Zoo management

PALAGIRI DHANARAJ,
Assistant Conservator of Forests (WL)
S.V.Zoological Park,
Tirupati.
Viewing wild animals in zoo has been one of the world’s popular cultural activities for many years.

India has a tradition of looking after wild animals.

Back in the old days, Rishis looked after peacocks and spotted deer in the ashrams.

Visiting Greeks have recorded wild animals being kept by kings and used in processions during festivals.
ZOO AS RECREATION & EDUCATION

➢ In the early years, zoos were largely set up mainly for entertainment and for recreation.
➢ The World’s oldest zoo established in 1759 at Vienna.
➢ The first Zoos in India, was established as early as 1859 as an annex to the Napier Museum. The Thiruvananthapuram Zoo is home to 82 species from around the world.
➢ It is estimated that 10% of the world’s population visit zoos every year.
➢ There are about 350 animal collections in our country and 50 million people visit them annually (National Zoo Policy (1998)).
➢ Around the year 1970, it was realised that zoos can be used as an instrument for conservation.
ZOO AS EDUCATION & CONSERVATION

➢ One can see the enthusiasm of children when they visit zoos and their eagerness to know about wild animals.

➢ This is what we want – Zoos to be a centre for leaning about wild animals, and to spread the message of conservation of forests and wild animals.

➢ The zoo continues to be a place of recreation and in addition to that, the message of conservation is passed on.
ZOO AS CONSERVATION & BREEDING CENTRE

➢ The Zoo became direct contribution in breeding endangered species like the Lion-tailed Macaque (LTM).
➢ The Breeding is further extended to almost all the species.
➢ The CZA specially entrusting breeding programme of 34 species to the particular zoos.

Ex:
SVZP, Tirupati has been given “Grey Jungle Fowl” breeding programme,
IGZP, Vizag has been given “Wild dog”,
NZP, Hyderabad has been given “Mouse deer” etc.,
ZOO AS BREEDING CENTRE & RESEARCH

● One of the objectives
● Zoo Research
● LaCONES (1998)
● Grey Jungle Fowl
● Panthers - 2
FACTORS DRIVING PEOPLE TO VISIT ZOO

- It could be several reasons but primarily people, irrespective of their age, status or gender, enjoy watching live animals endangered in their normal activities.
- Being in close physical proximity to wild animals gives them thrill and pleasure which cannot be duplicated by films or photographs.
- It could be curiosity, fascination, thrill, simple pleasure or a combination of all these that draw people to the zoo.
- Zoo provide the opportunity to reach millions of people around the world daily.
- Live animals are the most potent resource to inspire visitors to develop a harmonious relationship with nature.
- No wonder most conservationists see public education as the most important role of the zoo.
Central Zoo Authority

- Zoos should get prior recognition
- Min. standards for housing, upkeep, vet. care
- Captive breeding of End. animals
- Facilitating Exchange
- Facilitating Research
- Skill upgradation, etc.,
Recognition of Zoos

- The recognized zoos in the country are classified in four categories as per provisions laid down under Rule 9 of the Recognition of Zoo Rules, 2009 for the purpose of deciding standards and norms for operation and recognition of zoo as well as for monitoring and evaluation of their performance.
Recognition of Zoos contd.....

The classification under the rule is done on basis of
1. Area of the zoo,
2. Number of visitors,
3. Total number of species and animals,
4. Total number of endangered species and animals of endangered species in zoo.
# Classification of Zoos

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Category of zoo</th>
<th>Area of the zoo (hectares)</th>
<th>Criteria for Qualifying to the category</th>
<th>No. of visitors in a year (in lakhs)</th>
<th>No. of species</th>
<th>No. of animals</th>
<th>No. of endangered species</th>
<th>No. of animals of endangered species</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td><strong>Criteria for Qualifying to the category</strong></td>
<td>(4)</td>
<td>(5)</td>
<td>(6)</td>
<td>(7)</td>
<td>(8)</td>
</tr>
<tr>
<td>1</td>
<td>Large</td>
<td>75</td>
<td></td>
<td>7.5</td>
<td>75</td>
<td>750</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>Medium</td>
<td>35</td>
<td></td>
<td>3.5</td>
<td>35</td>
<td>350</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>Small</td>
<td>10</td>
<td></td>
<td>1.0</td>
<td>10</td>
<td>100</td>
<td>3</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>Mini</td>
<td>Less than 10</td>
<td></td>
<td>Less than 1.0</td>
<td>Less than 10</td>
<td>Less than 100</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
Sri Venkateswara Zoological Park
Tirupati
Sri Venkateswara Zoological Park, Tirupati, Andhra Pradesh with respect to its area, number of visitors and Annual Animal Inventory for the year 2016-17 submitted by the zoo under Rule 11(1) of the Recognition of Zoo Rules, 2009. The CZA in its 30th meeting held on 28th September 2017 recognized as ‘Large Category Zoo’
Master Plan for 10 to 20 Years

- Comprehensive master plan for 10 to 20 years
- Management plan for immediate 5 years
- Master Layout Plan
Example SVZP, Tirupati
Zoo management

- Structure of Zoo.
- Plans
- Zoo design
- Animal Health Care
  - Feed Management
  - Enclosure Hygiene & Disinfection
- Enrichment
- Animal rescue
Structures

- Animals
- Keepers
- Managers
- Visitors
- Veterinarians
Plans

- Collection plans
- Breeding plans
  - ARKS / ZIMS
  - Minimal requirement in captivity
  - Basic needs in captivity
  - Breeding loan
Collection plans

- Size of zoo
- Animal enclosures
  - Exhibit area
  - Exercise yard
  - Holding area
  - Raceway
  - Furniture
- Location and weather
- Cost
- Species of interest
Moated enclosures...
Carnivore....Moat
Primates (New)
Zoo design

- Animal area
- Working area
- Hospitalization area
- Maintenance area
- Office area
- Visitor area
Animal area

White Tiger

Asiatic Lion

Ostrich

Wild Dog
Working area
Hospitalization area
Visitor area

Zoo Interpretation Centre
Zoo design
(human-animal interaction)
Zoo design (welfare)
Zoo design (educational)
Animal health care

✓ Feed Management
  ◦ Hunger and thirst
  ◦ Physical distress
  ◦ Illness and pain
  ◦ Mental distress and stress
  ◦ Natural behavior
Animal health care
Enclosure Hygiene & Disinfection

- Enclosure
  - Exhibit area
    - Animal need
    - Animal behavior
    - Naturalize
  - Holding area
    - Strong
    - Easy access
    - Safe
  - Graphic
    - Educational
Past to Present....
Primates... Past to Present..
Past to Present....
Minimal requirement in captivity
Spraying of 2-3% Butox solution in animal enclosure for every 3 months.
Enrichments

- Stimulate 5 sense
- Encourage natural behavior
- Decrease boredom
- Stimulate breeding
- Exercise
Carnivores (Enrichment)
Enrichments
Shelter...
Enrichments..
Breeding plans

- ARKS (Animal Record Keeping System)
  - Data record
  - Inventory record: zoo ID, animal ID, scientific name, sex, origin, time receive, method receive, birth, parents, death, out of stock.
  - Daily record: health, behavior, feed and feeding, management, health care, problems
Breeding plans

● ARKS (Animal Record Keeping System)
  ◦ Inbreeding should be avoided
  ◦ Genetical viability should be observed
  ◦ Pedigree should be maintained
Breeding plans

- ARKS (Animal Record Keeping System)
  - Animal identification
Rescue and Rehabilitation

- Zoos role in rescue of animals
  - Injured
  - Sick
  - Orphaned
- Rehabilitation
- Examples: Elephants, Panther, Star tortoise
Animal Rescue Center

- Seven rescue centers in country
- In A.P two centers (Tirupati, Vizag)
Thank You
Visit SV Zoo once