

From the Director's Desk

Greetings to you from Nandankanan family. It gives me great pleasure the 1st quarterly newsletter of this year. During this quarter, the zoo actively celebrated various eco days, including World Veterinary Day, International Biodiversity Day, World Turtle Day, World Environment Day, World Crocodile Day, and International Day of Yoga. Several workshops were conducted, including one on "Value addition of aquatic weeds," a workshop on 'Research paper writing' for Zoo interns, and a Season Watch Training Programme on documenting trees. The "Raja bird count" was celebrated with birding events & an all-women bird walk. During the quarter Nandankanan received 6,73,367 visitors. The first "Zoo Ambassador Orientation Programme" was conducted. A rescued Indian pangolin was re- wilded at Similipal. Summer care was provided to animals, including water pools, sprinklers, coolers, and water guns. Successful veterinary management of zoo animals was continued in this quarter as well. The zoo welcomed many new births during this period. The support of donors in the form of animal adoption continued during this period also. This generous support goes long in ensuring welfare of captive animals and promoting in wildlife conservation. I hope to share more with you in the next quarter.

Dr Manoj V. Nair, IFS Director, Nandankanan Biological Park

Editorial Board

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About Us

Nandankanan Zoological Park is one of the finest large zoos of India established on 29th December, 1960. The State Botanical Garden with an area of 75 hectares and adjoining two important wetlands Kanjia lake (66 ha.) and Kiakani lake (25 ha) make the Nandankanan an ideal centre for Research, Education, Conservation breeding. The Zoological Park together with Kanjia lake and Botanical Garden has been declared as Nandankanan Wildlife Sanctuary over an area of 4.37 sq.km. (Notified on 3rd August, 1979). The park is under the management of the Government of Odisha, Forest Environment & Climate Change Department and followings the norms and guidelines laid by Central Zoo Authority, New Delhi, Govt of India.

Mission

To plan and implement best practices in captive animal welfare and health care, enclosure design and display, aesthetics and visitor amenities, education and outreach, research and conservation, technology and teamwork so as to foster the people-nature connect and transform the zoo to a global leader in ex-situ conservation

Vision

To achieve global standards in all aspects of management become a truly World-class zoo by the next decade, and thereby to significantly contribute in conserving our country's biodiversity.

Celebration of Eco Days

World Veterinary Day

World Veterinary Day was celebrated at Nandankanan on 27th April, 2024 with veterinarians from Nandankanan and various organisations of Odisha like Odisha Wildlife Headquarters and veterinarians from Barang and Bhubaneswar.





International Biodiversity Day

An "Insect Trail" was organized at Nandankanan on the occasion of International Biodiversity Day on 22nd May, 2024.



World Turtle Day

On World Turtle Day i.e. on 23rd May, 2024, a film on an Olive Ridley Sea turtle conservationist written & directed by filmmaker, Ishwar Shaw was screened at Nandankanan where zoo interns, zoo volunteers and staffs of Nandankanan joined and discussed about turtles.



World Environment Day

Nandankanan observed World Environment Day on 5thJune, 2024. Two innovative workshops on "Seed ball preparation" and "Value addition of aquatic weeds" were organised at State Botanical Garden & Nandankanan Zoological Park in collaboration with District Legal Services Authority, Bhubaneswar and Sattvic Soul Foundation.



World Crocodile Day

This time Nandankanan joined Satkosia Wildlife Division to observe World Crocodile Day on 17th June, 2024 at Tikarpada. RCCF, Angul, DFOs of Satkosia (WL), Mahanadi (WL), Athmalik, Athagarh, and Dhenkanal Divisions & Prof Sudarsan Maharana, etc. were present in the awareness campaign.



International Day of Yoga

Staff of Nandankanan observed the International Day of Yoga on 21st June 2024..



Other Events

Workshop on "Value addition of aquatic weeds"

A five-day workshop on "Value addition of aquatic weeds" was conducted at Nandankanan from 15.04.2024 to 20.04.2024 with 17 participants. The participants learnt to make paper, mushroom bed, decorative items, flower pots, briquettes and rope out of Water hyacinth (*Pontederia crassipes*).

The capacity building programme for staff of Nandankanan was conducted in coordination with Dr. G.N. Prabhu, from Centre for Research on Aquatic Resources, SD College, Alleppey, Kerela.





Workshop on 'Research paper writing'

Workshop on 'Research paper writing' was conducted on 26^{TH} April, 2024 at Nandankanan for Zoo interns with Dr. Bibhu Prasad Panda, Asst. Professor, Siksha 'O' Anusandhan University, Bhubaneswar as resource person, highlighting effective communication in science for early career researchers.



Season Watch Training Programme

A training session on documentation of trees around us through Citizen Science App, "Season Watch" with Dr. Geetha Ramaswami, from Nature Conservation Foundation, Bangalore as resource person was conducted at Nandankanan on 28th April 2024.







Raja Bird Count

The "Raja bird count" was celebrated at Nandankanan with birding on 14th & 16th of June. 20 bird enthusiasts joined where 44 species were observed on day 1 and 45 species were observed on day 2. An 'all women' bird walk was organised on this occasion. Raja festival time is a peak visitor footfall time for Nandankanan.



"Zoo Ambassador Orientation Programme" Orientation Programme

The first "Zoo Ambassador Orientation Programme" was conducted at Nandankanan where 43 Zoo Ambassadors along with their escort teacher and parents took part in zoo visit & other educational activities.



Re-wilding of Indian Pangolin

A rescued Indian pangolin (*Manis crassicaudata*) rewilded at the Chahala under Similipal North Division on 24.06.2024 with the help of Zoo Biologist & Field Biologist. The animal was microchipped and radio tagged before the release.





Summer Care Management

Summer care for animals at Nandankanan includes water pools, sprinklers, coolers, and water guns etc. to help them stay cool and comfortable.







Visitors during the Quarter (April 2024- June 2024)

Nandankanan Zoological Park and State Botanical Garden received 674348 visitors and 29019 visitors respectively between 01st April 2024 to 30th June,2024.

Passionate Guardians Animal Adopted during the Quarter (April - June 2024)

Sl no	Name of the persons/ institution	Details
1	Karthika Tirupathi Hyderabad, Telangana,500049	One Indian Tent Turtle 29-Jun-2024 To 28-Jun-2025
2	Saikrishna Hyderabad, Telangana,500089	One Binocellate Cobra 29-Jun-2024 To 28-Sep-2024
3	Atharv Chennai, Tamilnadu,600016	One Budgerigar 28-Jun-2024 To 27-Jul-2024
4	Dharani Lakshmi Chennai, Tamilnadu,600040	Two Common Indian Krait 17-Jun-2024 To 16-Jun-2025
5	Ruchika Sukh West Patel Nagar, Delhi,110008	One Binocellate Cobra 16-Jun-2024 To 15-Jul-2024
6	Ashwath Sumana Trust Pune, Maharashtra,411038	One Gaur 16-Jun-2024 To 15-Jul-2024
7	Satabdi Mohanty Bhubaneswar, Odisha,751007	One Himalayan Black Bear 03-Jun-2024 To 02-Sep-2024
8	Shyam Shreyansh Patra Mayurbhanj, Odisha,757026	One Blue Faced Lorikeet 18-May-2024 To 17-Jun-2024
9	Nikhil Kumar Agarwal Bhubaneswar, Odisha,751006	One Fischer's Love Bird 15-May-2024 To 14-Aug-2024
10	Mahesh Pandey Mumbai, Maharashtra,400084	One Binocellate Cobra 15-May-2024 To 14-May-2025
11	Mangi Neelima, Bhubaneswar, Odisha,751002	One Indian Flap Shell Turtle 13-May-2024 To 12-May-2025
12	Subrata Dey Dibrugarh, Assam,786602	One Alexandrine Parakeet 05-May-2024 To 04-Nov-2024
13	Sai Kumar Malkajgiri, Telangana,500011	Two Binocellate Cobra 30-Apr-2024 To 29-May-2024
14	Anand Kumar Panigrahi South Delhi, New Delhi,110021	One Leopard Cat 22-Apr-2024 To 21-May-2024
15	Atharv Sahu Bangalore, Karnataka,560087	One Binocellate Cobra 21-Apr-2024 To 20-Apr-2025
16	Abhinandan Mohanta Bhubaneswar, Odisha,752101	Two Nilgai 21-Apr-2024 To 20-May-2024
17	Amod Ashok Inamdar Pune, Maharashtra,411016	One Giant Fruit Bat 17-Apr-2024 To 16-May-2024
18	Danielle Bengaluru, Karnataka,560100	One Golden Pheasant 11-Apr-2024 To 10-May-2024
19	Bibaswan Satpathy Bhubaneswar, Odisha,751016	One Barbary Dove 07-Apr-2024 To 06-Jul-2024
20	MGM Minerals Limited, Bhubaneswar, Khorda, Odisha,751001	Two Asiatic Lion 02-Apr-2024 To 01-Apr-2025
21	Dr. Abhijit Acharya Bhubaneswar, Bhubaneswar,751029	Two Parma Wallaby 02-Apr-2024 To 01-May-2024
22	Aryaki Praharaj Thane, Maharashtra,400607	One Binocellate Cobra 01-Apr-2024 To 31-Mar-2025

Superannuating Staffs during this Quarter



Sri Nibasha Srichandan Zoo Watcher D.O.R: 31.05.2024



Sri Aun Kumar Samantray Zoo Watcher D.O.R: 31.05.2024



Sir Pandaba Bhoi Watchman D.O.R: 30.04.2024



Sri Udaysing Tamsoy Forest Guard D.O.R: 31.05.2024



Sri Chandramani Rout Animal Keerper D.O.R: 30.04.2024



Sir Sukadev Rout Animal Keeper D.O.R: 30.04.2024



Sri Duma Sabar Animal Keeper D.O.R: 30.06.2024



Sri Chandramani Rout Animal Keerper D.O.R: 31.05.2024

Zoo Education Programme during this Quarter (April - June 2024)

Date	Programme/Event	No. of Participants
03.04.2024	Visit programme of B.Sc Zoology students from Remuna Degree College, Balasore under "One Day at Nandankanan"	30
15.04.2024 to 19.04.2024	Workshop on "Value addition of Aquatic weeds" at Nandankanan Biological Park	35
26.04.2024	One day workshop on "Writing of Scientific Research Papers"	40
27.04.2024	Celebration of World Veterinary Day 2024	45
28.04.2024	One day workshop on "Season Watch" at State Botanical Garden	38
30.04.2024	Visit programme of School students Mothers Public School, Unit-I, Bhubaneswar under "One Day at Nandankanan"	74
04.05.2024	Visit programme of School students Mothers Public School, Unit-I, Bhubaneswar under "One Day at Nandankanan"	64
04.05.2024	Study tour programme of B.Sc (Forestry) students from College of Forestry, OUAT, Bhubaneswar	49
10.05.2024	Visit programme of kids from Mount Litera Zee School, Raghunathpur	115
14.05.2024	Study tour programme of B.Sc (Forestry) students from College of Forestry, OUAT, Bhubaneswar	45
16.05.2024	Conducted Moth Watching Session and Herping Trail at State Botanical Garden	22
22.05.2024	Conducted an Insect Trail programme to celebrate International Biodiversity Day 2024	18
23.05.2024	Celebration of World Turtle Day 2024	24
05.06.2024	Celebration of World Environment Day 2024	>300
12.06.2024	Orientation programme of IFS officers from XIMB, Bhubaneswar	12
14.06.2024	Raja Bird Count	28
16.06.2024	Raja Bird Count	24
17.06.2024	Celebration of World Crocodile Day 2024 at GRACU, Tikarpada	>100
18.06.2024	Conducted a Symposium by Habitat Trust Grant	25
21.06.2024	Conducted a Yoga Session to celebrate International Yoga Day 2024	28
23.06.2024	Conducted Zoo Ambassador Orientation Programme	>130
28.06.2024	Visit programme of Forest Guard Trainees from NFTS, Champua	46
29.06.2024	Visit programme of Forest Guard Trainees from NFTS, Champua	51
30.06.2024	Plantation programme "Ek Ped Maa Ke Naam" conducted at State Botanical Garden	25

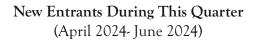
Glimpses of some educational activities











1	20.04.24	Gaur	1 U
2	21.04.24	Ring necked Parakeet (Lutino)	2U
3	22.04.24	Spotted Deer	5U
4	28.04.24	Four horned Antelope	1 U
5	29.04.24	Indian Peafowl	2 U
6	27.05.24	Swamp Deer	1 U
7	28.05.24	Hippopotamus	1U
8	28.05.24	Jungle Cat	1U
9	05.06.24	Gaur	1U
10	14.06.24	Ring necked Parakeet	1U
11	15.06.24	Barking Deer	1U
12	20.06.24	Swamp Deer	1U
13	22.06.24	Barking Deer	1U
14	28.06.24	Spotted Deer	3M+2F
TOTAL			24





Sri Ganesh Ram Singh Khuntia, Hon'ble Minister, Forest, Environment and Climate Change, Labour & Employees State Insurance, Govt of Odisha reviewed the ongoing activities and exhorted the management and staff to continue their work towards making Nandankanan a world-class zoo.

Plant in Focus

Sterculia urens: The Ghost Tree

Sterculia urens, popularly known as the "ghost tree" or "gum karaya tree," is an intriguing deciduous tree indigenous to India. Its light, smooth bark peels off in big flakes, giving it an almost ghostlike look, hence the name. But don't let its eerie name mislead you; this tree is a wonderful source of natural gum with a variety of applications.

Habitat and Appearance:

This medium-sized tree thrives in dry, deciduous forests, especially on rocky slopes. It can grow to be 15 meters tall, with horizontally spreading branches. The leaves are big and palmate, with 3-5 lobes. The blooms are tiny, greenish-yellow, and grow in panicles. The most distinguishing trait, however, is its smooth, greenish-grey bark, which peels away in papery flakes to reveal a whitish trunk beneath.

Gum Karaya: A Valuable Exudate:

Sterculia urens is best known for generating gum karaya, a valuable natural gum that emerges from the tree's bark when it is wounded. This gum has distinct qualities, expanding significantly as it absorbs water.

Uses of Gum Karaya:

- Medicinal: Used as a bulk laxative, in dental adhesives, and to soothe sore throats.
- Industrial: Acts as a thickener, emulsifier, and stabilizer in food, cosmetics, and pharmaceuticals.
- Textile Industry: Used in printing pastes.
- Other: Used as a binder in papermaking and as an adhesive for dentures.

Traditional Uses: In addition to gum karaya, the seeds of *Sterculia urens* are roasted and eaten, and the bark is used for cordage. Traditional medicine also utilizes various parts of the tree for different ailments.



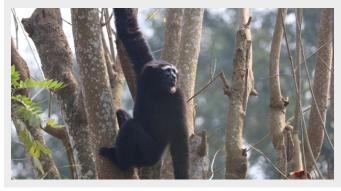




Species in Focus

Hoolock Gibbon (Hoolock hoolock)

Hoolock Gibbons are the only ape species found in India. These agile, canopy-dwelling creatures thrive in lush green forests of Northeast India, Bangladesh and Myanmar. Distinguished by their striking white eyebrows, they swing through the canopy, feeding on plants and fruits. However, hunting, habitat loss and fragmentation have led to their Endangered status. This remarkable species is protected under Schedule I of Wildlife (Protection) Act, 1972. The Hoolock gibbon (Hoolock hoolock) is a species of ape with a body length ranging from 60 to 90 cm and weighing between 6 to 7 kg. It has a gestation period of 184 to 193 days and typically gives birth to a single offspring. Hoolock gibbons reach sexual maturity at 6 to 8 years of age and can live for 30 to 35 years in the wild. Two pairs of Hoolock Gibbons were brought via animal exchange programme from Itanagar, Arunachal Pradesh & Aizawl, Mizoram in the year 2023.



Healthcare highlights

1. Surgical management of mammary tumor in a Striped hyena (*Hyaena hyaena*)

A seven-year-old female striped hyena (hyaena hyaena) of the zoo was seen with a swollen teat which was growing progressively. The hyena was immobilised on 20-05-2024, using zolazepam-tiletamine anaesthesia. Detailed physical examination revealed presence of firm tumor like mass attached to right caudal teat. X-ray and ultrasonography of the abdomen was conducted to rule out its attachment to internal organs. The tumor mass measuring 3.1cm×2.8cm×3.2cm was completely excised using standard procedure. The bleeding vessels were coagulated using electro-cautery. The hyena was kept confined to a squeeze cage for intensive treatment. The surgical wound got completely healed in about two weeks.



2. Successful management of lacerated wound in a Leopard cat (*Prionailurus bengalensis*)

A six-year-old female leopard was found with severe lacerated wound at the left forelimb exposing radio-ulnar bone exposed to outside, there was considerable loss of muscle tissue. On 04-06-2024, the cat was shifted to zoo veterinary hospital and immobilised using zolazepamtiletamine mixture. The dead tissues were cleaned and debridement was done. Wound dressing was done using collagen particles and colloidal silver gel. Parenteral antibiotic injection was administered daily for five. Then it was shifted back to its enclosure and every week it was immobilised for cleaning and dressing of the wound. It took about two months for complete healing of the wound.

Kindly send your feedback on

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