i>	M
71.	Eurasian Curlew	<i>Numenius arquata</i>	M
72.	Eurasian Sparrowhawk	<i>Accipiter nisus</i>	R
73.	Eurasian Spoonbill	<i>Platalea leucorodia</i>	R
74.	Eurasian Wryneck	<i>Jynx torquilla</i>	M
75.	Glossy Ibis	<i>Plegadis falcinellus</i>	M
76.	Graceful Prinia	<i>Prinia gracilis</i>	R
77.	Great Cormorant	<i>Phalacrocorax carbo</i>	R
78.	Great Egret	<i>Ardea alba</i>	R
79.	Great Grey Shrike	<i>Lanius excubitor</i>	R
80.	Great Tit or cinereous tit	<i>Parus cinereus</i>	R
81.	Great White Pelican	<i>Pelecanus onocrotalus</i>	M
82.	Greater Coucal	<i>Centropus sinensis</i>	R
83.	Greater Short-toed Lark	<i>Calandrella brachydactyla</i>	M
84.	Green Sandpiper	<i>Tringa ochropus</i>	M
85.	Greenish Warbler	<i>Phylloscopus trochiloides</i>	M
86.	Grey Francolin	<i>Ortygornis pondicerianus</i>	R

87.	Grey Heron	<i>Ardea cinerea</i>	R
88.	Grey Wagtail	<i>Motacilla cinerea</i>	M
89.	Grey-breasted Prinia	<i>Prinia hodgsonii</i>	R
90.	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>	M
91.	House Crow	<i>Corvus splendens</i>	R
92.	House Sparrow	<i>Passer domesticus</i>	R
93.	Indian Bushlark	<i>Mirafra erythroptera</i>	R
94.	Indian Eagle-owl	<i>Bubo bengalensis</i>	R
95.	Indian Golden Oriole	<i>Oriolus kundoo</i>	R
96.	Indian Grey Hornbill	<i>Ocyrceros birostris</i>	R
97.	Indian Jungle Crow	<i>Corvus culminatus</i>	R
98.	Indian Nightjar	<i>Caprimulgus asiaticus</i>	R
99.	Indian Paradise-Flycatcher	<i>Terpsiphone paradisi</i>	R
100.	Indian Peafowl	<i>Pavo cristatus</i>	R
101.	Indian Pitta	<i>Pitta brachyura</i>	R
102.	Indian Pond Heron	<i>Ardeola grayii</i>	R
103.	Indian Robin	<i>Copsychus fulicatus</i>	R
104.	Indian Roller	<i>Coracias benghalensis</i>	R
105.	Indian Scops owl	<i>Otus bakkamoena</i>	R
106.	Indian Silverbill	<i>Euodice malabarica</i>	R
107.	Indian Spot-billed Duck	<i>Anas poecilorhyncha</i>	R
108.	Indian Thick-knee	<i>Burhinus indicus</i>	R
109.	Indian White-eye	<i>Zosterops palpebrosus</i>	R
110.	Intermediate Egret	<i>Ardea intermedia</i>	R
111.	Isabelline Shrike	<i>Lanius isabellinus</i>	M
112.	Jacobin Cuckoo	<i>Clamator jacobinus</i>	M
113.	Jerdon's Leafbird	<i>Chloropsis jerdoni</i>	R
114.	Jungle Babbler	<i>Argya striata</i>	R
115.	Jungle Bush Quail	<i>Perdica asiatica</i>	R
116.	Jungle Nightjar	<i>Caprimulgus indicus</i>	R
117.	Jungle Owlet	<i>Glaucidium radiatum</i>	R
118.	Jungle Prinia	<i>Prinia sylvatica</i>	R
119.	Knob-billed Duck	<i>Sarkidiornis melanotos</i>	R

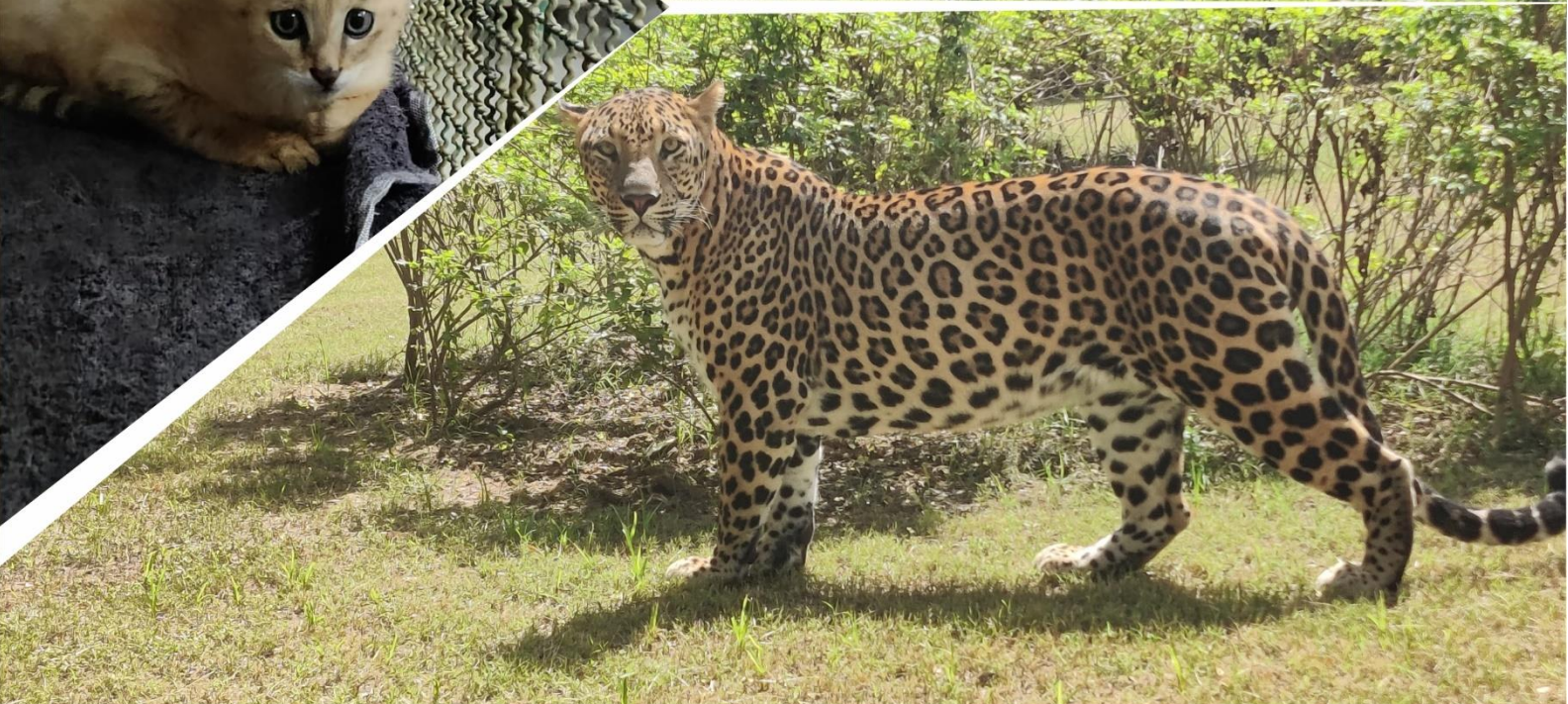
120.	Large Cuckooshrike	<i>Coracina macei</i>	R
121.	Large Grey Babbler	<i>Argya malcolmi</i>	R
122.	Laughing Dove	<i>Spilopelia senegalensis</i>	R
123.	Lesser Goden-backed Woodpecker or Black-Rumped flameback	<i>Dinopium benghalense</i>	R
124.	Lesser Whistling Duck	<i>Dendrocygna javanica</i>	R
125.	Lesser Whitethroat	<i>Curruca curruca</i>	M
126.	Little Cormorant	<i>Microcarbo niger</i>	R
127.	Little Egret	<i>Egretta garzetta</i>	R
128.	Little Grebe	<i>Tachybaptus ruficollis</i>	R
129.	Little Ringed Plover	<i>Charadrius dubius</i>	R
130.	Little Swift	<i>Apus affinis</i>	R
131.	Long billed Pipit	<i>Anthus similis</i>	M
132.	Long-tailed Shrike	<i>Lanius schach</i>	R
133.	Marshall's Iora	<i>Aegithina nigrolutea</i>	R
134.	Mottled Wood Owl	<i>Strix ocellata</i>	R
135.	Northern Pintail	<i>Anas acuta</i>	M
136.	Northern shoveler	<i>Spatula clypeata</i>	M
137.	Oriental Magpie Robin	<i>Copsychus saularis</i>	R
138.	Oriental Darter	<i>Anhinga melanogaster</i>	R
139.	Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	R
140.	Oriental Scops Owl	<i>Otus sunia</i>	R
141.	Orphean Warbler	<i>Sylvia hortensis</i>	M
142.	Osprey	<i>Pandion haliaetus</i>	M
143.	Painted Stork	<i>Mycteria leucocephala</i>	R
144.	Pale-billed Flowerpecker	<i>Dicaeum erythrorhynchos</i>	R
145.	Pallid Harrier	<i>Circus macrourus</i>	M
146.	Pheasant-tailed Jacana	<i>Hydrophasianus chirurgus</i>	R
147.	Pied Avocet	<i>Recurvirostra avosetta</i>	M
148.	Pied Bushchat	<i>Saxicola caprata</i>	M
149.	Pied Kingfisher	<i>Ceryle rudis</i>	R
150.	Plain Prinia	<i>Prinia inornata</i>	R
151.	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>	R
152.	Purple Heron	<i>Ardea purpurea</i>	R

153.	Purple Sunbird	<i>Cinnyris asiaticus</i>	R
154.	Purple Swamphen	<i>Porphyrio poliocephalus</i>	R
155.	Purple-rumped Sunbird	<i>Leptocoma zeylonica</i>	R
156.	Red Collared Dove	<i>Streptopelia tranquebarica</i>	R
157.	Red-breasted Flycatcher	<i>Ficedula parva</i>	M
158.	Red-headed Bunting	<i>Emberiza bruniceps</i>	M
159.	Red-naped Ibis	<i>Pseudibis papillosa</i>	R
160.	Red-necked falcon	<i>Falco chicquera</i>	R
161.	Red-rumped Swallow	<i>Cecropis daurica</i>	R
162.	Red-vented Bulbul	<i>Pycnonotus cafer</i>	R
163.	Red-wattled Lapwing	<i>Vanellus indicus</i>	R
164.	River Tern	<i>Sterna aurantia</i>	R
165.	Rose-ringed Parakeet	<i>Psittacula krameri</i>	R
166.	Rosy Starling	<i>Pastor roseus</i>	M
167.	Ruddy Shelduck	<i>Tadorna ferruginea</i>	M
168.	Rufous Treepie	<i>Dendrocitta vagabunda</i>	R
169.	Rufous-fronted Prinia	<i>Prinia buchanani</i>	R
170.	Rufous-tailed Lark	<i>Ammomanes phoenicura</i>	R
171.	Savanna Nightjar	<i>Caprimulgus affinis</i>	R
172.	Scaly-breasted Munia	<i>Lonchura punctulata</i>	R
173.	Shikra	<i>Accipiter badius</i>	R
174.	Short-toed Snake Eagle	<i>Circaetus gallicus</i>	R
175.	Siberian Stonechat	<i>Saxicola maurus</i>	M
176.	Singing Bushlark	<i>Mirafrja javanica</i>	R
177.	Sirkeer Malkoha	<i>Taccocua leschenaultii</i>	R
178.	Small Minivet	<i>Pericrocotus cinnamomeus</i>	R
179.	Spangled Drongo	<i>Dicrurus bracteatus</i>	R
180.	Spotted Dove	<i>Spilopelia chinensis</i>	R
181.	Spotted Flycatcher	<i>Muscicapa striata</i>	M
182.	Spotted Owlet	<i>Athene brama</i>	R
183.	Streaked Weaver	<i>Ploceus manyar</i>	R
184.	Sulphur-bellied Warbler	<i>Phylloscopus griseolus</i>	M
185.	Swinhoe's Minivet	<i>Pericrocotus cantonensis</i>	V

186.	Sykes's Lark	<i>Galerida deva</i>	R
187.	Tawny-bellied Babbler	<i>Dumetia hyperythra</i>	R
188.	Thick-billed Flowerpecker	<i>Dicaeum agile</i>	R
189.	Tickell's Blue flycatcher	<i>Cyornis tickelliae</i>	R
190.	Tree Pipit	<i>Anthus trivialis</i>	M
191.	Ultramarine Flycatcher	<i>Ficedula superciliaris</i>	M
192.	Variable Wheatear	<i>Oenanthe picata</i>	M
193.	Verditer Flycatcher	<i>Eumyias thalassinus</i>	M
194.	Western Marsh Harrier	<i>Circus aeruginosus</i>	M
195.	Western Yellow Wagtail	<i>Motacilla flava</i>	M
196.	White breasted Waterhen	<i>Amaurornis phoenicurus</i>	R
197.	White Wagtail	<i>Motacilla alba</i>	M
198.	White-bellied Drongo	<i>Dicrurus caeruleus</i>	R
199.	White-bellied Minivet	<i>Pericrocotus erythropygius</i>	R
200.	White-browed bulbul	<i>Pycnonotus luteolus</i>	R
201.	White-browed Fantail	<i>Rhipidura aureola</i>	R
202.	White-browed Wagtail	<i>Motacilla maderaspatensis</i>	R
203.	White-eared Bulbul	<i>Pycnonotus leucotis</i>	R
204.	White-eyed Buzzard	<i>Butastur teesa</i>	R
205.	White-spotted Fantail	<i>Rhipidura albogularis</i>	R
206.	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	R
207.	Wood Sandpiper	<i>Tringa glareola</i>	M
208.	Yellow-crowned Woodpecker	<i>Leiopicus mahrattensis</i>	R
209.	Yellow-eyed Babbler	<i>Chrysomma sinense</i>	R
210.	Yellow-footed Green Pigeon	<i>Treron phoenicopterus</i>	R
211.	Yellow-wattled Lapwing	<i>Vanellus malabaricus</i>	R
212.	Zitting Cisticola	<i>Cisticola juncidis</i>	R
Butterflies			
1.	Tawny coster	<i>Acraea terpsicore</i>	
2.	Plain tiger	<i>Danaus chrysippus</i>	
3.	Striped tiger	<i>Danaus genutia</i>	
4.	Common crow	<i>Euploea core</i>	
5.	Danaid eggfly	<i>Hypolimnas misippus</i>	

6.	Peacock pansy	<i>Junonia almana</i>
7.	Lemon pansy	<i>Junonia lemonias</i>
8.	Blue pansy	<i>Junonia orithya</i>
9.	Common evening brown	<i>Melanitis leda</i>
10.	Common leopard	<i>Phalanta phalantha</i>
11.	Tailed jay	<i>Graphium agamemnon</i>
12.	Common jay	<i>Graphium doson</i>
13.	Common rose	<i>Pachliopta aristolochiae</i>
14.	Lime butterfly	<i>Papilio demoleus</i>
15.	Common Mormon	<i>Papilio polytes</i>
16.	Pioneer	<i>Belenois aurota</i>
17.	Common emigrant	<i>Catopsilia pomona</i>
18.	Mottled emigrant	<i>Catopsilia pyranthe</i>
19.	Small salmon Arab	<i>Colotis amata</i>
20.	Orange tip	<i>Colotis etrida</i>
21.	Large salmon Arab	<i>Colotis fausta</i>
22.	White Arab	<i>Colotis vestalis</i>
23.	Common jezebel	<i>Delias eucharis</i>
24.	White orange tip	<i>Ixias marianne</i>
25.	Bright babul blue	<i>Azonus ubaldus</i>
26.	Forget-me-not	<i>Catochrysops strabo</i>
27.	Plains cupid	<i>Chilades pandava</i>
28.	Indian sunbeam	<i>Curetis thetis</i>
29.	Grass jewel	<i>Chilades trochylus</i>
30.	Lesser grass blue	<i>Zizina otis</i>
31.	Tiny grass blue	<i>Zizula hylax</i>
32.	Rice swift	<i>Borbo cinnara</i>

..... Report end.....



Gujarat Ecological Education and Research (GEER) Foundation

Indroda Nature Park, P. O. Sector-7, Gandhinagar - 382007, Gujarat, INDIA

Phone : (O) +91-79-23977300, 23977311

E-mail : dir-geer@gujarat.gov.in; Website: www.geerfoundation.gujarat.gov.in



Geer.EcoEdu



Geer.EcoEdu



indrodapark



FoundationGeer



oikos-theearth4539