EXCURSION TO ALIPORE ZOO

Organized by – Department of Zoology
Dr. Kanailal Bhattacharyya College
Introduction
Map of Alipore Zoological Garden
History of Alipore Zoological Garden
List of some captive mammals in Alipore Zoo
Illustration and information about some captive mammals that we have visited
List of some captive birds in Alipore Zoo
Illustration and information about some captive birds that we have visited
A visit to reptile house of Alipore Zoological Garden
List of some captive reptile faunas in Alipore Zoo
Illustration and information of some captive reptiles that we visited
Other attractions of Alipore Zoo
Ex-situ conservation
Role of Zoological garden in Ex-situ conservation
Captive breeding
Conservation breeding programme of the zoo
Captive breeding in Alipore Zoological Garden
Problems regarding captive breeding in Alipore Zoo
Significance

MEMBERS OF OUR TRIP

<table>
<thead>
<tr>
<th>Teacher:</th>
<th>Dr. Sudipta Bhowmick</th>
<th>Mr. Santu Paria</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Students:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Priya Bhowmick</td>
</tr>
<tr>
<td>2. Priti Maity</td>
</tr>
<tr>
<td>3. Sheya Parvin</td>
</tr>
<tr>
<td>4. Manimohan Pal</td>
</tr>
<tr>
<td>5. Dipan Khamaru</td>
</tr>
<tr>
<td>6. Sumona Dey</td>
</tr>
<tr>
<td>7. Piyali Malik</td>
</tr>
<tr>
<td>8. Chandrani Das</td>
</tr>
<tr>
<td>9. Sukonna Maity</td>
</tr>
<tr>
<td>10. Rituparna Bhattacharya</td>
</tr>
<tr>
<td>11. Sudeshna Dhara</td>
</tr>
<tr>
<td>12. Shilpa Nandy</td>
</tr>
</tbody>
</table>

Date: 22/02/2020
ZOLOGICAL GARDEN, ALIPORE
## List of Some Captive Mammals in Alipore Zoo

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Habitat</th>
<th>Habit</th>
<th>Reproduction</th>
<th>IUCN Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Indian One Horned Rhinoceros</td>
<td><em>Rhinoceros unicornis</em></td>
<td>Assam, West Bengal, Uttar Pradesh and Nepal</td>
<td>Herbivorous</td>
<td>Produces single calf after a gestation period of 474-488 days</td>
<td>Endangered (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td>2</td>
<td>Brow-antlered Deer</td>
<td><em>Cervus eldi</em></td>
<td>Manipur</td>
<td>Herbivorous</td>
<td>Usually after a gestation period of 8 months</td>
<td>Endangered (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td><strong>Indian Lion</strong></td>
<td><em>Panthera leo persica</em></td>
<td>Gir Forest of Junagadh district of Gujarat in India</td>
<td>Carnivorous</td>
<td>Gives birth 2-4 cubs after a gestation period of 103-105 days</td>
<td>Endangered (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td>4</td>
<td><strong>Bengal Tiger</strong></td>
<td><em>Panthera tigris tigris</em></td>
<td>Western region, Nepal, Bangladesh &amp; Myanmar</td>
<td>Carnivorous</td>
<td>gestation period of 103-108 days usually gives birth 2-3 cubs</td>
<td>Endangered (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td>5</td>
<td><strong>Sloth bear</strong></td>
<td><em>Melursus ursinus</em></td>
<td>India, Sri Lanka</td>
<td>Leads solitary life, good climber</td>
<td>Usually gives birth 1-3 young after a gestation period of 7-8 months</td>
<td>Endangered (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td>6</td>
<td><strong>Common marmoset</strong></td>
<td><em>Callithrix jacchus</em></td>
<td>South America, Central America</td>
<td>Herbivorous</td>
<td>Gestation period of 144 days &amp; give birth 1-2 baby.</td>
<td>Threatened (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td>7</td>
<td><strong>Giraffe</strong></td>
<td><em>Giraffa camelopardalis</em></td>
<td>Africa - Sudan, Somaliland to South America.</td>
<td>Herbivorous</td>
<td>Gestation period of 455-488 days &amp; give birth 1 calf.</td>
<td>Vulnerable (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td>8</td>
<td><strong>Jungle Cat</strong></td>
<td><em>Felis chaus</em></td>
<td>India (except high Himalayas)</td>
<td>Carnivorous</td>
<td>Gestation period of 65 days &amp; give birth 3-5 kittens.</td>
<td>Least Concern (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td></td>
<td>Chimpanzee</td>
<td>Pan troglodytes</td>
<td>Guinea, Uganda, Tanzania</td>
<td>Herbivorous</td>
<td>Gestation period of 202-260 days &amp; give birth 1-2 baby.</td>
<td>Endangered (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td>---</td>
<td>------------</td>
<td>-----------------</td>
<td>--------------------------</td>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>-----------------------------------------------------------</td>
</tr>
</tbody>
</table>

**ILLUSTRATION AND INFORMATION ABOUT SOME CAPTIVE MAMMALS THAT WE HAVE VISITED**

- **COMMON NAME**: Indian one horned rhinoceros
- **SCIENTIFIC NAME**: Rhinoceros unicornis
- **DISTRIBUTION**: Found in Assam, West Bengal, and Nepal etc.
- **IUCN CATEGORY**: Endangered (protected by the wild life protection Act 1972)

**CHARACTERISTIC FEATURES:**
➢ **SIZE:** The body sizes of the rhinoceros are 3.7 – 3.8 m (male) and 3.1 – 3.4 m (female) in length.

➢ **WEIGHT:** The weight of animal is 2200 kg (male) and 1600 kg (female).

➢ **HABIT:** Herbivores in nature.

➢ **LIFESPAN:** The lifespan of animal is average 40 years.

➢ **FOOD:** Rhinoceros are herbivores. So, they feed grasses, leaves, branches of shrubs, trees etc.

➢ **REPRODUCTION:** Produces single calf after a gestation period of 474 – 488 days.

---

**Brow-Antlered Deer**

- **COMMON NAME:** Brow-Antlered Deer
- **SCIENTIFIC NAME:** Cervus eldii eldii
- **DISTRIBUTION:** Found at southern part of Loktak in Manipur etc.
- **IUCN CATEGORY:** Endangered (protected by the wild life protection Act 1972)

**CHARACTERISTIC FEATURES:**

➢ **SIZE:** The body size of animals are 95-115 cm in length.

➢ **WEIGHT:** The body weight of animal is 90-140 kg (male) and 70-120 kg (female).

➢ **Habit:** Herbivores in nature.
➢ **LIFESPAN:** The lifespan of animal is average 12-15 years.

➢ **FOOD:** Feeds on grasses, leaves, branches of shrubs and floating vegetation etc.

➢ **REPRODUCTION:** Usually after a gestation period of 8 months.

---

**Indian Lion**

- **COMMON NAME:** Indian lion
- **SCIENTIFIC NAME:** *Panthera leo persica*
- **DISTRIBUTION:** Found in Gir forest of Junagadh district of Gujarat in India etc.
- **IUCN CATEGORY:** Endangered (protected by the wild life protection Act 1972)

**CHARACTERISTIC FEATURES:**

- **SIZE:** The body size of animals are 2.82-2.87m (111-113 inch) in length.
- **WEIGHT:** The body weight of animal is 160-190 kg (male) and 110-120 kg (female).
- **Habit:** Carnivores in nature.
- **LIFESPAN:** The lifespan of animal is average 17-18 years (female) and around 16 years (male).
- **FOOD:** Lions prefers large prey species within a weight of 190-550 km. They most commonly feeds chital, sambar, nilgai, cattle buffalo etc.
- **REPRODUCTION:** Usually gives birth 2-4 cubs after a gestation period of 103 – 105 days.
- **COMMON NAME**: Bengal Tiger
- **SCIENTIFIC NAME**: *Panthera tigris tigris*
- **DISTRIBUTION**: Found in all over India, except North-western region, Nepal, Bangladesh and Myanmar.
- **IUCN CATEGORY**: Endangered (protected by the wild life protection Act 1972)

**CHARACTERISTIC FEATURES:**

- **SIZE**: The body size of animals are 270-310 cm (male) including tail and 240-265 cm (female) including tail in length.
- **WEIGHT**: The body weight of animal is up to 325 kg (717 lb).
- **HABIT**: Carnivores in nature.
- **LIFESPAN**: The lifespan of animal is average 8 – 10 years.
- **FOOD**: It prefers to hunting large ungulates such as chital, sambar, gaur and mammals also.
- **REPRODUCTION**: Gestation period of 103-108 days usually gives birth 2-3 cubs.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Common name</th>
<th>Scientific name</th>
<th>Habitat</th>
<th>Habit</th>
<th>Reproduction</th>
<th>IUCN category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Great Indian Hornbill</td>
<td><em>Buceros bicornis</em></td>
<td>Found in India, South-Western China, Bangladesh, Western Thailand, Laos, Cambodia, Malaysia and Sumatra</td>
<td>Feeds on fruits, fish, reptiles, termite etc. They have a strong preference for figs but also eats snakes and lizards</td>
<td>Lays 1-3 eggs</td>
<td>Vulnerable (According to IUCN Red list)</td>
</tr>
<tr>
<td>2</td>
<td>Adjutant stork</td>
<td><em>Leptoptilos javanicus</em></td>
<td>Northeastern India, Bangladesh, Pakistan etc</td>
<td></td>
<td></td>
<td>Endangered (According to IUCN Red list)</td>
</tr>
<tr>
<td>3</td>
<td>Golden Pheasant</td>
<td><em>Chrysolophus pictus</em></td>
<td>Founds in the</td>
<td>Feeds on leaves and buds of small shrubs</td>
<td>Lays 6-12 eggs; incubation period 22 days</td>
<td>Least Concern (According to IUCN Red list)</td>
</tr>
</tbody>
</table>
ILLUSTRATION AND INFORMATION OF SOME CAPTIVE BIRDS THAT WE HAVE VISITED

Great Indian Hornbill

- COMMON NAME : Great Indian Hornbill
- SCIENTIFIC NAME : *Buceros bicornis*
- DISTRIBUTION : Found in India, South-western China, Bangladesh, Western Thailand, Malaysia and Sumatra.
- IUCN CATEGORY : Vulnerable (according to IUCN Red list)

CHARACTERISTIC FEATURES:

- SIZE: The size of the bird is 95-130 cm in length.
- WEIGHT: The body weight of the bird is 2.15-4 kg.
- WINGSPAN: The wingspan is 152 cm.
- LIFESPAN: The bird lives nearly 50 years.
- HABITAT: Inhabits into forest area.
- FOOD: Feeds on fruits, meats and some proteins etc.
- LAYS EGGS: The female bird lays 1-3 eggs.
- INCUBATION PERIOD: The incubation period of bird is 38-40 days
Adjutant Stork

- COMMON NAME: Adjutant stork
- SCIENTIFIC NAME: *Leptoptilos javanicus*
- DISTRIBUTION: North-eastern India, Bangladesh, Pakistan etc.
- IUCN CATEGORY: Endangered (according to IUCN Red list)

**CHARACTERISTIC FEATURES:**

- **SIZE:** The size of the birds is 145-150 cm in length.
- **WEIGHT:** The weight of the bird is 8-11 kg.
- **WINGSPAN:** The wingspan of birds is 250 cm.
- **LIFESPAN:** 43 years.
- **HABITAT:** Inhabits in moist Wetlands and swamp area.
- **FOOD:** Feeds on carrion and offal etc.
- **LAYS EGGS:** 3 eggs in one season.
- **INCUBATION PERIOD:** The incubation periods of birds are 35 days.
Golden pheasant

- **COMMON NAME**: Golden pheasant
- **SCIENTIFIC NAME**: *Chrysolophus pictus*
- **DISTRIBUTION**: In Mountain areas of China, Canada, Chile, United Kingdom, Australia etc.
- **IUCN CATEGORY**: Least Concern (according to IUCN Red list)

**CHARACTERISTIC FEATURES:**
- **SIZE**: The size of birds are 90-105 cm in length.
- **WEIGHT**: The weights of bird are 630 gm.
- **WINGSPAN**: The wingspan of bird is around 70 cm.
- **LIFESPAN**: The bird lives in 15-20 years.
- **HABITAT**: Inhabits into mountains and valleys etc.
- **FOOD**: Feeds on grain, leaves and invertebrates etc.
- **LAYS EGGS**: The bird lays 8 – 12 eggs at a time.
- **INCUBATION PERIOD**: The incubation period of birds are 22-23 days.

Lutino rosella

- **COMMON NAME**: Lutino rosella
▪ **SCIENTIFIC NAME**: *Platycercus* sp.

▪ **DISTRIBUTION**: In Australia and nearby islands etc.

▪ **IUCN CATEGORY**: Least Concern (according to IUCN Red list)

**CHARACTERISTIC FEATURES:**

- **SIZE**: The size of birds is 26-37 cm in length.
- **WEIGHT**: The weights of bird are 175 gm.
- **WINGSPAN**: The wingspan of birds is 164-188 mm.
- **LIFESPAN**: Lives in more than 20 years.
- **HABITAT**: Inhabits in forest woodland and farmland and gardens etc.
- **FOOD**: Feeds on mostly fruits and seeds.
- **LAYS EGGS**: They lay several eggs at a time.
- **INCUBATION PERIOD**: The incubation period of birds are 18-22 days.

**A VISIT TO REPTILE HOUSE OF ALIPORE ZOOLOGICAL GARDEN, KOLKATA**
**LIST OF SOME REPTILES IN ALIPORE ZOO**

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Common name</th>
<th>Scientific name</th>
<th>Habitat</th>
<th>Habit</th>
<th>Reproduction</th>
<th>IUCN category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Marsh Crocodile</td>
<td><em>Crocodylus palustris</em></td>
<td>India, Sri Lanka, Myanmar</td>
<td>Good swimmer, carnivorous</td>
<td>10-40 eggs: incubation period 60-90 days</td>
<td>Vulnerable (According to IUCN Red list)</td>
</tr>
<tr>
<td>2</td>
<td>Russells’ Viper</td>
<td><em>Vipera russelli</em></td>
<td>India, China, Taiwan</td>
<td>Venomous, basically nocturnal in habit. Feed on rodents, birds, lizards etc.</td>
<td>30-40 young are born</td>
<td>Least Concern (According to IUCN Red list)</td>
</tr>
<tr>
<td></td>
<td>Species</td>
<td>Subspecies</td>
<td>Habitat</td>
<td>Diet</td>
<td>Clutch Size</td>
<td>Incubation Period</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------</td>
<td>--------------------------</td>
<td>--------------------------------</td>
<td>-----------------------------------</td>
<td>---------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>3</td>
<td>Monocellae Cobra</td>
<td>Najakaouthia</td>
<td>India, Bangladesh, Nepal, Bhutan, Myanmar etc.</td>
<td>Venomous snake, feeds on frogs, toads, mice, small birds, fish etc.</td>
<td>Lay 10-15 eggs which hatch in 60-70 days.</td>
<td>Least Concern (According to IUCN Red list)</td>
</tr>
<tr>
<td>4</td>
<td>Gharial</td>
<td>Gavialis gangeticus</td>
<td>Found in inland water of India</td>
<td>Feeds on fish</td>
<td>Lays 10-90 eggs; incubation period 72-90 days</td>
<td>Endangered (protected by the Wild Life Protection Act 1972)</td>
</tr>
<tr>
<td>5</td>
<td>Aldabra Giant Tortoise</td>
<td>Aldabrachelys gigantea</td>
<td>Found in Aldabra island in Indian Ocean</td>
<td>Herbivorous</td>
<td>Females lay between 9-25 eggs. Incubation period is about 8 months</td>
<td>Vulnerable (According to IUCN Red list)</td>
</tr>
<tr>
<td>6</td>
<td>Water Monitor</td>
<td>Varanus salvator</td>
<td>Found in West Bengal, Odisha, Assam</td>
<td>Carnivorous</td>
<td>Females lay eggs between 25-30</td>
<td>Least Concern (According to IUCN Red list)</td>
</tr>
<tr>
<td>7</td>
<td>Indian Starred Tortoise</td>
<td>Geochelone elegans</td>
<td>Found in central and southern India, Sri Lanka.</td>
<td>Herbivorous</td>
<td>Lays eggs 3-7</td>
<td>Vulnerable (According to IUCN Red list)</td>
</tr>
<tr>
<td>8</td>
<td>Indian Rock Python</td>
<td>Python molurus</td>
<td>Found in Nepal, India, Bhutan.</td>
<td>Carnivorous</td>
<td>Lays upto 100 eggs. Incubation period 60-80 days</td>
<td>Near Threatened (According to IUCN Red list)</td>
</tr>
<tr>
<td>9</td>
<td>Tokay Gecko</td>
<td>Gekko gekko</td>
<td>India, Bhutan, Nepal, Indonesia.</td>
<td>Insectivorous</td>
<td>Female lay 1-2 eggs. Incubation period 60 days</td>
<td>Least Concern (According to IUCN Red list)</td>
</tr>
</tbody>
</table>
Introduction:

- Biodiversity encompass variety and variability of all forms of life on Earth that play a great role in human existence. It’s conservation embraces maintenance, sustainable utilization and restoration of the lost and degraded biodiversity through two basic and complementary strategies called In-situ conservation and Ex-situ conservation.
- Ex-situ conservation is the technique of conservation of all levels of biological diversity outside their natural habitats through different techniques like zoo, captive breeding, aquarium, botanical garden and gene bank.
- Ex-situ conservation method plays a key role in communicating the issue, raising awareness, and gaining widespread public support for conservation action and for breeding endangered species in captivity for reintroduction.
- The ex-situ conservation concept was developed earlier before it’s official adoption under the Convention of Biological Diversity signed in 1992 in Rio de Janeiro. In generas ex-situ conservation is applied as an additional measure to supplement in-situ conservation that means ex-situ conservation and in-situ conservation is interlinked.

Role of Zoological Garden In Ex-Situ Conservation:

- Zoos or Zoological Garden or Zoological Parks in which animals are confined within enclosure or semi-natural and open areas displayed to the public and in which they may also bred. They are considered by universal thinkers and environmentalist as important means of conserving biodiversity.
- Not only zoos act as institution, museums, research laboratory and information banks of rare animal behavior. As it attracts many visitors each year, it also has an economic value.
- Zoos bred many endangered species to increase their numbers. Such captive breeding in zoos has helped to save several species from extinction. Management of animals in zoos includes animal identification, housing, health, nutrition as well as addressing and way of interaction with the public.
- As many visitors visit zoos every year, their education and marketing services play a key role in communicating the issue, raising awareness, changing behavior, and gaining widespread public support for conservation.
- Zoos support conservation by educating the public, raising money for conservation programs, developing technology that can be used to track wild populations,
conducting scientific research, advancing veterinary medicine, and developing animal handle techniques.

- By studying animals in captivity and applying that knowledge to their husbandry, zoos can provide valuable and practical information that may be difficult or impossible to gather from the wild.
- Not only zoo plays a valuable conservation work by breeding endangered species and returning them to the wild but also can be used for business that makes money, this means that animals are often bred for commercial purpose.
- So, it can be said that zoo garden has a great effect not only in conservation but also in our economy.

---

**CAPTIVE BREEDING**

**Introduction:**

Captive breeding is an integral part of the overall conservation action plan for a species that helps to prevent extinction of species, subspecies, or population. It is an intensive management practice for threatened individuals, populations, and species by anthropogenic and natural factors. In small and fragmented populations, even if the human caused threats could be magically reversed, the species would still have a high probability of extinction by random demographic and genetic events, environmental variations, and catastrophes. Thus, under sufficient knowledge on the biology and husbandry of the species, captive breeding helps individuals in the relative safety of captivity, under expert care and sound management by providing an insurance against extinction. Stock for reintroduction or reinforcement efforts, opportunities for education, raising of awareness, scientific and husbandry research, and other contributions to conservation are also possible through captive breeding.

**Purpose:**

Captive breeding is generally carried out for one of these main purposes:

1. To produce animals for commercial purposes (pets, food, fibre, medicine, and other human uses).
2. To produce animals for zoos, aquaria, research institutions, and other public facilities.
3. To increase captive population numbers of threatened or endangered species. In some cases, these individuals are part of a management programme aimed at eventually reintroducing captive-bred animals into wild habitats and populations. In other cases, captive facilities claim to be breeding animals for such purposes -but
the animals may not be suitable - or they are not part of a legitimate conservation and management programme.

**Advantages of Captive Breeding:**

- To increase a wild population that is decreasing due to a range of factors.
- The zoos are able to recreate the natural habitat of the captured animals.
- The enclosures are able to protect animals from any predators.
- Zoos are able to protect endangered species of animals and also have breeding programs to enrich the populations of animal species.
- Zoos can cross breed animals and also increase the gene pool of an animal species by

**Disadvantages of Captive Breeding:**

- Sometimes animals can be kept in a restrictive environment such as small cages.
- In some parts of the world animals can be forced to perform for visitors and can be very badly treated.
- There are arguments against bringing animals out of their natural habitats.
- When animals are removed out of their natural habitats the environmental conditions could vary in a zoo.
- The animals aren’t free to do as they like in a zoo like there are in the wild.

**Captive Breeding in Alipore Zoo, Kolkata**

![Hatching of Python eggs in Alipore Zoo:](image)

**Reticulated Python (Malayopython reticulatus)**

**Burmese Python (Python bivittatus)**

**Rock python (Python molurus)**
**Captive breeding of pythons:**

Three pythons in Kolkata's Alipore Zoo gave birth to 56 snakelings, thanks to the efforts of a team of skilled snake breeders hired by the zoo. Interestingly, all three pythons were of three separate species - Rock, Burmese and Reticulated. The Rock python laid two eggs, both of which hatched. The Burmese python laid 41 eggs in March of which 34 hatched in April. The Reticulated python laid 28 eggs, of which 20 hatched. Reticulated python is the longest snake species in the world and heaviest among the three.

**Captive breeding of some other animals done in 2017**

On 15.09.2017, eggs (24 in no.) of Monocled Cobra and rat snake were rescued from a factory store by the DFO, 24 Pargana (south) division and handed over to Zoological Garden, Alipore. Eggs were kept under artificial incubation maintaining temperature (30-35 degree Celsius) and humidity (approx. 80-85%). Ten eggs of Monocled Cobra were hatched on 14/10/2017. Rest were of these snakes’ eggs hatched on 03/11/2017. The hatchlings are now in the nursery.
fishing cat—the state animal of West Bengal, were born in October 2017.

2018

Captive breeding of tiger:

Snehasish, a 5-year-old tiger, was caught from the wild in Odisha, initially kept in Nandankanan Zoological Park in Bhubaneswar, shifted to Alipore Zoo for a while and then transferred to the North Bengal Safari Park in Siliguri. “He stayed here for a few months before being sent to north Bengal,” Samanta said, adding that in Siliguri, Snehasish mated successfully with the only tigress there, Sheela, leading to the birth of three cubs. “He had successfully mated in the very first attempt and that’s the reason we are hopeful that he will do for us what hasn’t been done in the past five years,” the director added.

AGGRESSIVE FEMALES AN ISSUE
Though the latest development has rekindled hope of tiger breeding in Alipore Zoo, the authorities are worried how the females would react. All the five tigresses at the zoo are frustrated, thanks to apparent disinterest shown by the males towards mating.

EVEN MEDICINES FAILED
The zoo authorities have left no stone unturned since 2015 to get the tigers to mate. The zoo authorities even administered a number of libido-enhancing medicines and vitamins and gave the tigers more covered space. But nothing worked.

AGE MATTERS
According to zoo authorities, the age of the tigers is one of the prime reasons behind their lack of interest. The natural lifespan of a tiger is 12 to 14 years in the wild and up to 16 years in captivity. They are most fertile between five and eight years of age. Three out of the four tigers in the zoo are older than 11. The only young (eight-year-old) tiger caught from the wild in the Sundarbans also doesn’t show much interest. They are more cautious and unlike the captive-bred ones, are easily disturbed by human presence. So, human smell or sound can distract them.
**Captive breeding of Asiatic lion:**

After two decades, a lion cub was born in the Alipore Zoological Gardens. The cub was born to 11-year-old Viswas and 5-year old Sruti, a pair of Asiatic lion brought from the Hyderabad zoo under an animal exchange programme October 2017. Alipore zoo director A K Samanta said the last lion cub was born in the zoo in 1998.

**Captive breeding of Eastern grey kangaroo:**

Samanta said that Punka, aged around two now, gave birth to the joey. “It conceived in February this year. In mid-March, it developed maggots inside its pouch and while treating it, we came to know that it has already given birth. Only three days ago, the joey popped out of its mother’s pouch for the first time. Some visitors also got a glimpse of it that day,” said Samanta.

The young kangaroo or joey is born at a very immature stage when it’s only about 2 cm long and weighs less than a gram. Immediately after birth it crawls up the mother’s body and enters the pouch. While red kangaroos leave the pouch at around eight months and continue to suckle for another three to four months, grey kangaroos leave at about 11 months, continuing to suckle until they are as old as 18 months.

The last kangaroo — a red one — was born in the zoo in November 2011. It had died in the zoo in November 2015. The joey was born to one of the four red kangaroos brought from the Czech Republic. Three of them died of myopathy that affects their muscles.

**Captive breeding of Giraffe:**

The giraffe named Lakshmi gave birth on Monday. Ashish Kumar Samanta said, “The baby was born on 31st December, 2018 at around 12:30. The baby is a male. We kept the baby under our observation. We also kept an eye on the behaviour of the mother. We noticed that the mother kept her baby close to her and hence he is in good health.”
**Captive breeding of Manipuri dancing deer:**

The Alipore Zoological Gardens welcomed a new guest — an endangered sangai or Manipuri dancing deer — on Saturday, the day the cyclone made landfall in Bengal. The zoo authorities have named the fawn, which was born around 7am on Saturday, Bulbul.

According to the zoo director Asish Kumar Samanta, there are 18 other such deer in the zoo now and the new guest takes the count to 19. He also added that the dancing deer at the zoo had never been named earlier.

The sangai is an endemic and endangered subspecies of brow-antlered deer found only in Manipur. Also known as Manipur brow-antlered deer, it is the state animal of Manipur. Its original natural habitat are the floating marshy grasslands of Keibul Lamjao National Park, located in the southern parts of Loktak Lake, which is the largest freshwater lake in eastern India.

Samanta said the brow-antlered deer is medium-sized, with uniquely distinctive antlers measuring 100cm–110cm in length with extremely long brow tine, which form the main beam. The two tines form a continuous curve at right angles to the closely set pedicels. This signifies its name, brow-antlered deer, since the forward-protruding beam appears to come out of the eyebrow.

Culturally, sangai is deeply associated with legends and folklore of the Manipuris. Based on a popular folk legend, the sangai is interpreted as the binding soul between humans and the nature.
Captive breeding of Ring-tailed lemur:

New guest arrives again Alipore Zoo. A ring-tailed lemur, brought from Visakhapatnam in November 2019, gave birth to two babies on 1st February of 2020.

Captive breeding of Zebra:

The zebras in Alipore Zoo have finally earned their stripes to have a breeding centre of their own. The State Zoo Authority has decided to set up a zebra breeding centre at the zoo for captive breeding and also expand the enclosure to accommodate the nine zebras they already have. Such a facility does not exist in any of the zoos in the country.

The breeding centre will also be used to house female zebras after they conceive. The zebras at the zoo tend to turn violent and chase and fight with each other inside the enclosure. “We can keep female zebras inside the enclosure to protect her from others. Also, once a foal is born, we can keep it in the enclosure till it is old enough to be kept with others,” said the official.

In this February Alipore zoo welcomed a zebra foal. The zebra foal was named Valentina as she was born on February 14, the Valentine's Day, zoo director Asish Samanta told reporters.

The female foal, weighing around 25 kg, was born on February 14 and has since been kept with its mother in a mini-shelter carved out of the zebra enclosure.
A zoo is a place where animals live in captivity and are put on display for people to view. The word “zoo” is short for “zoological park.” Zoos contain wide varieties of animals that are native to all parts of the Earth.

- Today, zoos are meant to entertain and educate the public but have a strong emphasis on scientific research and species conservation. There is a trend toward giving animals more space and recreating natural habitats. Zoos are usually regulated and inspected by the government.

- The zoos have to be constantly moulded as centres of coordinated breeding under ex-situ conditions and to continue scientific studies on the wild animals so as to transfer the technology to the in-situ conservation and also to create awareness about nature in the public. It is often claimed that captive populations of animals kept in zoos can function as significant demographic and genetic reservoirs from which wildpopulations can get vital infusions to secure a declining population or to founded a new population.