



Pimpri Chinchwad Municipal Corporation

Nisargakavi Bahinabai Chaudhary
Pranisangralaya Sambhaji Nagar, Pimpri, pune

Annual report 22-23



Table of content

Sr No	Section	Page No
1	Report of Officer In-charge	3
2	History of the zoo	4
3	Vision	5
4	Mission	5
5	Objective	5
6	About us	6
7	Organizational chart	9
8	Human resources	10
9	Capacity building of zoo personnel	12
10	Zoo advisory committee	13
11	Health advisory committee	15
12	Statement of income and expenditure of the zoo	15
13	Practices followed to regulate health of animals	15
14	Daily feed schedule of animals	17
15	Vaccination schedule of animals	19
16	Deworming schedule of animals	20
17	Disinfection schedule	20
18	Health checkup of employees for zoonotic diseases	22
19	Development works carried out in the zoo during the year	23
20	Education and awareness programme during the year	31
21	Important events and happenings in the zoo	33
22	Research work carried out and publications	33

23	Conservation and breeding programme of zoo	33
24	Seasonal species arrangements for upkeep of animals	33
25	Animal acquisition / transfer / exchange during the year	34
26	Rescue and rehabilitation of wild animals carried out by the zoo	37
27	Annual inventory of animals	38
28	Mortality of animals	39
29	Status of the compliance with conditions stipulated by the Central Zoo Authority	41
30	List of free living wild animals within the zoo premises	47

1.Report of Officer In-charge

Pimpri Chinchwad is renowned as an automobile and industrial hub. With a growing population and emergence as an IT hub, the city has undertaken several development projects in education, research, culture, and entertainment. One such project is the transformation of the city's zoo, Nisargakavi Bahinabai Chaudhari Prani Sangrahalay (PCMC Zoo), which has been operational since 1989. In response to modern demands, the zoo is being revamped to meet the needs of the contemporary era.

The PCMC Zoo has devised a comprehensive all-of-zoo operation plan, with a strong emphasis on creating and conserving urban green spaces. Despite its limited area of 7.05 acres, the zoo strives to meet the recent guidelines set by the Central Zoo Authority, encompassing housing requirements for diverse animal collections. Finding the perfect balance between the geographical area, guidelines, and visitor attraction, the theme of "REPTILES AND AVIARY" has been aptly chosen. The proposed facility will accommodate an impressive array of wildlife, including 31 species of snakes, 2 species of monitor lizards, 13 species of turtles and tortoises, 2 varieties of crocodiles, and 14 species of wetland birds.

The vision for this zoo is to become one of the world's finest small zoos, setting the standard for animal care, conservation efforts, community and school education programs, and environmental management. Pimpri Chinchwad Municipal Corporation is deeply committed to wildlife conservation and raising awareness about the importance of preserving our natural heritage.



2. History of the zoo

Pimpri Chinchwad is mainly known for its status as an automobile and industrial hub. However, due to recent population growth and its emergence as an IT hub, the city has seen a need to develop additional projects in fields such as education, research, culture, and entertainment. In response to these changing needs, the city's zoo, which has operated since 1989, is currently undergoing modifications to meet modern requirements. The project, known as Nisargakavi Bahinabai Choudhary Pranisangrahalay, or previously named the 'Snake Park and Aviary,' is one such development.

To ensure they offer a comprehensive zoo experience, the PCMC zoo has developed an all-encompassing zoo operation plan focusing on all aspects of zoo operations. The creation and conservation of urban green spaces have been prioritized in its planning. However, the PCMC Zoo occupies just 7.05 acres, categorizing it as a small zoo, and the recent Central Zoo Authority guidelines have provided clear instructions on required housing areas for various animal collections. The challenge has been to accommodate a theme that considers geographical area, guidelines, and visitor attraction, leading to the selection of the "REPTILES AND AVIARY" theme. The proposed facility is targeted to accommodate a total of 31 snake species, 2 monitor lizard species, 13 tortoise and turtle species, 2 crocodile varieties, and 14 wetland bird species.

The zoo's vision is to become one of the world's leading small zoos that prioritize animal care, conservation work, community and school education programs, and environmental management. The Pimpri Chinchwad Municipal Corporation is committed to wildlife conservation and awareness.



3.MISSION

To become a premier center for the conservation of indigenous reptiles and avifauna found in the area.

4.VISION

Our vision is to provide an exceptional experience to visitors by developing a theme-based zoo focused on educating people on the importance of Western Ghats' endemic reptiles.

5.OBJECTIVE

The zoo's proposed development aligns with the theme 'Reptiles of Ghats and Aviary.' Our objective is to collect rare and native species of reptiles found in the Western Ghats while offering a diverse range of wetland birds. To achieve this objective, we have set the following goals:

- Educate students and visitors on the significance of wildlife and the importance of preserving nature and natural resources.
- Rescue and release snakes, birds, and other animals that enter human habitation. We receive permission from the Forest Office and obtain transit passes before conducting release activities.
- Implement conservative breeding programs for several endangered snake species and release their offspring into declining population areas.
- Organize guided tours featuring essential information, lectures, demonstrations, slide shows, and printed materials with audio-visual media for school children.
- Disseminate up-to-date biodiversity information to the general public.
- Create suitable enrichment in all enclosures, considering species requirements and environmental changes.



6.About us

The Nisargakavi Bahinabai Chaudhari Prani Sangrahalaya, also known as the PCMC Zoo, is an important urban zoo located in Pimpri Chinchwad, Pune, Maharashtra. The zoo's mission is to serve as a center of excellence in animal care, conservation, and education, while providing visitors with an immersive and educational experience. The zoo is dedicated to preserving wildlife and habitats, promoting responsible stewardship of natural resources, and inspiring future generations to engage with nature and take action to protect it.

Over the past year, the zoo has made significant strides in service delivery, infrastructure development, and conservation efforts. This annual report provides an overview of the accomplishments, challenges, and future plans of the zoo. Through this report, we hope to demonstrate our commitment to preserving and protecting the natural world while providing a unique and educational experience to our visitors.

Zoos play a crucial role in urban cities as they provide a unique opportunity for people to experience and learn about animals that they may not otherwise have access to. Zoos also serve as a platform to raise awareness about endangered species, conservation efforts, and the importance of protecting wildlife and their habitats.

Educational programs and exhibits offered by zoos can inspire visitors to become more environmentally conscious and engage in conservation efforts. Children, in particular, can benefit from the interactive and educational experiences offered by zoos, which can instill a sense of responsibility for the environment at a young age.



Basic Information about the Zoo

S.No.	Particulars	Information
1	Name of the Zoo	Nisargakavi Bahinabai Chaudhari Prani Sangrahalay, Sambhaji Nagar, Chinchwad, Pune -411019
2	Year of Establishment	1 st January 1990
3	Address of the Zoo	Nisargakavi Bahinabai Chaudhari Prani Sangrahalay, Sambhaji Nagar, Chinchwad, Pune -411019
4	State	Maharashtra
5	Telephone Number	020-27371036
6	Fax Number	--
7	E-mail address	zoo@pcmcindia.gov.in
8	Website	www.pcmcindia.gov.in
9	Distance from nearest	Airport: Pune Airport - 18 km
		Railway Station: Chinchwad Railway Station – 5 km
		Bus Stand: Sambhaji Nagar Bus Stand – 300 mtrs
10	Recognition Valid up to (Date)	19-08-2022
11	Category of zoo	Small Zoo
12	Area (in Hectares)	2.85 Ha
13	Number of Visitors (Financial Year)	Currently the Zoo is closed for renovation.
14	Visitors' Facilities Available in Zoo	Currently the Zoo is closed for renovation. Visitor facilities include resting shades, drinking water, wheel-chair, first-aid, etc.
15	Weekly Closure Day of the Zoo	Currently the Zoo is temporarily closed for renovation.
Management Personnel of the zoo		
16	Name with designation of the Officer in-charge	Mr.Sandeep Khot, HOD, Veterinary department
	Name of the Director	Mr.Arun Dagade

	Name of the Curator	Ms. Apurva Bandal
	Name of the Veterinary Officer	Dr. Savita Devkatte
	Name of the Biologist/ Education Officer	-
	Name of the Education Officer	-
	Name of the Compounder/ Lab Assistant	-
Owner / Operator of the Zoo		
17	*Name of the Operator	The Municipal Commissioner, Pimpri Chinchwad Municipal Corporation, Pimpri, Pune - 411018
18	Address of the Operator	The Municipal Commissioner, Pimpri Chinchwad Municipal Corporation, Old Mumbai-Pune Highway Pimpri, Pune - 411018
19	Contact details/Phone number of Operator	020 - 39 33 11 17
20	E-mail address of Operator	commissioner@pcmcindia.gov.in

It gives us great pleasure to bring forth the annual report for the year 2022-23. Our dedicated colleagues in Pimpri Chinchwad Municipal Corporation have been working hard to develop this facility for the benefit of the public and animals as well. We are indebted to all of them. We express our gratitude to the following officials and dignitaries of the Pimpri- Chinchwad Municipal Corporation, without the help of whom this zoo would never have taken shape.

Mr. Shekhar Singh, I.A.S., Administrator and

Commissioner

Mr. Pradeep Jambhale Patil, Additional Commissioner

Mr. Vijay Khorate, Additional Commissioner

Mr. Sandip Khot, Assistant Commissioner (Veterinary Dept)

Mr. Manoj Sethia, Joint City Engineer Garden (Civil)

Dr. Arun Dagade, Veterinary Officer

We are also thankful to the Central Zoo Authority, Maharashtra State Zoo Authority, Zoological Survey of India, Zoo Outreach Organization, Department of Animal Husbandry (Govt. of Maharashtra) and the State Forest Department, for regular co-operation, help, guidance,

assistance and encouragement rendered by them.

7. Organizational chart

ZOO ADMINISTRATION

Zoo Director / Curator	Education Officer / Biologist	
	Office Clerk	Booking Clerk
	Driver, Gardener & Laborer	
	Security Officer	Security Guards
Veterinary Officer	Head Animal Keeper	Animal Keepers

8.Human resource

Sr. No.	Designation	Number of sanctioned posts	Posts filled	Names of the incumbent
1	Director	1	1	Dr. Arun Dagade
2	Curator	1	1 Contractual	Ms. Apurva Bandal
3	Veterinarian	1	1 Contractual	Dr. Savita Devkatte
4	Biologist / Education Officer	1	1 Contractual	-
5	Animal Keeper	3	3 Contractual	Mr. Abhijit Pawar Mr Rajesh Kamble Mr. Yogesh Kanjawne
6	Assistant Animal Keeper	6	2 (Staff)	Mr. Anil P. Raut Smt. Jayashree D. Madane
	Total	12	6	6

Roles

Curator

1. Animal Management: A curator is responsible for overseeing the management of animals in the zoo. This includes ensuring their health, nutrition, and welfare.
2. Exhibit Planning: Curators work with exhibit designers and architects in the planning and design of exhibits. They choose the appropriate animal species for each exhibit, determine their dietary, social, and habitat requirements, and ensure that the exhibit provides a suitable environment for the animals.
3. Conservation: Curators are often involved in conservation efforts of species found within the zoo. They may be responsible for overseeing breeding programs, reintroduction programs, and research to help protect and preserve endangered species.
4. Education and Outreach: Many curators are involved in educational programs for visitors to the zoo. They may give presentations, provide guided tours, and answer questions about the animals in the zoo.

and their habitats. They may also work with local schools and community groups to promote zoological education and be involved in public outreach.

5. Budgeting and Staff Management: Curators are also responsible for managing budgets and staff. They may oversee animal handlers and care staff, as well as manage budgets for animal food, equipment, and veterinary care.

Veterinary doctor

1. Animal Health: A veterinary doctor is responsible for the diagnosis, treatment, and prevention of diseases in zoo animals. They work to maintain the health of all animals in the zoo by creating and implementing animal health programs, which include regular check-ups, vaccinations, and disease prevention measures.

2. Surgery: In some cases, veterinary doctors may need to perform surgery or other medical procedures on zoo animals. This may include routine surgical procedures like neutering or spaying, as well as more complex procedures to treat injuries or illnesses.

3. Emergency Care: Veterinary doctors are also responsible for providing emergency care to zoo animals. They must be prepared to handle a variety of emergency situations, including injuries, illnesses, and anesthesia complications.

4. Research: Zoo veterinary doctors are often involved in research projects aimed at improving the health of captive animals. They may work on projects related to disease prevention, parasite control, nutrition, and reproduction.

5. Public Education: Veterinary doctors in zoos also play a role in educating the public about animal health. They may give presentations to visitors, provide information on animal health care and conservation, and participate in outreach programs.

Animal keepers

1. Feeding: One of the most critical tasks of an animal keeper is feeding the animals in their care. They must ensure that the animals receive the correct amount and type of food for their species. They must also monitor the animals' eating habits and adjust their diets if necessary.

2. Cleaning: Animal keepers are responsible for maintaining a clean and healthy environment for the animals. This means cleaning enclosures, removing waste, and disinfecting the area.

3. Health Monitoring: Animal keepers must monitor the animals' health daily and report any issues to the veterinary staff. They must be familiar with the signs of illness or injury and know how to provide immediate care if needed.

4. Behavior Enrichment: Animal keepers must work to enhance the animals' quality of life by providing them with a stimulating environment and activities. This includes providing enrichment such as toys, puzzles, and food puzzles.

5. Public Education: Animal keepers are often responsible for educating the public about the animals in their care, including their natural behaviors and the importance of conserving their habitats.

Cleaning staff

1. Cleaning and Disinfecting: Zoo cleaning staff must ensure that animal enclosures, feeding areas, and other animal care areas are cleaned thoroughly and disinfected regularly to prevent the spread of disease and keep the animals healthy.

2. Waste Removal: The cleaning staff must remove animal waste and other debris from enclosures and other areas of the zoo to maintain a clean and sanitary environment.

3. Maintenance: Zoo cleaning staff also perform routine maintenance tasks such as replacing bedding, cleaning drains, and painting enclosures.

4. Safety: They must be aware of safety hazards and potential risks associated with their work, such as handling cleaning chemicals and operating equipment.

5. Visitor Experience: The cleaning staff also play a role in creating a positive visitor experience by maintaining clean restrooms, walkways, and other public areas.

9.Capacity building of the zoo personnel

Capacity building

It is essential for maintaining the health and welfare of the animals in zoos. It involves providing training and resources to enable zoo personnel to carry out their roles effectively.

1. Training on animal care: Most zoo personnel require basic training on animal care, such as feeding, cleaning, and providing proper habitats. This involves training sessions on animal husbandry, behavior, and health.

2. Continuing education: Continuing education is essential for zoo personnel to stay up-to-date with emerging issues and advancements in the field. This involves attending seminars, workshops, and conferences, or enrolling in online courses.

3. Safety training: This involves training on how to handle dangerous animals, evacuation procedures, and emergency response.

4. Environmental conservation training: Zoos are often involved in environmental conservation efforts, and it's essential that zoo personnel are knowledgeable about the issues and able to contribute to conservation efforts. This could involve training on sustainability, environmental management, and habitat restoration.

5. Leadership and management training: For zoo personnel in leadership positions, it's essential to have training in management skills, including communication, decision making, and team building.

10. Zoo advisory committee

An advisory committee plays a significant role in the management of a zoo. Here are some of the key roles of an advisory committee in zoo management:

1. Developing policies and strategies: The advisory committee is responsible for developing policies and strategies that govern the management of the zoo. They help in the formulation of plans and policies that guide the zoo's daily operations.

2. Overseeing the zoo's budget: An advisory committee serves as a financial advisor to the zoo. They help in the development of the budget, allocate resources, and ensure that funds are spent wisely.

3. Ensuring compliance: The advisory committee ensures that the zoo adheres to relevant laws and regulations. They review policies and procedures and recommend changes where necessary to ensure compliance.

4. Providing expert advice: The committee members have expertise in different fields, including wildlife management, law, finance, marketing, and communications. They provide expert advice and guidance to the zoo management on various issues affecting the zoo.

5. Enhancing the zoo's image: The committee members work with the zoo management to build strong relationships with the community, sponsors, and donors. They assist the zoo management in adopting effective marketing strategies to increase visitor numbers and revenue.

6. Promoting animal welfare: An advisory committee ensures that animal welfare is a top priority in the zoo. They help in developing and implementing protocols to ensure that animals are safe, healthy, and well-cared for.

ZOO ADVISORY COMMITTEE

Zoo advisory committee has been reformed to observe the ongoing developmental activities in the Zoo.

Date of constitution: 20th March, 2017

Members: The committee consists of the following members.

Zoo Advisory Committee Members

1	Mr. Vijay Khorate	Additional Commissioner	Chairman
2	Mr. Manoj Sethia	Joint City Engineer	Member Secretary
3	Dr. Arun Dagade	Municipal Veterinary Officer	Coordinator
5	Mr. Gorakh Gosavi	Chief Garden Superintendent	Member
6	Mr. Pankaj Jain	Zoo Architect	Member
7	Mr. Anuj Khare	State Wildlife Advisory Board	Member
8	Dr. Rahul Marathe	Renowned Entomologist	Member
9	Dr. Rajkumar Jadhav	Director, RGZP	Member
10	Dr. Mayuri Panse	Educationalist	Member
11	Mr. Rahul Patil	DCF, Pune	Member
12	Mr. Umesh Vaghela	NGO, Representative	Member

Zoo advisory committee meetings are regularly held for discussions on Zoo Development related issues. The Addl. Commissioner is the chairman of this committee. Under his committed leadership the development is acclaimed. The committee is represented by higher authorities in Municipal Corporation, representatives of local electoral members, eminent wildlife experts and a member from State Wildlife Board.

Zoo advisory committee meeting

The committee has been formulated considering the role of Zoos in conservation. Due to varied expertise and holistic development approach the committee is of the opinion that the Zoo shall focus on conservation and display of lesser known small fauna. The committee is also considering conservation breeding of native fishes and amphibians as a priority.

11. Health advisory committee

Health advisory committee for PCMC Zoo was proposed in January 2018 Zoo Advisory Meeting. The committee has accepted the proposal to constitute the same. The constitution of this committee is under process.

12. Statement of income and expenditure of the zoo

The zoo remains closed for visitors from 25th December 2017 to till date.

BUDGET AND FINANCES

Budget Year	Budget allotted	Expenditure
2016-2017	2 Crore	1.92 Crore
2017-2018	7.50 Crore	7.20 Crore
2018-2019	5 Crore	4.90 Crore
2019-2020	1.25 Crore	1.17 Crore
2020-2021	3.5 Crore	2.90 Crore
2021-2022	2.1 Crore	1.8 Crore
2022-2023	2.5 Crore	-

13. Practices followed in zoo to regulate health of animals

Following are the routine practices for monitoring health of animals and safety of staff and visitors undertaken in the Zoo:

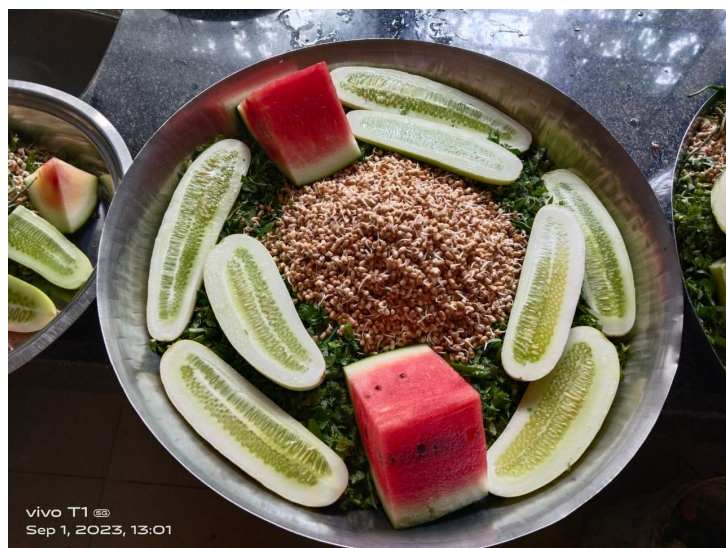
- De-worming and vaccination is scheduled periodically.
- De-beaking and nail clipping of birds is a periodic practice.
- Perches are repaired or replaced with new ones regularly. In new enclosures emphasis has been given to produce natural perching on live plants.
- Animal waste, food wastage, leaf litter and other biodegradable wastes are recycled to produce compost. No chemical fertilizers or pesticides are used in Zoo campus.
- Exhibit substrates /furnishings are modified or changed totally whenever necessary. Hiding places and escape refuges are maintained to reduce stress levels.
- Heat convector, air coolers, humidifiers and are used during climatic extremities.
- Volunteers and staff control the vandalism.
- Food and drinking water is regularly examined.
- Plastic Carry bags are banned in the zoo. Necessary signages are displayed to prevent vandalism.



14. Feeding Schedule

HERBIVORE

Sr. No.	Name	Feed Item	Approx. Quantity (Per animal) (Gms)	Day of fasting
1	Indian Peafowl	Mixed Vegetables- Leafy Vegetables-Mixed Grains	100-100-150	---
2	Budgerigar	Coriander-Millet-Sprouts	10-20-10	---
3	Cockatiel	Coriander-Millet-Sprouts	20-40-20	---
4	Alexandrine Parakeet	Mixed Fruits-Coriander- Sprouts-Oilseeds	20-10-10-50	---
5	Rose-ringed Parakeet	Mixed Fruits-Coriander- Sprouts-Oilseeds	20-10-10-50	---
6	Plum-headed Parakeet	Mixed Fruits-Coriander- Sprouts-Oilseeds	20-10-10-50	---
7	Spot-billed Duck	Mixed Vegetables- Leafy Vegetables-Mixed Grains	50-50-100	---
8	Starred Tortoise	Mixed Vegetables-Mixed Fruits-Dry Prawns	150-50-10	---



CARNIVORE

Sr. No.	Name	Feed Item	Approx. Quantity (Per animal) (Gms/Units)	Feeding Frequency
1	Common Cobra	Mice	2	Once a week
2	Russell's Viper	Mice	2	Once a week
4	Dhaman	Mice	2	Once a week
5	Checkered Keelback	Mice/Live Fish	1/2	Once a week
6	Trinket	Mice	1	Once a week
7	Sand Boa	Mice	1	Once a week
8	Earth Boa	Mice	1	Once a week
9	Banded Racer	Mice	1	Once a week
10	Wolf Snake	Mice	1	Once a week
11	Grass Snake	Mice/ Live Fish	1/1	Once a week
12	Common Krait	Mice	2	Once a week
13	Wall's Sind Krait	Mice	2	Once a week
14	Bamboo Pit Viper	Mice	1	Once a week
15	Marsh Crocodile* (Adult)	Chicken	1500-2000	Twice a week (Summer) Once a week (Winter)
16	Flap-shelled Turtle	Beef/Chicken Dry Prawns Coriander	40 10 20	Daily (Except Sunday)
17	Indian Black Turtle	Beef/Chicken Dry Prawns Coriander	40 10 20	Daily (Except Sunday)
18	Deccan Soft-shell Turtle	Beef/Chicken	80	Daily (Except Sunday)
19	Red-eared Terrapin	Beef/Chicken Dry Prawns Coriander	30 10 20	Daily (Except Sunday)
20	Pariah Kite	Beef/Chicken	150	Daily (Except Sunday)

Food health hygiene safety measures followed in zoo

When providing food to animals in a zoo, it is essential to follow food health hygiene safety measures. Here are some measures we follow:

1. **Food Preparation:** We keep food preparation areas clean and separate from other areas. Use sanitized equipment and follow appropriate food handling procedures. Use gloves and hair nets when handling food.
2. **Storage:** Store food in a cool, dry place, and keep it separate from other items like cleaning supplies. Check expiration dates regularly.
3. **Feeding:** Make sure feeding conditions are clean and no contaminated food is available to the animals. Remember not to serve leftover food to the animals. Animals also have specific dietary needs, so make sure to feed them according to their particular dietary requirements.
4. **Staff Training:** Properly train the staff in maintaining food safety and hygiene measures. Staff must know how to detect if food is contaminated and how to handle such a situation.
5. **Clean-up:** Regular cleaning of the animal feeding areas with approved disinfectants and disposal of waste properly.
6. **Disease Control:** In case of a disease outbreak, instructions should be given to the staff on how to handle infected animals and food to prevent the spread of the disease.
7. **Handling Commodities:** Staff handling fresh fruits and vegetables, either grown onsite or brought in from another location, should maintain strict hygiene measures to prevent contamination.

15.Vaccination schedule of animals

Regular vaccination of zoo animals is crucial for several reasons:

1. To Prevent the spread of infectious and zoonotic diseases.
2. Protects endangered species.
3. Maintains the health of the animal.
4. Promotes public safety against zoonotic diseases.

The vaccination is performed SOS on warnings from State Animal Husbandry and Central Zoo Authority.

16. Deworming schedule of animals

Deworming schedule

A regular deworming and disinfection schedule is important for maintaining the health and well-being of animals in the zoo.

Deworming:

We rotate dewormers to prevent the development of resistance to a specific drug.

De-worming is carried out in every quarter for birds.

Sr. No.	Species	Drug used	Month
1	Indian Peafowl	Albendazole	May, Aug, Nov, Feb
2	Budgerigar	Albendazole	May, Aug, Nov, Feb
3	Cockatiel	Albendazole	May, Aug, Nov, Feb
4	Alexandrine Parakeet	Albendazole	May, Aug, Nov, Feb
5	Rose-ringed Parakeet	Albendazole	May, Aug, Nov, Feb
6	Plum-headed Parakeet	Albendazole	May, Aug, Nov, Feb
7	Black kite	Albendazole	May, Aug, Nov, Feb
8	Spot-billed Duck	Albendazole	May, Aug, Nov, Feb
9	Starred Tortoise	Albendazole	May, Aug, Nov, Feb

17. Disinfection schedule

Disinfection:

Since the zoo is under renovation, enclosure locations and surface soil has been changed recently. Otherwise, the surface soil and perches are disinfected periodically using suitable media. Cage resting and solar exposure is performed routinely to avoid chances of infection. All disinfection processes are carried out on advice of the veterinary doctor.

Safety measures while cleaning the enclosure

1. Proper Training of animal keeper and helpers.
2. Protective Gear: We provide protective gear such as gloves, closed-toe shoes, and long-sleeved shirts, to provide an additional layer of protection against animal bites, scratches and reduce the risk of exposure to zoonotic diseases.
3. Provide Safety Equipment such as safety catch-poles, hooks, and shields for handling of dangerous animals.
4. Locks and Barriers: All doors, cages, and enclosures leading in and out of the area should be secure, with locks and barriers to prevent the escape or accidental release of the animals.
5. Proper Cleaning Materials: The cleaning materials, such as brushes, scoops, and disinfectants, should be selected carefully and kept separate from other animal records to avoid cross-contamination.
6. Supervision of the entire area to monitor the cleaning process and intervene in case of an emergency.

Animal handling safety measures to be followed in zoo

Birds, Reptiles, crocodiles:-

When handling birds in a zoo, it is essential to follow safety measures to ensure the health and safety of both the animals and staff. Here are some measures to follow:

1. Personal Protective Equipment (PPE): Always wear appropriate PPE when handling birds, including gloves, face shields, and goggles. This can protect you from scratches, bites, and exposure to bird droppings.
2. Training: Properly train staff members on how to handle birds safely, including how to hold them, how to restrain them for medical procedures, and how to avoid stress.
3. Sanitation: Keep bird enclosures clean and sanitary. Clean and disinfect all equipment and surfaces used in bird enclosures and keep a healthy environment for the birds.
4. Handling Techniques: Birds are easily stressed, so it's crucial to handle them with care. Use proper handling techniques to minimize the risk of injury or stress to birds.
5. Quality of Food: Ensure the birds are fed with high-quality and fresh food. Do not provide them with contaminated or stale food, or anything that might harm their health.

6. Age and Condition: Be cautious when handling young birds and those in poor physical condition. Young birds are fragile, and birds in poor health may respond unpredictably and pose a risk to zoo keepers and themselves.

7. Emergency Preparedness: Be prepared for emergencies, such as a bird escape or an animal attack. Have an emergency plan in place and ensure that staff members know what to do in such situations.

Turtles

Handling turtles in a zoo requires some safety precautions to prevent injury to both the staff and the animal. Here are some measures to take:

1. Proper Training: All staff members handling turtles should be well trained on how to approach and handle these animals without causing them any stress.

2. Protective Clothing: It is essential to wear protective clothing, such as gloves, closed-toe shoes, and long-sleeved shirts to reduce the risk of injuries and minimize the transfer of zoonotic diseases.

3. Proper Handling Techniques: Turtle's arms, legs, and neck are quite delicate. Therefore, proper techniques such as supporting the shell and limbs, should be used when picking up a turtle. The handler should avoid stressing the turtles by lifting them by their tails.

4. Tank Design: The tanks should be designed safely, secure, and lockable to prevent outside access by unauthorized persons.

5. Sanitation: Proper sanitation and cleanliness should be maintained in the turtle enclosure to minimize the spread of disease.

6. Monitor Water Quality: Turtles are aquatic animals and require an appropriate environment that includes water. A filtration system should be in place to keep the water clean and maintain adequate oxygen levels.

7. Proper Feeding Regimen: Provide a varied and nutritious diet to the turtles. Be sure to feed them with food suitable for their type, size, and age.

18. Health checkup of employees for zoonotic diseases

Every year in the month of June employees undergo health check-up for zoonotic diseases.

No suspect was found in the current year. At the time of inspection employees were

vaccinated with Anti-Rabies and Tetanus.

19. Development work carried out in zoo during the year

As zoo remains closed for last 5 years for renovation, listed points are proposed in phases for renovation to restart the zoo

A small zoo focusing on Reptiles and Bird collection was envisioned in 1989 to enlighten city dwellers about the biological heritage of the region. It was the only 3rd Reptile specialized zoo in the country at that time. Though the facility was attracting a large number of visitors, the need of upgrading the facility to latest trends in the field was imperative. Accordingly, the Master Development Plan for Nisargakavi Bahinabai Chaudhari Prani Sangrahalay was prepared and approved by the Central Zoo Authority.

The zoo is spread over 7.05 acres and is surrounded by residential zones. The theme selected in the approved master plan is **'Reptiles and Aviary'**. **The proposed facility is expected to house 31 species of snakes, 2 species of monitor lizard, 13 species of turtles and tortoises, 2 varieties of crocodiles and 14 species of wetland birds. The Zoo Master Development Plan has been approved by the Central Authority In year 2014-15.**

The development is focused on creating naturalistic environments for inmates. The zoo landscape is also planned to complement the natural environment and emphasis is given to promote native plants. Technical posts recommended by CZA in the Master Plan have been included in PCMC's proposed Restructure. The civil works proposed in the development are under progress.

Phase I of the development was completed in 2017. In First phase construction of Compound wall, peripheral underground water and drainage line, new toilet block and peripheral pathway, civil construction of reptile, bird aviary, chelonian section and mugger section were completed.

Phase II including quarantine section, enrichment works of various enclosures are undertaken simultaneously to conclude the developments in stipulated time.

Current phase of work

Chelonia

A chelonia enclosure in a zoo is a habitat designed specifically for turtles and tortoises. These enclosures aim to replicate the natural environment of these reptiles, providing them with the space, temperature, and humidity they need to thrive.

Chelonia enclosures typically feature a mix of land and water areas, with plenty of places for the animals to bask in the sun or seek shade as needed. The water area may be large or small, depending on the species of turtle or tortoise, but it is usually deep enough for the animals to swim in and may have rocks, logs, or other structures to provide additional hiding places or climbing opportunities.

The enclosure is landscaped to incorporate natural plants and rocks.

Chelonia enclosures in zoos are designed with the needs of visitors in mind, with viewing areas or interpretive displays providing insight into the habits, lifestyle, and conservation challenges facing these fascinating animals.

CHELONIA SECTION



3D VIEW (THEMATIC PRESENTATION) OF CHELONIA SECTION



Current status of chelonia enclosures

Wetland Bird aviary

A wetland bird aviary section in a zoo is a specially designed enclosure that mimics the natural habitat of wetland birds, such as ducks, geese, swans, and cranes. Typically, this section has a large body of water in the center of the enclosure, surrounded by plants and trees that are typically found in wetlands. The water would be filtered and cleaned regularly to ensure it is safe for the birds to swim in and drink from.

In addition, the wetland bird aviary has an inbuilt waterfall which would create a natural and tranquil environment for the birds. This waterfall could be designed to mimic the sound and flow of a natural waterfall in the wild, which would help to create a calming atmosphere for both the birds and visitors.

The wetland bird aviary also has shaded areas where the birds can rest and hide from the sun, as well as feeding stations where they can find food during the day. These feeding stations would be designed with special dispensers that can release food automatically, which will help to reduce the stress on the birds and ensure that they are well-fed throughout the day.

Visitors to the wetland bird aviary would be able to observe the birds in their natural habitat and learn about their behaviors, diets, and habitats. Interpretive displays will also be incorporated into the enclosure to provide visitors with information and education about the importance of wetlands, the birds that live in them, and the threats they face in the wild.

WETLAND AVIARY



3D VIEW OF WETLAND AVIARY (THEMATIC REPRESENTATION)



Current status of wetland aviary

Crocodiles and gharial

A crocodile and gharial enclosure in a zoo is a specially designed habitat that mimics the natural environment of these aquatic predators. The enclosure consists of a large pool of water with an adjoining sandy or rocky shore area where the crocodiles and gharials can bask in the sun.

The size of the enclosure depends on the number of crocodiles and gharials living within the space. The pool is divided into separate areas to allow for different types of habitats or to separate smaller or younger crocodiles and gharials from larger, more aggressive adults.

The enclosure is typically designed with high walls and glass to ensure the safety of both the animals and the visitors. The water in the pool would be filtered and cleaned regularly to maintain its quality and to meet the health needs of the animals.

The sandy or rocky shore area of the enclosure is designed to provide a drying area for the crocodiles and gharials. It is large enough to accommodate all the animals and allow them to move about freely while also keeping a safe distance from the visitors.

The enclosure also includes hiding spaces for crocodiles and gharials to retreat to when they need privacy or seek protection from the sun. These spaces could include structures like caves, rocks, or logs.

Educational signs and displays could be incorporated into the enclosure to provide visitors with information on the behavior, habitat, and conservation status of crocodiles and gharials. The signs could also detail the importance of protecting these elusive creatures in the wild to help ensure their survival for future generations.

MUGGAR AND GHARIAL SECTION



3D VIEW OF MUGGER AND GHARIAL ENCLOSURE (THEMATIC REPRESENTATION)



Current status of work in muggar and gharial section

Snake ghat (Reptiles of ghat)

The Snake Ghat enclosure in a zoo is designed to house large snakes such as pythons and anacondas. The enclosure is typically a long and narrow space that mimics the natural environment of these snakes, which is usually a dense jungle-like habitat.

The Snake Ghat enclosure is designed to include hiding areas such as rock or log structures, to allow the snakes to feel secure and sheltered while also providing a naturalistic environment. The enclosure have different levels of elevation and varying textures to provide an environment that stimulates the snake's natural behavior.

The enclosure has a water source such as a shallow pool for the snakes to soak in or swim in, as these animals are semi-aquatic. The temperature and humidity within the enclosure would be controlled to match the natural conditions of their habitat.

The Snake Ghat enclosure has a glass wall or viewing area to allow visitors to safely observe the snakes. Additionally, informational signs and displays would be placed around the enclosure to educate visitors about different species of large snakes, their habitats, and conservation status.

Overall, the Snake Ghat enclosure in a zoo is designed to provide a safe, natural, and educational habitat for large snakes while also allowing visitors to learn more about these fascinating creatures.

REPTILES OF GHATS SECTION



3D view of thematic representation of reptiles of ghat



Current entrance of reptiles of ghat



current status of snake enclosures

Quarantine and rescue

The quarantine and rescue section of a zoo is a crucial area where animals that are sick, injured, or rescued from the wild are cared for. This area is designed to provide a safe and supportive environment for animals in need of medical attention, rehabilitation, or quarantine.

The quarantine section of the zoo is typically a separate and isolated area where new animals are kept for a period of time to prevent the spread of any potential diseases to the other animals in the zoo. During this time, the new animals are provided with medical care, appropriate nutrition, and veterinary attention to ensure that they are healthy and free from any illnesses or parasites before being introduced into the general animal population.

The rescue section of the zoo provides a home for animals that have been injured in the wild, abandoned, or confiscated. These animals may require specialized medical care and rehabilitation before they can be released back into the wild, or if they cannot be released, they may remain in the zoo as permanent residents.

The staff in the quarantine and rescue section are specially trained to care for the animals in their care. They provide an array of medical treatments and rehabilitation services such as physical therapy, hydrotherapy, and behavior modification exercises. They monitor the animals' progress daily and work toward achieving their ultimate goal of releasing the animals back into the wild or ensuring their long-term health and welfare.

Emergency safety precautions and procedures to be followed in zoo

Emergency safety precautions and procedures in a zoo are important to ensure the safety of visitors, staff, and animals. Here are some general emergency safety precautions and procedures that should be followed in a zoo:

1. **Develop an Emergency Plan:** The zoo should have an emergency plan in place that outlines the specific procedures for different types of emergencies, such as natural disasters, fire, animal escape, and medical emergencies.
2. **Regular Drills:** Regular drills should be conducted to ensure that staff and visitors are aware of the emergency procedures and familiar with the evacuation route.
3. **Communication:** There should be a well-established communication system in place, including emergency numbers and radios, to ensure fast communication during an emergency situation.
4. **Animal escape:** If an animal escapes, the area should be secured, and visitors should be evacuated to a safe location.
5. **Fire Safety:** Adequate fire safety measures should be in place, including smoke detectors, fire extinguishers, and firefighting equipment. All staff should be trained on how to respond to a fire emergency.
6. **Medical Emergencies:** There should be trained medical personnel available to handle medical emergencies, and all staff should be trained to provide first aid.
7. **Evacuation Procedures:** Clear evacuation procedures should be established and communicated to visitors and staff, including designated assembly points and evacuation routes.
8. **Emergency Response Team:** A dedicated emergency response team should be trained and equipped to respond to emergencies and provide support.
9. **Animal Safety:** During emergencies, animals should be evacuated to safe locations and provided with appropriate care.
10. **Post-Emergency Procedures:** After an emergency, a post-emergency assessment should be conducted to determine its cause and review if any changes or improvements in the current emergency plan are needed.

20. Education and Awareness programmes during the year

Awareness

These programs aim to educate visitors and the wider public about the importance of conservation and the role zoos play in protecting animal species that are vulnerable or endangered. Here are some of the key benefits of these programs:

1. **Engaging the Public:** Zoos have a unique opportunity to engage the public and raise awareness about conservation issues. Educational programs and awareness campaigns provide a platform to share information and encourage visitors to take action to protect wildlife and their habitats.
2. **Inspiring Future Generations:** Through educational programs and awareness campaigns, zoos can inspire the next generation to care about wildlife and conservation. By inspiring a love of animals and nature in young people, zoos can create a legacy of conservation that can last for generations.
3. **Fund raising:** Many zoos use educational programs and awareness campaigns to raise funds for conservation projects. By highlighting the urgent need to protect endangered species and their habitats, zoos can encourage visitors to donate to important conservation causes.



21. Important events and happenings in the zoo

As the zoo is closed for visitors for renovation purposes there were no programmes held inside the zoo but we celebrated the wildlife week by visiting schools where we held drawing competitions, lectures on identification of reptiles and amphibians, precautionary measures to be taken, etc.

22. Research work carried out and publications

There were no research papers published during this year

23. Conservation and breeding programme of zoo

Currently no breeding programmes ran in the zoo

24. Seasonal special arrangements for upkeep of animals

Seasonal management practices to be done in enclosures

Seasonal management practices for birds and reptiles living in enclosures can help protect them from extreme climatic conditions. Here are some management practices followed in our zoo:

1. **Temperature Control:** Enclosures have proper insulation, heating, and cooling systems to maintain appropriate temperatures for the species living inside.
2. **Humidity Control:** Some bird and reptile species require specific humidity levels to maintain their health. Adequate misting systems can be used to regulate humidity levels.
3. **Shade and Sunlight:** Enclosures should provide adequate shade for species sensitive to direct sunlight and an area for them to bask in the sun.
4. **Water Sources:** Adequate water sources should be provided in the enclosures and regularly checked to ensure water is clean and fresh. Water depth should be appropriate for the species to avoid drowning.
5. **Diet and Nutrition:** Diets should be adjusted accordingly to meet the seasonal needs and changes of species and ensure adequate nutrition.
6. **Behavioral and Enrichment Needs:** Bird and reptile species have specific behaviors and enrichment needs based on their natural habitat. Enclosures should provide adequate space and tools for them to engage in natural behaviors.

7. Monitoring and Regular Maintenance: Enclosures should be regularly monitored for any signs of wear and tear that could compromise the animal's safety. Regular maintenance of heating and cooling systems, water sources, and enclosures are necessary.



Room heaters to control temperature



Snake boxes with incandescent light bulb

25. Animal acquisition/ transfer / exchange during the year Proposed animal collection

[A] REPTILES

Sr. No.	COMMON NAME	SCIENTIFIC NAME	Proposed Collection			
			M	F	U	T
1	Common Kukri snake	<i>Oligodon arnensis</i>	2	2	0	4
2	Python Indian	<i>Python molurus</i>	2	2	0	4
3	Python Reticulated	<i>Python reticulatus</i>	2	2	0	4
4	Anaconda	<i>Eunectes murinus</i>	2	2	0	4
5	Yellow Monitor	<i>Varanus salvater</i>	2	2	0	4
6	Monitor Lizard	<i>Varanus bengalensis</i>	2	2	0	4
7	Green Iguana	<i>Iguana iguana</i>	2	2	0	4
8	Indian Chameleon	<i>Chameleon zeylonicus</i>	3	3	0	6
9	Whitaker's Boa	<i>Gongylophis whitekarii</i>	2	2	0	4
10	Montane Trinket	<i>Coelognathus helena monticollaris</i>	3	3	0	6
11	Ornamental Snake	<i>Chrysopelia ornata</i>	2	2	0	4

12	Bronze-back Tree Snake	<i>Dendrolephis tristis</i>	2	2	0	4
13	Royal Snake	<i>Spalerosophis atriceps</i>	2	2	0	4
14	Banded Krait	<i>Bungarus fasciatus</i>	2	2	0	4
15	Cat Snake Common	<i>Boiga trigonata</i>	3	3	0	6
16	Cat Snake Forsten's	<i>Boiga forstenii</i>	2	2	0	4
17	Cobra Monocled	<i>Naja kaouthia</i>	2	2	0	4
18	Saw-scaled Viper	<i>Echis carinatus</i>	2	2	0	4
19	Sand Boa	<i>Gongylophis conicus</i>	2	2	0	4
20	Earth Boa	<i>Eryx johnii</i>	2	2	0	4
21	Wolf snake	<i>Lycodon aulicus</i>	2	2	0	4
22	Yellow spotted wolf snake	<i>Lycodon flavomaculatus</i>	2	2	0	4
23	Cobra common	<i>Naja naja</i>	5	5	0	10
24	Dhaman	<i>Ptyas mucosa</i>	5	5	0	10
25	Banded racer	<i>Argyrogena fasciolatusz</i>	3	3	0	6
26	Grass snake	<i>Macropisthodun plumbicolor</i>	3	3	0	6
27	Trinket	<i>Coelognathus helena</i>	5	5	0	10
28	Bamboo pit viper	<i>Trimerasurus graminus</i>	3	3	0	6
29	Checkered keelback	<i>Xenochrophis piscator</i>	10	20	0	30
30	Russell's Viper	<i>Daboia russelli</i>	5	5	0	10
31	Wall's sind krait	<i>Bungarus s.walli</i>	2	2	0	4
32	Striped keelback	<i>Amphiesma stolatum</i>	1	2	0	3
33	Krait common	<i>Bungarus ceruleus</i>	2	2	0	4
34	Elongated Tortoise	<i>Indotestudo elongata</i>	2	4	0	6
35	Travancore Tortoise	<i>Indotestudo travancorica</i>	2	4	0	6
36	Spotted Terrapin	<i>Geoclamys hamiltonii</i>	4	8	0	12
37	Eastern Hill Terrapin	<i>Melanochelys tricarinata</i>	4	8	0	12
38	Indian Terrapin	<i>Melanochelys trijuga</i>	3	6	0	9
39	Deccan Flapshell Turtle	<i>Nilsonia leithii</i>	2	4	0	6
40	Tent Terrapin	<i>Pangushura tecta</i>	6	12	0	18
41	Narrow-mouthed Softshell Turtle	<i>Chitra indica</i>	4	4	0	8
42	Indian Roofed Turtle	<i>Pangushura tenctoria</i>	6	12	0	18
43	Assam Roofed Turtle	<i>Pangshura sylhetensis</i>	5	5	0	10
44	Red eared turtle	<i>Trachemys scripta</i>	6	12	0	18
45	Flapshell turtle	<i>Lessymis punctata</i>	3	6	0	9

46	Starred tortoise	<i>Geochelone elegans</i>	8	12	0	20
47	Marsh crocodile	<i>Crocodylus palustris</i>	2	4	0	6
48	Gharial	<i>Gavialis gangeticus</i>	2	4	0	6

[B] BIRDS

Sr. No.	COMMON NAME	SCIENTIFIC NAME	Proposed Collection			
			M	F	U	T
1	Pelican	<i>Pelecanus onocrotalus</i>	3	3	0	6
2	White Ibis	<i>Threskiornis melanocephalus</i>	3	3	0	6
3	Grey Heron	<i>Ardea cineraria</i>	2	2	0	4
4	Painted Stork	<i>Mycteria leucocephala</i>	3	3	0	6
5	Spoonbill	<i>Platalea leucorodia</i>	3	3	0	6
6	Comb Duck	<i>Sarkidiornis melanotos</i>	5	5	0	10
7	White-breasted Water hen	<i>Amaurornis phoenicurus</i>	3	3	0	6
8	Dabchick	<i>Tachybaptus ruficollis</i>	5	5	0	10
9	Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	2	2	0	4
10	Night Heron	<i>Nycticorax nycticorax</i>	5	5	0	10
11	Large Egret	<i>Ardea alba</i>	2	2	0	4
12	Common Teal	<i>Anas crecca</i>	5	5	0	10
13	Shoveller	<i>Anas clypeata</i>	5	5	0	10
14	Ruddy Shelduck	<i>Tadorna ferruginea</i>	5	5	0	10

26. Rescue and rehabilitation of wild animals carried out by the zoo

Safety measures while treatment of injured or sick animal

When treating an injured or ill bird, snake, turtle, or crocodile, it is essential to follow safety measures to minimize the risks and maximize animal welfare. Here are some safety measures to consider:

1. **Proper Training:** It is essential to have proper training and knowledge of the animal's behavior, movement, and handling techniques before treating it.
2. **Protective Gear:** Protective gear such as gloves, boots, long-sleeved shirts, and eye protection should be worn to protect against bites, scratches, and exposure to zoonotic diseases.
3. **Appropriate Restraint:** Proper techniques for restraining the animal should be used to prevent it from biting or injuring itself during treatment.
4. **Administering Medications:** Medications should be given by experienced personnel, following the appropriate protocol.
5. **Hygiene and Cleanliness:** Cleanliness and hygiene should be maintained while handling the animals to avoid the risk of cross-contamination.
6. **Work in Teams:** It is recommended that staff work in teams when treating these animals, with one or more staff members providing a lookout for the animal.
7. **Supervision:** A supervisor should be present to monitor the treatment process and intervene in case of an emergency.

27. Annual inventory of animals

[A] REPTILES						
Sr. No.	COMMON NAME	SCIENTIFIC NAME	M	F	U	TOTAL
	Common Cobra	<i>Naja n. naja</i>	2	6	0	8
2	Russell's Viper	<i>Vipera russelli</i>	2	2	0	4
3	Indian Rat snake/Dhaman	<i>Ptyas mucosa</i>	2	6	0	8
4	Checkered Keelback	<i>Xenochrophis piscator</i>	3	3	0	6
5	Marsh Crocodile	<i>Crocodylus palustris</i>	1	0	1	2
6	Flap-shelled Turtle	<i>Lissemys punctata</i>	0	2	10	12
7	Trinket	<i>Coelognathus helena</i>	1	3	0	4
8	Sand Boa	<i>Eryx conicus</i>	1	2	0	3
9	Earth Boa	<i>Eryx johnii</i>	1	2	2	5
10	Banded Racer	<i>Argerogena fasciolatus</i>	1	1	0	2
11	Wolf Snake	<i>Lycodon aulicus</i>	1	1	0	2
12	Grass Snake	<i>Macropisthodon plumbicolor</i>	0	0	2	2
13	Starred Tortoise	<i>Geochelone elegans</i>	4	4	6	14
14	Common Krait	<i>Bungarus caeruleus</i>	2	2	0	4
15	Wall's Sind Krait	<i>Bungarus sindanus walli</i>	0	2	0	2
16	Indian Black Turtle	<i>Melanochelys trijuga</i>	0	1	2	3
17	Deccan Softshell Turtle	<i>Nilsonia leithii</i>	0	0	0	0
18	Bamboo Pit Viper	<i>Trimersurus gramenus</i>	0	0	2	2
19	Red-eared Terrapin	<i>Trachemys scripta</i>	7	11	0	18
		Total	28	48	25	101

[B] BIRDS						
Sr. No.	COMMON NAME	SCIENTIFIC NAME	M	F	U	TOTAL
1	Indian Peafowl	<i>Pavo cristatus</i>	2	0	0	2
2	Budgerigar	<i>Melopsittacus undulates</i>	15	11	10	36
3	Cockatiel	<i>Nymphicus hollandicus</i>	11	8	8	27
4	Alexandrine Parakeet	<i>Psittacula eupatria</i>	4	0	1	5
5	Rose ringed Parakeet	<i>Psittacula krameri</i>	3	5	0	8
6	Plum-Headed Parakeet	<i>Psittacula cyanocephala</i>	1	0	0	1
7	Spotbill Duck	<i>Anas poecilorhyncha</i>	0	1	0	1
8	Pariah Kite	<i>Milvus migrans</i>	0	0	4	4
		Total	36	25	23	84

28. Mortality of animals

SUMMARY OF DEATH REPORT

Date	Species	Sex	Cause of Death	Method of Disposal
16/03/2023	Leiths soft shelled turtle	U	Inanition leading to multiple organ failure	Burial
08/03/2023	Alexandrine parakeet	U	aging	Incineration
04/08/2022	Leiths soft shelled turtle	F	Ulcerative gastritis	Burial

STOCK POSITION

Category	Closing stock of previous year (2021-22)	Births	Acquisition	Death (April 2022-March 2023)	Disposal (April 2022-March 2023)	Closing stock of this year (2022-2023)
Birds	85	-	-	01	00	84
Reptiles	103	-	-	02	00	101
Total	188	-	-	03	00	185

29. Status of compliance with conditions stipulated by the Central Zoo Authority

(Ref: Letter No. 19-127/93-CZA(180)(Vol. III)(NS) dated 03.01.2019 subjected as Renewal of recognition to Nisargakavi Bahinabai Chaudhari Prani Sangrahalaya, Pimpri Chinchwad, Maharashtra under Section 38H of the Wildlife (Protection) Act, 1972 beyond the period 28.09.2019)

Sr. No.	Norm. No	Condition Stipulated	Time period to Comply	Pre sent Status	Remark
1. General Requirements					
1.	10.1(2)	The zoo should plant native trees and bushes as screening and buffer all around the boundary wall especially at the entrance of the zoo area towards the adjacent temple.	Immediately	Native tree plantation is done.	
2.	10.1(6)	It has been observed that one residential house has been existing inside the zoo campus, which is not separated by the boundary wall of two meters height. The entry and exit of the house is also from the zoo campus only. As per the approved master (layout) plan it was proposed to demolish the structure to construct a butterfly park. However, the same has not been complied so far.	Immediately	To be carried out in future during renovation process	
2. Administrative & staffing pattern					
3.	10.2(1)	The zoo should appoint a whole time well qualified Officer-in-charge having appropriate knowledge of Wildlife management. At present, it has been observed that Officer-in-charge and other important staff like Veterinarian and Biologist are appointed only for short term duration with up to six month duration. The Officer-in-charge should have delegated adequate financial and administrative powers for taking immediate decisions concerning the health and welfare of the captive wild animals.	Immediately	Direct recruitment is not done. All posts (Officer-in-charge, Veterinarian and Biologist) are on honorarium basis.	Direct recruitment should be done.

3. Development and planning					
4.	10.3(5)	The construction work of the zoo is going on. The zoo should take care of the natural landscapes of the zoo and animal enclosures should not be masked and the cleanliness and hygiene of the zoo should not be affected.	Immediately	Under renovation	Phase-II enrichment work is in progress.
4. Animal housing, display of animals and animal enclosures					
5.	10.4(1)	The new enclosure being constructed should be nature immersing since the zoo is housing reptiles, so to take care of sufficient sunlight, the temperature controlling devices and equipment should be placed for the safety of animals.	Immediately	Under renovation	
6.	10.4(2)	The construction work of the zoo is going on since long. The animals of the zoo are temporarily housed in small enclosures which do not meet the design and dimension prescribed by the CZA for housing these animals. The work of the new enclosure should be done on pace and should complete at the earliest. In the mean time zoo should take care of the animal housed and ensure that they do not get stressed due to housing in small enclosures.	Immediately	Under renovation	

7.		On the left side of the entrance of the zoo, there is an old abandoned enclosure. As per the master (layout) plan peacock enclosure is approved on this location. The old enclosure is not in bad shape; hence it is suggested to modify the enclosure in place of demolishing the same after approval of the design from CZA. The design should be submitted to the CZA for approval.	Immediately	Under renovation	
8.	10.4(6)	The zoo should provide species specific enrichment artifacts to meet the behavioral needs of the animals in the enclosures.	Immediately	Under renovation	Current enclosures are provided with species specific enrichment for temporary period
9.	10.4(9)	The live hedge should be developed between the viewing area and standoff barrier in the newly constructed enclosures.	Immediately	Under renovation	
10.	10.4(10)	The zoo should place appropriate bilingual signage's (Hindi as primary language) displaying adequate detailed scientific information about species.	Immediately	Under renovation	
5. Upkeep and health care of animals					
11.	10.5(5)	The provision of footbaths should be made at the entry and exit point of each enclosure which is being constructed. Further, the footbath should have provision of proper disinfectant.	Immediately	Under renovation	
12.	10.5(6)	The food and water samples should be tested periodically for microbiological, toxicological and any other contaminants at a recognized laboratory.	Immediately as not done in the past.	Periodically samples are checked.	
13.	10.5(8)	The vaccination and deworming is being done, however, the schedule for the same should be prepared and displayed at the enclosure and strictly be followed.	Immediately	After completion of enrichment, the schedules will be strictly displayed at the enclosures.	

14.	10.5(9)	The zoo staff handling the animals should be screened against zoonotic diseases at least once in a year and the record should be maintained.	Immediately	Zoo staff will be screened periodically against zoonotic diseases.	
15.	10.5(10)	The keeper's diary, daily reports, animal history cards and treatment cards should be prepared as per the specified standards / format of the CZA.	Immediately	All reports are maintained.	
6. Veterinary and infrastructure facilities					
16.	10.6 (1)	The zoo should take up the modification/ construction of the zoo hospital unit as per approval of the CZA.	Six months	Under renovation	
17.	10.6 (5)	A zoo should depute a Veterinary support staff as a whole time employee.	Immediately	Whole time veterinary support staff deputed.	

7. Postmortem and disposal of carcass of animals					
18.	10.7 (2)	The finding of the post-mortem examination should be recorded in the CZA prescribed format and records should be maintained for at least six years.	Immediately	All records are maintained	
19.	10.7 (2)	The zoo should also install an incinerator for disposal of animal carcasses in a manner that does not have any adverse impact on the hygiene and cleanliness of the zoo.	Six months	Incinerator is available at PCMC Veterinary department.	
10. Research activities					
20.	10.10 (1)	There are a number of education institutes in Pune city. The zoo should encourage local students of these educational institutions to take up research studies.	Six months	Under renovation	
11. Education and outreach activities					
21.	10.11 (1)	The zoo should develop an annual calendar to take up educational activities for the awareness and conservation of wildlife to the general public and students etc. the objective can be achieved through by involving local educational institutions or with the help of educated volunteers. The various environment and wildlife days should be celebrated at the zoo by inviting the school students.	Immediately		

12. Visitor Facilities					
22.	10.12 (1)	The zoo should have the facility of cloak rooms and kiosks for the visitors.	One year	Under renovation	
23.	10.12 (3)	The zoo should also make provision of the wheelchair and ramps for providing the access of better viewing of the animals by the 'Divyangjan'.	Immediately	Wheel-chair is available. Ramps were constructed at the entrance of veterinary hospital ,office,and all enclosures	

30. List of free living wild animals within the zoo premises

LIST OF MAMMALS

Sr. No.	English Name	Marathi Name	Scientific name
1	Common Mongoose	Mungus	<i>Herpestes edwardsii</i>
2	Palm Squirrel	Khar	<i>Funambulus palmarum</i>
3	Flying Fox	Vatvaghul	<i>Pteropus giganteus</i>
4	Rat	Udir	<i>Rattus rattus</i>

LIST OF BIRDS

No.	Vernacular Name (Marathi)	Common English Name	Scientific Name
1	Ghar	Pariah Kite	<i>Milvus migrans</i>
2	Shikra	Shikra	<i>accipiter badius</i>
3	Titvi	Red-wattled Lapwing	<i>Vanellus indicus</i>
4	Parva	Blue Rock Pigeon	<i>Columba livia</i>
5	Hola	Little Brown Dove	<i>Streptopelia senegalensis</i>
6	Popat	Rose-ringed Parakeet	<i>Psittacula krameri</i>
7	Kokila	Koel	<i>Eudynamys colopacea</i>
8	Bharadwaj	Crow Pheasant	<i>Centropus sinensis</i>
9	Gavhane Ghubad	Barn Owl	<i>Tyto alba</i>
10	Pingalya	Spotted Owlet	<i>Athene burma</i>
11	Pakoli	House swift	<i>Apus affinis</i>
12	Khandya	White-breasted kingfisher	<i>Halcyon smyrnensis</i>
13	Bandya	Small Blue kingfisher	<i>Alcedo atthis</i>
14	Veda Raghu	Green Bee-eater	<i>Merops orientalis</i>
15	Shin Chocha	Grey Hornbill	<i>Tocus birostris</i>
16	Tambat	Coppersmith Barbet	<i>Megalaima haemacephala</i>
17	Pakoli	Dusky Crag Martin	<i>Hirunda concolor</i>
18	Bhingari	Red-rumped Swallow	<i>Hirundo rustica</i>
19	Tarvali Bhingari	Wire-tailed Swallow	<i>Hirundo smithii</i>
20	Haladya	Golden Oriole	<i>Oriolus oriolus</i>
21	Khatik	Rufous-backed Shrike	<i>Lanus schach</i>
22	Kotwal	Black Drongo	<i>Dicrurus adsimilis</i>
23	Salunkhi	Common Myna	<i>Acridotherus tristis</i>
24	Bhoradi	Brahmini Myna	<i>Sturnus pagodarum</i>
25	Kawla	House Crow	<i>Corvus splendens</i>
26	Dom Kavala	Jungle Crow	<i>Corvus macrorhynchos</i>
27	Subhag	Iora	<i>Aegithina tiphia</i>
28	Bulbul	Red-vented Bulbul	<i>Pynonotus cafer</i>

29	Satbhai	Large Grey Babbler	<i>Turdoides malcolmi</i>
30	Nachara	White-browed Fantail	<i>Rhipidura aureola</i>
31	Vatvatya	Ashy Prinia	<i>Prinia socialis</i>
32	Vatvatya	Plain Warbler	<i>Plain subflava</i>
33	Shimpi	Tailor Bird	<i>Orthotomus sutorius</i>
34	Dayal	Magpie Robin	<i>Copsychus saularis</i>
35	Chirak	Indian Robin	<i>Saxicoloides fulicata</i>
36	Thirthira	Black Redstart	<i>Phaenicurus ochruros</i>
37	Fultoehya	Tickel's Flowerpecker	<i>Dicaeum erythrorhynchos</i>
38	Gangara	Great Tit	<i>Parus major</i>
39	Karada Dhobi	Grey Wagtail	<i>Motacilla cinerea</i>
40	Pandhara Dhobi	White Wagtail	<i>Motacilla alba</i>
41	Shinjiru	Purple Sunbird	<i>Nectarinia asiatica</i>
42	Shinjiru	Purple-rumped Sunbird	<i>Nectarinia zeylonica</i>
43	Chimani	House Sparrow	<i>Passer domesticus</i>
44	Chashmewala	White-eye	<i>Zosterops palpebrosa</i>
45	Sugran	Baya Weaver Bird	<i>Ploceus phillippinus</i>
46	Munia	Spotted Munia	<i>Lonchura punctulata</i>
47	Chanderi Munia	Silverbill	<i>Lonchura malabarica</i>

LIST OF REPTILES AND AMPHIBIANS

Sr. No.	English Name	Marathi Name	Scientific name
1	Indian Rat Snake	Dhaman	<i>Ptyas mucosa</i>
2	Trinket Snake	Taskar	<i>Coelognathus helena</i>
3	Wolf Snake	Kavdya	<i>Lycodon aulicus</i>
4	Common Kukri Snake	Kukri	<i>Oligodon arnensis</i>
5	Striped Keelback	Naneti	<i>Amphiesma stolatum</i>
6	Worm Snake	Wala	<i>Indotyphlops braminus</i>
7	House Gecko	Pal	<i>Hemidactylus flaviviridis</i>
8	Brook's Gecko	Pal	<i>Hemidactylus brookii</i>
9	Bark Gecko	Pal	<i>Hemidactylus leschenaultii</i>
10	Common Skink	Sapsurali	<i>Eutropis carinata</i>
11	Common Toad	Bhek	<i>Duttaphrynus melanostictus</i>
12	Cricket Frog	Beduk	<i>Fejervarya sp.</i>
13	Ornate Frog	Beduk	<i>Microhyla ornata</i>
14	Common Tree Frog	Beduk	<i>Polypedates maculatus</i>
15	Indian Skittering Frog	Beduk	<i>Euphylyctis cyanophlyctis</i>

LIST OF TREES

Sr. No.	English Name	Marathi Name	Scientific name
1	Indian lilac/ Neem	Neem	<i>Azadirachta indica</i>
2	Sisam	Sisam	<i>Dalbergia sisoo</i>

3	Soapnut	Ritha	<i>Sapindus laurifolia</i>
4	Spathodia	Pichkari	<i>Spathodia campanulata</i>
5	Eucalyptus	Nilgiri	<i>Eucalyptus sp.</i>
6	Plumeria	Chapha	<i>Plumeria alba</i>
7	Silk Cotton Tree	Kate Sawar	<i>Bombax ceiba</i>
8	Night-Flowering Jasmine	Parijat	<i>Nyctanthes arbor-tristis</i>
9	Tikoma	Songhanti	<i>Tecoma stans</i>
10	Banyan	Vad	<i>Ficus benghalensis</i>
11	Variegated Banyan	Variegated Vad	<i>Ficus benghalensis var.</i>
12	Curry leaf	Kadipatta	<i>Murraya koenigii</i>
13	Acacia	Hivar	<i>Acacia leucophloea</i>
14	Peepal	Pimpal	<i>Ficus religiosa</i>
15	Silver Oak	Suru	<i>Grevillea robusta</i>
16	Bottle Palm	Bottle Palm	<i>Roystonea regia</i>
17	Areca Palm	Supari	<i>Areca sp.</i>
18	Coconut	Naral	<i>Cocos nucifera</i>
19	Mast Tree	Ashok	<i>Polyalthia longifolia</i>
20	Weeping Fig	Pimparni	<i>Ficus benjamina</i>
21	Indian laurel	Nandrukh	<i>Ficus microcarpa</i>
22	Rubber tree	Rubber tree	<i>Ficus elastica</i>
23	Golden Bamboo	Pivla Bamboo	<i>Bambusa aurnatiana</i>
24	Green Bamboo	Kalak	<i>Bambusa vulgaris</i>
25	Coral tree	Pangara	<i>Erythrina indica</i>
26	Variegated Pangara	Pangara	<i>Erythrina variegata</i>
27	Gulmohar	Gulmohor	<i>Delonix regia</i>
28	Rain Tree	Vilayati Shirish	<i>Samanea saman</i>
29	Indian Cork	Buch	<i>Millingtonia hortensis</i>
30	Casuarina	Suru	<i>Casuarina equisetifolia</i>
31	Indian Tulip Tree	Bhend	<i>Thespesia populnea</i>
32	Bottle Brush	Bottle Brush	<i>Callistemon lanceolatus</i>
33	Copper Pod	Tambra-Shingi	<i>Peltophorum ferrugineum</i>
34	Camel's Foot Tree	Kanchan	<i>Bauhinia sp.</i>
35	Christmas Tree	Silver Oak	<i>Araucaria sp.</i>
36	Sandalwood	Chandan	<i>Santalum album</i>
37	Black Acacia	Khair	<i>Acacia catechu</i>
38	Jamun	Jambul	<i>Syzygium cuminii</i>
39	Singapore Cherry	Cherry	<i>Muntingia calabura</i>
40	Guava	Peru	<i>Psidium guajava</i>
41	Mango	Amba	<i>Mangifera indica</i>
42	Custard Apple	Sitafal	<i>Annona squamosa</i>
43	Papaya	Papai	<i>Carica papaya</i>
44	Bel Tree	Bel	<i>Aegle marmelos</i>

LIST OF BUSHES

Sr. No.	English Name	Marathi Name	Scientific name
1	China Rose	Jaswand	<i>Hibiscus sp.</i>
2	Nerium	Kaner	<i>Nerium odorum</i>
3	Jasmanum	Mogra	<i>Jasminum sp.</i>
4	Cana	Kardal	<i>Canna sp,</i>
5	Vinca	Sadafuli	<i>Vincarosea</i>
6	Thuja	Morpankhi	<i>Thujaoccidentalis</i>
7	Holy Basil	Tulas	<i>Ocimum sanctum</i>
8	Cycas palm	Cycas	<i>Cycas sp.</i>

Photos





Curator, NBCP



Additional Commissioner, PCMC

Veterinary officer, PCMC

Chief Garden Superintendent

Commissioner, PCMC

Executive Engineer (Garden Civil)



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