## MEMORIES OF A ZOO VET Charles J. Chandra

It was in December 1970 that I was asked by the then Director of Animal Husbandry, Dr.M. N. Menon to take up the post of Veterinary Surgeon at the Thiruvananthapuram Zoo, consequent to the promotion of Dr. Haridas, as Assistant Director in the Department of Animal Husbandry (DAH). Thus began my tryst with the captive wild animals and birds, a career which gave me immense satisfaction and joy. Initially it was a learning experience and as time went on, the work became challenging, nevertheless a soul satisfying experience. I want to express my gratitude to Dr Menon, for his support and guidance and above all for his personal concern.

I had had many occasions to go to the Zoo when Dr.Haridas was the veterinary surgeon there. Eventhough that was to enjoy his hospitality, the curious sight of abandoned tiger cubs, kept in boxes in the verandah of his quarters had kindled my curiosity and interest on the problems in the management of captive animals especially the young ones those are abandoned, killed or eaten away by the mother or cage mates.

Births of Tiger cubs had been a regular feature in Thiruvananthapuram Zoo all along. It was found that the chances of survival of the cubs were very remote. This was mainly due to mother consuming the young one or due to the offspring being neglected and abandoned by the mother. So from the beginning. I decided to take special care in the management of breeding of Tigers with the ultimate aim of keeping alive the cubs born.

The Tigers reach their maturity -- male in 4 to 5 years and females in 3 to 4 years. The adult female comes to heat seasonally -mostly every 5 months. The onset of heat can be easily noticed by her readiness for breeding, roaring, moaning and scent marking with smelling urine mixed with the secretion from the anal glands. This attracts the males. The selected male moves closer until they are at whisker to whisker - but continue to snarl for a time. Then they start playing, grooming, muzzlling, licking, rubbing and she starts giving "Love bites". Rolling, snorting and foot stamping may be part of the act. The male mounts in a knee bent position. During ejaculation the male makes a sharp cry and bites the loose skin fold on the neck of the female. This is the sign of a successful mating. When male dismounts the female growls and jumps to dislodge him and give him scratches with nails of her front paws.

Pregnancy can be detected only by assessing the bulging of the lower abdomen and swelling of the teats only 10 to 12 days before the delivary. The gestation period is only 103 to 108 days. The animal generally gives birth to 2 to 4 cubs. In the wild they give birth in an area of good cover, caves, long grass, thick bushes, overhanging rocks or hollow logs where there is protection and shelter from nature and enemies.

Normally the births are complete in an hour, but it has been recorded in the zoo that it can extend upto 24 hrs. Immediately after each birth, the mother licks and frees the cub from the umbilical cord, eats the embryonic sac umbilical cord and the placenta. Cubs are born blind and soon they attempt to locate the teats. The mother does not assist in



Dr. Chandra with his Pet

## Dr. Charles J. Chandra

locating the teat. It is seen that the weakest cub generally dies of starvation or get crushed by the body of the mother. Some may devour the cub and some animals may not care to feed them. All these factors contribute to the high mortality of new born tiger cubs.

As the date of delivery was nearing "MEERA" the pregnant tigress was housed in a comfortable cage. The sides and front of the cage were covered to minimize the disturbance from the public and only one keeper, who had personal bond with Meera, was allowed to be with her always. Unwanted disturbances will make the tigress excited and increase the risk of abandoning the cubs or even devouring them or crushing to death. If a captive mother becomes anxious she carries her cubs by mouth and carries them to a newer and safer place. Devouring the cubs have many reasons - If the mother has protein deficiency she will eat the cubs to overcome the deficiency, if the cub is a weaker one and the mother believes that it will not survive the mother may eat, any excitement or disturbance will result in eating the cubs or crushing them to death.

Meera gave birth to three cubs late in the night, but consumed one before the morning. We decided to wean the other two and were taken out after shifting Meera to the next cage. On examination one was normal and healthy and feeding was started. After feeding as a test case the cub was let with the mother. The mother accepted the cub and started licking the cub. But she didn't allow the cub to approach the teats probably because of the tickling sensation. Meera did not allow the cub to suck milk from her teats even though the cub tried its level best to suck. So it was taken out and continued feeding artificially six times a day and in between letting her with the mother. On the fourth day we found that the cub had succeeded in sucking the teat of Meera. From this time onwards Meera became a good mother. Subsequently Meera became prolific and gave us many cubs.

The mother had licked the umbilicus of the second cub producing a big wound in the area. The intestines were seen protruding out through the wound. The hernia was reduced by surgery and necessary treatments were also given.

Hand rearing is complicated and requires much time and dedication. So the cub was taken to my quarters. For two days glucose and milk were given every hour soaking a ball of cotton and squeezing in to the mouth. Third day it started sucking the cotton and then after feeding bottle with soft nipple was introduced. In the 7th day the eyes were open. The stitches in the herniated area were removed. It was found that the wound healed without any complication. The cub became smart, grew up healthy in my quarters. After two weeks, milk mixed with meat broth was given and the cub relished it. The quantity was also increased and given 5 times a day. After each feeding the stomach was massaged and the genital area rubbed with a cotton ball moistened with warm water. This is necessary to stimulate the cub for passing urine and faeces. This function is done by the mother by licking. Started giving small quantity of minced meat after one month.

The cub being female, we called her "MINI".Our American spitz -Nimmi -and Mini became very friendly and it was loving to see Nimmi running barking around Mini telling her to behave and she acted as a foster mother. After three months Mini grew up and Nimmi was little scared and will run away even though Mini wanted to play with her. My family -wife and children- enjoyed feeding Mini, while I was away from the quarters.

Three months passed -Mini had grown up and was 22 kgms in weight. She was healthy and was eating half a kgm of minced raw meat and two litres of milk mixed with meat broth.

A swelling at the umbilicus was seen and was diagnosed as umbilical hernia, She was chained and taken to the then S P C A hospital, Trivandrum. It was a sight to the people there to see a tiger cub on a chain and behaving properly. Surgery to repair the hernia was done under the leadership of Dr.D. V. P. Nair, then senior vet of the hospital. Mini was very cooperative and the operation was a success. After the recovery from the anesthesia Mini was taken back to my quarters. For three days I had to be with her, preventing her from licking away the stitches. Injections and dressing continued. The stitches were removed on the 7th day, the hernia was reduced and the wound healed.

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She again became smart and started playing with Nimmi and my children.

Till eight month she had a bed room in my guarters with attached bath room. She was growing and was weighing 38 kgms. She did not show any behavioral change and was very docile and friendly. But her strength and power of forearms were great if she held your legs and started licking, you would not be able to move until she left. She used to stand on putting both her forearms on my shoulders and try to lick my face . You can imagine the sharpness of her tongue -which is used to separate meat from bone. But Mini licks very mild and lovingly. Friends, relatives and visitors stopped visiting my quarters. Eventhough my wife and children were happy with her in the house. Due to so many compulsions I took her to the hospital premises and kept her chained. The keeper Markose was in charge of her and she became very friendly with him. On many occasions when Markose let her free she jumped out and ran to my quarters and opened the door by

just slapping with her paws. With great reluctance only she was chained and brought back. At this time I was away attending some training and that was the reason she was transferred to the main cage. My family also moved to my house. For four days she didn't eat or drink and only after my wife's presence, she had her meat and milk.

Four years went by; Mini had become an adult tigress. One open moated cage was constructed in the zoo and mini was accommodated in one of the three shift cages in the open moated cage. By this time Meera had given birth to three more cubs and she behaved as a good mother and reared them up.

Even now when I go to the zoo and sit in vets quarters or hospital I still feel that Mini is lying down near me holding and licking my legs.

## Author

Retd Joint Director Dept of museum and zoo Thiruvananthapuram.

