

# Housing of wild animals

DANVEER SINGH YADAV

Assistant Professor

Livestock Production Management

College of veterinary Science & A. H. (NDVSVU), MH

# Objectives of Wild Animal Housing in Zoo

1. To protect from **adverse environmental** conditions.
2. To protect the wild animals of **one category** from the others.
3. To **facilitate** the **breeding, feeding, watering and treatment** in captivity.

- 
4. To protect the wild animals from the **stress** due to the constant flow of visitor in the Zoo.
  5. To protect the visitors and Zoo **personnel from the ferocious** wild animals.
  6. To protect the wild animals from **teasing and mischievous** behavior of visiting public

# Principles of Housing

1. The floor space and height of the roof must be adequate and as per the norms **depending on species size and behavior** of the animals.
2. There should be **economy in construction** but should provide **maximum comfort** to the captive animals and over crowding within the enclosure must be avoided.

3. There should be adequate provision of ventilation, circulation of air and exposure to **maximum sunlight**.
4. The open to sky area should have soft earthen floor while the indoor flooring **should be of cement and concrete**.
5. For the animals which are having the **burrowing habit**, e.g Rabbit, Mongoose.

- 
6. Separate enclosure should be provided for advance pregnant animals also to the recently born young ones with their lactating mother.
  7. There must be large flowering plants around the enclosure to provide shade which may add to the **aesthetic value of the Zoo.**

# Enclosure Barriers

- Enclosure barrier for **extra protection** of wild animals in Zoo.
- The enclosure barrier not only restrict the entry of visitors to certain permissible limit but also ensure against the escaping of the animals by jumping of by any other means.
- There are **6 type of enclosure Zoological** Parks and Zoo.

# 1. Wet and dry moat

Wet and dry moat are useful to restrict the animals which can not swim and also not having a long range of jumping capabilities.

## Moat wall

The zoo revised its statement about the height of the moat wall from 18 feet to 13 feet at the center. This is far shorter than the recommended 16.4-foot minimum suggested by the American Zoological Association.



Source: Mercury News reporting

FAI — MERCURY NEWS

# 1. Wet and dry moat



## 2. Wire mesh fencing

- Wire mesh fencing with optimum height is used for the deer's and antelopes and Felidae.



### 3. Vertical walls



## 4. Glass and plastic panels



# 5. High tensile vertical wires

- For ferocious animals like tiger, lion, bear's
- High tensile vertical wires or electrically charged wires are useful as an enclosure barrier.



## 5. High tensile vertical wires



## 6. Electrically charged wires



# Do's for Efficient Housing and Management of Wild Animals in Captivity

- Study the psychology, shelter seeking behavior, feeding habits, sexual behavior and mothering ability of the animals in captivity and provide conditions accordingly.
- Animals should be grouped and placed according to age, size and sex. Male and female should be housed separately.

- 
- Calculate the feeding
  - Provide housing conditions in captivity as **natural as possible**.
  - All the hygienic measures must be adopted within the enclosure and in premises of the Zoo.

# Don'ts for Efficient Housing and Management of Wild Animals in Captivity

- Do not allow the feed stuffs from outside the zoo or feeding by the visitor must not be allowed . This may carry infection.
- Do not feed stale and unfresh meat and other feed stuff to the animals in captivity.

- Do not allow the entry of pet dogs, cats and birds along with visitors in Zoo.
- The visitors must not be allowed with **weapons** (even **toy guns**) within the Zoo and safari parks.
- Do not allow the visitor to tease the animals especially to monkeys and elephant.

# Restraint and Handling of Wild Animals

## Objectives:

- Medication and vaccination either, oral, injection or topical application.
- Major and minor surgical operations and wound dressing.

- 
- **Trimming** of nails, hooves and tails.
  - **Clinical examinations.**
  - Collection of materials for diagnostic investigations.
  - **Transportation.**

# Mainly Two Methods for Restraining

1. Physical method
2. Chemical method

# Physical method

## 1. Squeeze cages:

- These are **most useful tools** for confinement and restraint of wild animals. squeeze cages may be of different sizes and made of cast iron bars and may have **small wheels**.
- Once the animals enter the cage, the **mobility of the animals is restricted by squeezing** the cage area through **movement of side panels**.
- The squeeze cages are used to restrict the movement of wild animals for **performing minor surgical operations, wound dressing or intravenous injections**.

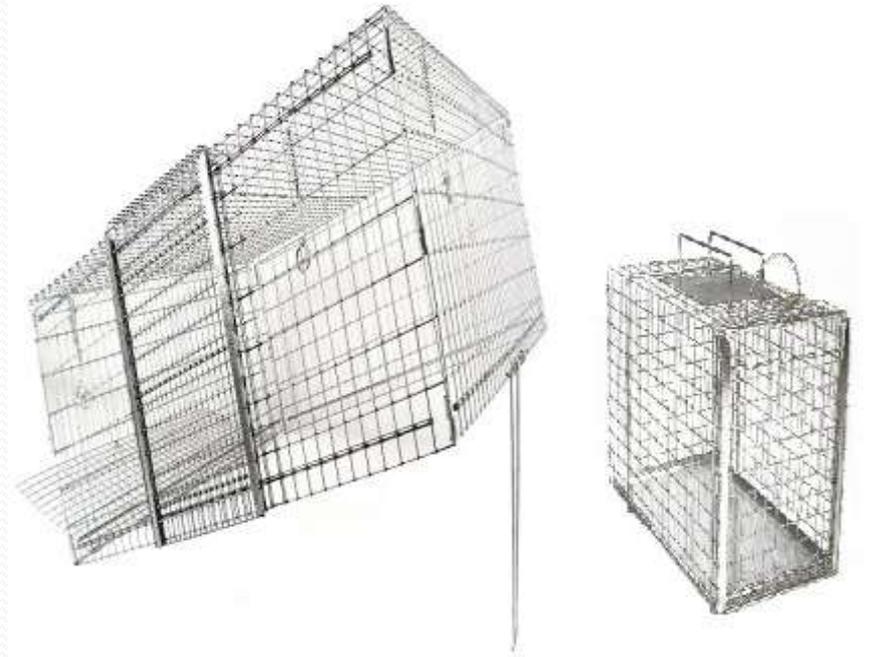


Here's a tiger entering a portable cage from the lockout area of its habitat (note the closed interior gate separating the lockout area from the rest of the enclosure):



## 2. Wire netted string cat bags

- These are useful for handling pups and small wild animals.



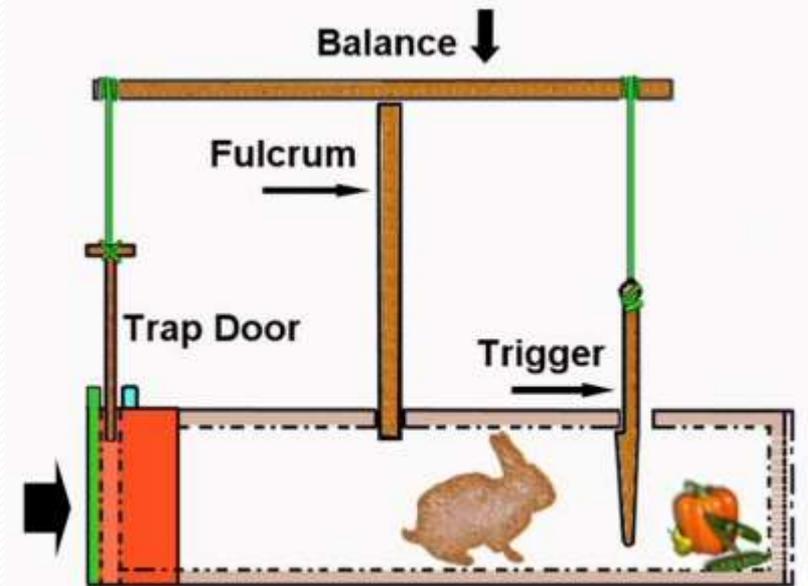
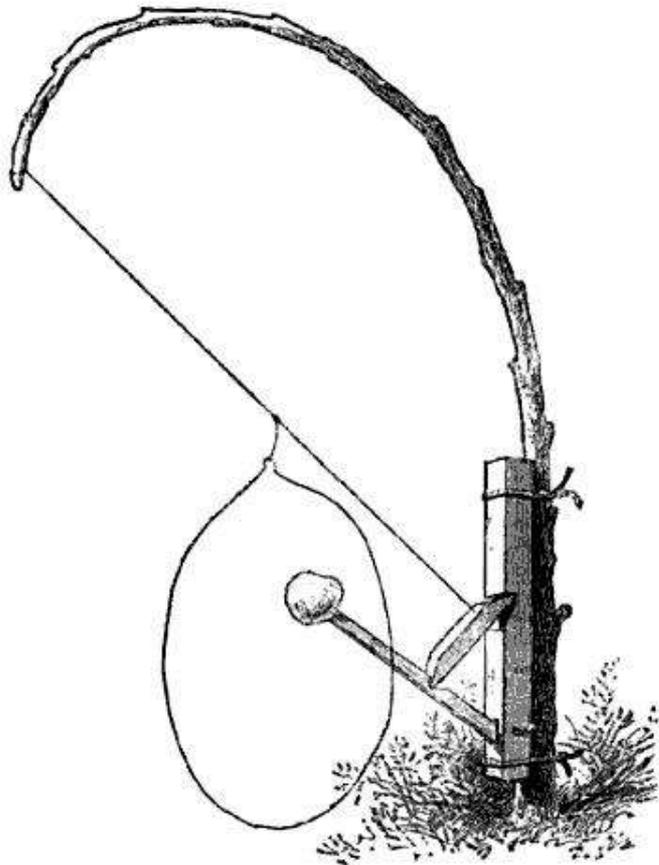
## 2. Wire netted string cat bags



### 3.Snare and large nets with the arrangement of strings

- These are good for trapping large and small size wild animals.
- By placing a net the movement of animals can be restricted and **manipulative operations** can be performed at case.
- The size of the mesh must not be large enough to permit the head inside and the **dander of strangulation**.
- Materials like **nylon and cotton** of the optimum durability and elasticity is recommended.

# 3. Snare and large nets with the arrangement of strings



### 3. Snare and large nets with the arrangement of strings



# 4. Roping and tying with bars of cages

- These are some of the other methods.
- Bears can be restrained by roping them to bars of the cages while hippopotamus can be controlled by holding the jaw apart by means of ropes.



# 4. Roping and tying with bars of cages



# Mouth gags and leather hunters

- Used for wild Dogs, Wild cat, Foxes and Jackals.

# Mouth gags



# Chemical method

- The chemical restraint is **one of the most modern and best method for handling of large and ferocious animals.**
- The drugs which sedate and anaesthetized the wild animals can be injected from the distance by capture gun (Dart gun).
- Vaccines, antibiotics, tranquilizers, anesthetics can be administered by capture gun method.

# There are 4 types of guns available.

## 1. Blow pipe

- These are very simple and can be used for short distance anaesthesia.



# Blow Pipe Kit



## 2. Short Ranger Projector(Pistol)

- Powered by compressed CO<sub>2</sub>.
- The range is 15 meters.



### 3. Long Ranger Projector(Rifle)

- Also Powered by compressed CO<sub>2</sub>.
- The range is 35 meters.



# Long Ranger Projector(Rifle)



## 4. Extra long Ranger Projector

- Powered by percussion caps, the maximum range is 80 meters.



# Anesthetic drugs and immobilizing agents

1. Promazine HCL.
2. Diazepam.
3. Etorphine HCL.
4. Ketamine HCL.
5. Tiletamine HCL.
6. Nembutal.

Thank you