

# HAND-REARING WITH PATERNAL CARE OF ORPHANED INDIAN ELEPHANT CALVES AT ASSAM STATE ZOO, GUWAHATI.

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During monsoon, flood causes havoc in Assam and threatens the lives of human as well as animals without any exception. Many baby animals of Wildlife Parks become orphaned or swept away by flood water and thereafter attacked/killed by wild predators. Those fortunate babies specially of rhinos and elephants which are rescued by the Forest personnel or wildlife lovers are brought to this zoo.

Every year the zoo people wait with great enthusiasm to welcome the new arrivals of baby elephants to its family which is an exciting event for the keepers to offer "paternal care" for the young ones by "hand-rearing". Extra duties and attention have to be rendered by the Zoo Vets for management and protection of health of the orphans.

The calves have to pass through a series of physical stress during rescue/ capture and transportation. Moreover, they suffer from psychological stress on missing their family and maternal care.

## INFANT CARE

The infants of 1-3 months old show a variety of problems, when they arrive at the zoo. They cry for some days in search of their mother and are reluctant to suckle milk from the feeding bottle. Of course, gradually they become accustomed with the feeding practice.

Very often they show stomach trouble like constipation, diarrhoea, flatulence, etc, while taking artificial diet. Therefore, cleanliness of the feeding equipments including hygiene and sanitation of the quarantine yard are to be monitored very carefully to avoid such complications.

Special attention and care have to be provided whenever any baby elephant arrives during extreme climatic condition as in winter or rainy season. When the babies are exposed to such extreme climatic change they usually suffer from pneumonia.

To combat against such climatic stress the following measures are adopted.

## Winter Season

During night, fire is kept at a safe distance to warm up, bodies are covered with gunny bags and straw mattress are provided on the floor. During morning hours, calves are massaged with mustard oil.

## Summer Season

At the beginning regular bathing is done near the quarantine yard and there after calves are taken to the pond daily along with the herd for wallowing.

The calves usually arrive with a variety of complaints which are to be dealt with immediate care and attention and till recovery are kept in the quarantine yard.

## GENERAL COMPLAINTS

Traumatic injuries : Newly arrived calves are very prone to receive major/ minor traumatic injuries during rescue operation as well as transportation. Wounds are dressed with local applications and treated with antibiotics.

Stress and debility : Treated with normal and dextrose saline i.v. along with multivitamins. ORS are also given for a considerable period of time.

Fever : Treated parenterally with antibiotics and antipyretics are given orally.

Low body temperature : Nikethamide is injected i.v. with NSS and multivitamins. This condition is commonly observed during winter months.

Diarrhoea : Treated with anti-diarrhoeal drugs mainly Dependal M liquid given along with milk which gives satisfactory result.

Constipation :Tried with paraffin enema or Livomyn liquid given along with Gripe Water syrup.

Gripping Colic pain : Gripe water syrup given along with enteromycin gives a good result.

Pneumonia : Treated with antibiotics.

Worm infestation : Faecal samples are examined and anthelmintics are given accordingly. Deworming practice is carried out at 2-3 months interval depending on severity of infestation. Commonly, round worm infestation is observed. Liver flukes are found occasionally.

## Diet

for 0 - 3 month infant : Lactogen powder - 500 gms.

Powder milk is mixed with luke-warm water and infants are fed at least 7 times at two hours interval. Feeding bottle is prepared with the help of a 750 ml conical glass bottle fitted with a piece of rubber tube of a bicycle.

for 3 - 6 month calf :Lactogen powder - 1 kg, boiled rice - 1/2kg, sugar - 50 gms

The method of preparation and feeding schedule of milk is same as above. In addition to it, 1/2 kg boiled rice is mixed properly with milk and sugar and then drenched to the calf. Formerly calves (03-06 months) were fed with boiled barley which caused acute flatulence with discomfort colic pain. Then on trial, it was found that feeding with Lactogen milk

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with sugar and boiled rice giving good result in gaining body weight and growth.

for 6 - 12 month calf: Lactogen powder - 1 kg, sugar - 100 gms, athia banana - 4 nos, rice - 1 kg, masur dal - 250 gms

Milk is prepared by mixing properly with luke warm water with sugar and Athia banana (without seeds) and feed to the calves with the help of feeding bottle for 5 times a day. "Khisiri", is prepared by cooking rice and masur dal and offered to the calves 2 times a day.

for 12 - 15 month calf: Lactogen powder - 1.5 kgs, sugar - 100 gms, athia banana - 10 nos, rice - 1 kg, masur dal - 1 kg, soaked gram whole - 1 kg

The method of preparation of milk, sugar and athia banana is same as above and given 4 - 5 times a day. Khisiri and soaked gram whole is given twice a day.

for 15 - 24 month calf: Lactogen powder - 1.5 kg, sugar - 100 gms, athia banana - 10 nos, rice - 1 kg, masur dal - 1 kg, soaked gram whole - 1 kg, banana tree with leaves - 1 no, dol grass - 50 kgs (Also grazing in natural vegetation)

for 2 - 6 years sub-adult calf: When the calves attain an average age of two years, powder milk and sugar are withdrawn from the diet schedule which is replaced by the following commodities.

Soaked gram whole - 2 kg, sugar Cane - 1 kg, athia banana - 10 nos, molasses - 200 gms, garlic - 25 gms, turmeric (green) - 20 gms, black salt - 250 gms, common Salt - 25 gms, dol grass - 1 qtl, banana tree with leaves - 2-3 nos. (Also grazing in natural vegetation for 2-3 hrs).

for 6 year old sub-adult elephant: Soaked gram whole - 4 kgs, sugar cane - 1 kg, athia banana - 10 nos, molasses - 200 gms, garlic - 50 gms, turmeric (green) - 20 gms, black Salt - 500 gms, common Salt - 50 gms, dol grass - 1 qtl, banana tree with leaves - 4 nos (Also grazing in natural vegetation for 2 - 3 hrs).

#### TAMING

The calves that arrive at the zoo are completely wild and have to be tamed. They are chained properly and kept at a near sight of the herd until they are sufficiently tamed. Older the newly arrived calves, more the time required to tame them.

As soon as the new comer becomes completely tamed, it is allowed to mix with the herd during walking, bathing, exercise and grazing in the natural vegetation at least for 2 - 3 hrs a day. It is observed that within a short span of days the new comer becomes a member of the new family. During day and night elephants are chained and kept together within the herd.

#### TRAINING

When the calves attain an average age of 5 years and if they are normal from all aspects to go for training, they are then selected accordingly. At present the Zoo is rearing 12 nos. of Indian Elephants of different age group (Table).

There are 5 mahouts and 2 helpers who are giving training to the elephants. Usually training is given within the herd. The elephants are trained with the following procedures - stop; proceed; move forward/ back; sit down; get up; lie down to right/left, open mouth/ raise trunk; pick up objects; drag objects

Once the elephants are trained, they are engaged in minor works like lifting/ dragging of the bundles of grass, banana trees, etc.

Previously trained elephants from this zoo either transferred to other wildlife sanctuaries/ parks or abroad on exchange basis. Since 1967, 8 elephants were transferred to different parks within the country and 2 abroad (Belgium) in exchange of 2 Chimpanzees, still there is a proposal for transfer of 2 elephants to the M.M.C. Zoological Park, Chhatbir, Punjab, on exchange basis.

For the first time "elephant joy ride" event is introduced for children visitors to the Zoo which was inaugurated on the 41st Wildlife Week. Presently for this purpose four trained elephants are engaged.

*Table. Present status of orphaned Indian elephant calves reared at Assam State Zoo, Guwahati*

| CALL NAME  | DATE OF RECEIPT | AGE AT RECEIPT (APPROX) | SLX | TRAINED (T) OR UNTRAINED (UT) | PRESENT AGE (APPROX) | HEIGHT (CM) |
|------------|-----------------|-------------------------|-----|-------------------------------|----------------------|-------------|
| DIPKANYA   | 04.11.88        | 3 M                     | F   | T                             | 7 YR                 | 184         |
| MADHABI    | 24.08.89        | 2 M                     | F   | T                             | 6 YR                 | 175         |
| JOHN       | 30.05.90        | 2 M                     | M   | T                             | 5 YR                 | 160         |
| LAKSHMI    | 07.01.91        | 3 M                     | F   | T                             | 5 YR                 | 155         |
| MAYA       | 06.09.91        | 2 M                     | F   | UT                            | 4 YR                 | 162         |
| DOLI       | 09.04.92        | 4 YR                    | F   | T                             | 7 YR                 | 168         |
| CHILARAI   | 17.05.92        | 2 YR                    | M   | T                             | 5 YR                 | 160         |
| HEMANTI    | 06.07.92        | 1 YR                    | F   | UT                            | 4 YR                 | 142         |
| RAJKUMAR   | 17.07.92        | 1 YR                    | M   | UT                            | 4 YR                 | 146         |
| CHAMELEE   | 08.08.93        | 2 YR                    | F   | UT                            | 4 YR                 | 140         |
| LANKESWARI | 17.01.95        | 15 M                    | F   | UT                            | 2 YR                 | 133         |
| RANI       | 12.08.95        | 2 1/2 YR                | F   | UT                            | 2 YR                 | 130         |