

Wildlife
Health

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Profession of Zoo & Wild Life Medicine

WILD LIFE HEALTH

(Half Yearly Journal of IZVA dedicated to the profession of zoo
and wild life Medicine)

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No.I&II.

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B.V.Sc.,

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IN THIS ISSUE

PAGE NO.

- | | |
|--|----|
| 1) Breeding Record of wild animals of Nehru Zoological Park, Hyderabad | 1 |
| 2) Artificial Insemination in wild animals. | 7 |
| 3) Research on wild life diseases in Orissa Zoo. | 9 |
| 4) Methods of Rodent control in Zoo management. | 10 |
| 5) News corner. | 13 |

AUTHORS

1. Dr. Mir Gowher Ali Khan.
Dr. Sabir Ali &
Dr. Dattatri Rao.
2. Dr. C.K. Mondal.
3. Dr. A.T. Rao. &
Dr. L.N. Acharjyo.
4. Dr. A.H.M. Azmathullah,

Cover Drawing, Sambar Stag (Cervus Unicolor) Drawing by
Dr. Mir Gowher Ali Khan.

IMMUNIZATION PROGRAMME OF EXOTIC CATS AGAINST FELINE DISTEMPER

FELOCINE (feline Distemper Vaccine): is a highly antigenic Vaccine Produced from virus isolated from the Snow Leopard.

C-Vet FELINE ENTERITIS VACCINE is another brand of feline distemper Vaccine. (Killed Virus-Tissue Culture-Origin-Feline).

DOSAGE:

- I. Domestic Cat: Inject contents of Vial (1 Ml.) subcutaneously or intramuscularly taking usual aseptic precautions. Disposable Syringes are provided.
- II. WILD BIG CATS (ADULT): 2-3- times of Normal domestic cat.
 - a) Leopard size animal - 2Ml.
 - b) Tiger size animal - 3Ml.
 - i) Cats that are not Vaccinated previously should receive this dose twice at an interval of three weeks.
 - ii) Cubs from a new vaccinated mother are vaccinated with 1 Ml. at 5,8,& 12 weeks of age.
 - iii) Pregnant mothers can be vaccinated safely.
 - iv) All cats should receive annual booster dose with the appropriate adult dose.

The programme has been derived from our expertise experiences with these products and taken into account the latest information.

DR. A.G. GREENWOOD, M.A. Vet.
M.B.M.R.C.V.S.
HAINSWORTH HOUSE,
DAMENS LANE,
INGROW KEIGHLEY,
WEST YORK SHIRE, U.K.

Availability of Vaccine:

- i) FELOCINE .. SMITH KLINE & FRENCH LABS.LTD.
WELWYN GARDEN CITY,
HERTFORDSHIRE-U.K.
- ii) C-Vet FELINE ENTERITIS VACCINEPITMAN-MOORE INC.
WASHINGTON CROSSING,
N.J. 08560,
U.S.A.

-oOo-

WHEN THE VETS FELL OUT?

A rectal prolapse occurs when the terminal portion of the digestive tube falls out. When this occurred in the Breeding Female of Indian Rhino in a Zoo park, the Vety. Staff fell out.

..J. of Z.A. Medicine.

THE SECOND OPINION (Editorial)

I was in-structed by the Director Animal Husbandry Department, Andhra Pradesh to attend a National Conference on "Rinderpest Disease and its control measures", held at Veterinary College, Thirupathi in the year 1980, as in August, 1979 there was an outbreak of "Rinderpest Disease" amongst gaurs, Sambar and Nilgai of Eturnagaram wild life sanctuary of Warangal District, Andhra Pradesh. In the same conference, one day, there was a discussion on the production of Biological Products, such as Vaccines, Sera etc., by the various Indian states, and how best to standarise them. With the permission of the Chairman, I enlightened the delegates about the prevalance of FELINE DISTEMPER, a deadly viral disease among the Felines of the Indian Zoos and requested the Chairman to recommend the Indian Council of Agricultural Research to take up the production of Feline Distemper Vaccine at the Indian Veterinary Research Institute, Izathnagar, U.P. My suggestion was not included in the recommendations. It was pointed out that:-

1. The I.V.R.I. does not have the seed Virus.
2. The production of Feline Distemper Vaccine will incur huge expenditure.
3. The demand and the sale of the vaccine will not be satisfactory.

How far these excuses are justifiable?---this is our concern.

Feline Distemper has become endemic in most of the Indian Zoos. So far, the Nehru Zoological Park, Hyderabad has lost two white tigers, six pumas, a good number of normal tigers and panthers. I do not have the data of other zoos, but I am sure it is taking heavy toll of Feline population kept in captivity in various Indian zoos.

National Zoological Park, New Delhi, Alipur Zoo, Calcutta, Nandan Kanan Biological park, Orissa and the Nehru Zoological Park, Hyderabad are the prestigious zoos having a fairly good number of white tigers. Recently another genepool is established at the Orissa Zoo. How we are going to keep these valuable animals free from this disease? Can we remain tightlipped if Feline Distemper breaks out among these beautiful white big cats? If the country is not in a position for the present to produce the Vaccine, then efforts should be made to import it. The National Zoological Park, New Delhi, has been the Central Agency to receive the vaccine from abroad and has distributed to other zoos. Surprisingly this important task has been discontinued. Needless to say, the vaccine once started, booster does has to be given every year. Moreover the newly borns and acquired will have to be protected against this viral infection.

Hence continuous supply of feline distemper vaccine should be restored and National Zoological Park, New Delhi, be made the distributing agency.


EDITOR

INDIAN ZOO VETERINARIANS ASSOCIATION

(Established 1982)

INDIAN ZOO VETERINARIANS
ASSOCIATION

The Objective of the Indian
Zoo Veterinarians Association are:

1. To advance programme for preven-
tive medicine, husbandry and
scientific research in the field of
Veterinary medicine dealing with
wild animals in captivity and in
free state.

2. To Provide a forum for the
presentation and discussion of
problems related to the health care
and disease management of the
Wild Life.

3. To publish and distributed
Scientific information related and
pertaining to the Veterinary
medicine dealing with captive
wild animals.

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ANY ZOO VETERINARIAN WORKING WITH THE ZOO & WILD LIFE
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WELFARE OF WILDLIFE.

1. Life Membership Fee Rs.200=00

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DR. MIR GOWHER ALI KHAN,
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NEHRU ZOOLOGICAL PARK,
HYDERABAD-500 264. A.P.

WILD LIFE HEALTH.

VOL.II. NO.I&II.

BREEDING RECORD OF WILD ANIMALS OF NEHRU ZOOLOGICAL
PARK, HYDERABAD

- | | | |
|---|--|--|
| 1. Dr. Mir Gowher Ali Khan
Dy. Director (A.H.) Retd. | | |
| 2. Dr. Sabir Ali,
Asstt. Director (A.H.). | | |
| 3. Dr. Dattatri Rao,
Veterinary Officer. | | |

== Nehru Zoological Park,
Hyderabad, A.P.

-oOo-

Breeding of wild animals in captivity is the ultimate goal of any conservation policy. It is the "Biological Barometer" which indicates the animals are leading a happy and content life. It is a very right excuse for a zoo manager to put on more and more feathers in his colourful cap. A huge sum for purchase of animals is not always kept at his disposal but he is expected to adopt such methods by which animals under his charge will start multiplying. This will fetch him back the amount which he has already spent in procuring and keeping them in Zoos and parks, It is in the own interest of the species to breed and multiply in captivity to feel more secure and content in captive condition. This is here, where the role of a zoo veterinarian assumes great importance in keeping them disease free and healthy.

The pre-requisites for captive breeding differ from species to species. But basically they require good housing, nutritious and well balanced diet and less disturbance.

Below is the list of various species of wild animals bred in the Nehru Zoological Park, Hyderabad over a period of 17 years i.e. from 1965 to 1983.

LIST OF WILD ANIMALS BRED IN NEHRU ZOOLOGICAL PARK, HYDERABAD.A.P.
(1965 to 1983)

Sl. No.	Common Name	Scientific Name	No. of young ones born.	Sex ratio.	Survival	Maximum Litter Size.	REMARKS	
					Died under one month	survived		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8) (9)	
I. FELIDAE:								
1.	Tiger	<i>Panthera tigris</i>	22 (10 lts.)	9:13	4	18	4	
2.	White tiger	<i>Panthera tigris</i>	5 (2 lts.)	2:3	1	4	3	
3.	Indian Lion.	<i>Panthera leo persica.</i>	14 (6 lts.)	5:9	11	3	3	
4.	African Lion	<i>Panthera leo.</i>	16 (9 lts.)	9:7	3	13	4	
5.	Panther (Normal coloured)	<i>Panthera pardus</i>	25 (11 lts.)	17:8	5	20	4	
6.	Panther (Black coloured)	<i>Panthera pardus</i>	15 (10 lts.)	9:6	3	12	3	
7.	Puma	<i>Felis concolor</i>	8 (4 lts.)	4:4	2	6	3	
8.	Jaguar	<i>Panthera onca</i>	(2 cubs were recovered from the womb of a dead female on Autopsy)					
II. CANIDAE								
1.	Indian fox	<i>Vulpes bengalensis</i>	2 (2 lts.)	--	--	2	1	
2.	Jackal.	<i>Canis aureus</i>	13 (5 lts.)	--	8	5	4	
3.	Striped Hyæna	<i>Hyaena hyaena</i>	1 (1 lts.)	0:1	---	1	1	

WILD LIFE HEALTH

(1) (2) (3) (4) (5) (6) (7) (8) (9)

III. URSIDAE:

1. Asiatic Himalayan Black Bear. Selenarctos thibetanus 1 1:0 -- 1 1

2. Malayan Sun Bear. Helactos malayanus 1 1:0 1 -- 1

IV. UNGULATES

(a) DDD TOES

1. Hippopotomus amphibioides. 1 0:1 - 1 1

2. Wart Hog. Phaeocochoerus aethiopicus. 6 (2 lts.) 2:4 2 4 4

3. Wild Ass Equus hemionus 2 1:0 2 - 1

4. Zebra Hippotigris Ap. 1 1:0 -- 1 1
 (One abortion--One caesarian operation)

(b) EVEN TOES

1. Spotted Deer. Axis axis (Breeding profusely)

2. Sambar Deer Cervus unicolor 29 -- -- 29 1

3. Hog Deer Axis percinnus 38 -- 1 37 1

4. Thamin Deer Cervus eldi 11 4:7 2 9 1

5. Asiatic mouse Deer Tragulus javanicus 7 4:3 -- 7 1

WILD LIFE HEALTH VOL. II, NO. I&II.

(1)	(2)	(3)	--:4:-- (4)	(5)	(6)	(7)	(8)	(9)
6. Barking Deer		Muntiacus muntjak	1	0:1	--	1	1	
7. Sika Deer		Cervus nippon	2	1:1	--	2	1	
8. Fallow Deer		Dama dama	2	1:1	--	2	1	
9. Nilgai		Boselaphus tragocamelus	50 (Twin -5 times)	--	--	50	2	
10. (a) Four horned antelope		Tetracerus tragocamelus	44 (13 times twins)	--	8	36	2	
(b) White Buck		-do-	1	0:1	--	1	1	
11. Chinkara		Gazelle gazelle	3	1:2	--	3	1	
12. Goral		Saiga mongolica	4	3:1	--	3	1	
13. Bos gaur		Bos gaurus	5	2:3	--	5	1	
14. American Bison		Bison bison	1	1:0	1	--	1	
15. Giraffe		Giraffa camelopardalis	2	1:1	--	2	1	
16. Eland		Taurotragus oryx	14	7:7	--	14	1	
17. Guanaco		Lama guanaco	1	1:0	--	1	1	
18. Gnu (Blue wildebeast)		Connochaetes taurinus	4	3:1	--	4	1	
19. Water Buck		Kobus lechae	1	1:0	--	1	1	
20. Thompson Gazelle		Gazella thompsoni	6	2:4	1	5	1	
<u>V. MARSUPIALS:</u>								
1. Red Kangaroo		Macropus rugus	2	0:2	--	2	1	
2. B. Wallaby		Petrogale Sp.	6	2:4	--	6	1	

(1) (2) (3) (4) (5) (6) (7) (8) (9)

VI. RODENTS

1. Porcupine Hystrix Sp. 9 5:4 2 7 1

VII. NON-HUMAN PRIMATES:

1. Mandril Mandrillus sphinx 6 4:2 -- 6 1

2. Sacred Baboon Papio hamadryas 9 3:6 3 6 1

3. Gelada Baboon Theropithecus Sp. 1 0:1 1 1 1

4. Olive Baboon Chaeropithecus Sp. 4 2:2 1 3 1

5. Yellow Baboon Papio cynocephalus 2 1:1 -- 2 1

6. Sooty mangaby Cercopithecus torquatus 2 1:1 2 -- 1

7. Diana Monkey Cynocephalus cynocephalus 1 0:1 1 -- 1

8. Squirrel Monkey Saimiri sciureus 1 0:1 -- 1 1

9. Rhesus Monkey Macaca mullata 16 -- -- 16 1

10. Bonnet Monkey Macaca radiata 8 -- -- 7 1

11. Stumped tailed Monkey Macaca arctoides 11 -- -- 11 1

WILD LIFE HEALTH

VOL. II. NO. I&II.

(1) (2) (3) (4) (5) (6) (7) (8) (9)
VIII. BIRDS: (Information about some important species only is given)

(a) RATITES:

1. American Rhea Rhea americana 2 1:1 -- 2

(b) GALLINDUS SP.

1. Ring necked Phasianus colchicus 10. -- 2 8
phaasant torquatus

2. Silver phaasant Gennaeus nycthemerus 19 -- 5 14

3. Swinhoe Hierophasis swinhoii 2 2:0 -- 2

4. White crested Lophura leucomelana 4 2:2 -- 4
kalij phaasant hamiltoni

5. Manipure Kalij Gennaus leucomelanos 4 2:2 -- 4
phaasant

6. Golden phaasant Chrysolophus pictus 1 0:1 -- 1

7. Peafowl Pavo cristatus 12 -- 3 9

8. White peafowl -do- 1 0:1 -- 1

9. Red spur fowl Galloperdix spadicea 5 3:2 -- 5

10. Grey jungle Gallus sonneratii 2 1:1 -- 2
fowl

(c) WATER BIRDS:

1. Spoon Bill Platalea leucorodia 7 -- 2 5

2. White Ibis Threskiornis aethiopica Sp. 3 -- -- 3

3. Sarus Crane Grus antigone antigone 4 -- -- 4

4. Lapwing Vanellus malabaricus 1 -- 1 --

(Yellow wattleed)
IX. REPTILES:

1. Mugger crocodile Crocodilus palustris 75 (6Nests) 20-brought back to the
crocodile complex and 55-left in the Breeding pools)

Artificial Insemination in the wild animals, (an account of the workshop held in National Zoological Park, New Delhi on February 25th, 1984).

Dr. C.K. Mondal. --Senior Technical Assistant,
National Zoological Park,
New Delhi.

Artificial Insemination is widely practiced in the veterinary field now-adays. Today the necessity is being felt to adopt the same practice in the management of wild animals also; where ofcourse the purpose will be a bit different, i.e. to get a baby of any desired species without inviting any hazard of 'crossing' of the two wild individuals. Many a times it happen that some zoo needs either male or female for the purpose of breeding of some species. But no zoo wants either to spare or damage its own breeding pair. In such cases artificial insemination is the only solution.

On February 25th, 1984 a workshop on this subject was held at National zoological Park, New Delhi under the expertise of Dr. Anne Schaffer, Reproductive Physiologist, Lincoln zoo, Chicago. The workshop was graced by the presence of Dr. Dennis O. Johnson D.V.M. Science attache, American Embassy, New Delhi. The following veterinarians engaged in wild life medicine attended this workshop.

1. Dr. V.K. Sharma Chatbir
2. Dr. K.B. Sharma Udaipur
3. Dr. D.K. Barua Gauhati
4. Dr. A.V. Juwekar Gwalior
5. Dr. P.P. Tongaonkar Pune.
6. Dr. R.K. Dass Lucknow
7. Dr. A.K. Jha Patna
8. Dr. V. Krishnamurthy Madras
9. Dr. Srinivasan Mysore
10. Dr. M.R. Ansari IVRI
11. Dr. A.K. Mohanty Orissa
12. Dr. S.D. Sharma New Delhi
13. Dr. C.K. Mondal New Delhi
14. Dr. Monmohan Sharma New Delhi

The workshop was coordinated by Dr. J.H. Desai, Director, National Zoological Park, New Delhi.

Dr. Schaffer demonstrated mainly the technique of semen collection by electrical impulse method using single electrode.

Three kinds of subjects were used for this purpose:

- i. Ladhaki goat
- ii. Rhesus monkey
- iii. Indian Lion

The first one was used in a normal state and semen was collected from the other two subjects in tranquilised state. The electrode was introduced into the rectum of the subject and then controlled impulses were released intermittently, thereby contracting the bulbo-and ischio-cavernosa muscles. After passing a few impulses semen started collecting in the tube held at the tip of the penis.

The volume of the semen collected from each of the animals on that day was disappointingly low with practically nil sperm count. Although several factors contribute to the volume and quality of the semen, but that day the following factors seemed to be responsible for the less volume of semen. The day was already very cold. The animals were caught unaware and therefore they were psychologically unaroused. Lastly the animals were tranquilised during the operation. The fluid collected was mainly comprised of the secretion from prostate and the seminal vesicle.

The whole procedure is still under study. In abroad the veterinarians of several zoos are understood to be seriously involved in this subject. Possibilities are immense and it is felt that a major success in having a widespread use of this technique in the wild life husbandry is not far.

RESEARCH ON WILD LIFE DISEASES IN ORISSA

1. Dr. A.T. Rao. ---Associate Professor, Pathology,
Orissa Veterinary College.
2. Dr. L.N. Acharjyo ---Veterinary Assistant Surgeon,
Nandan Kanan Biological Park,
Orissa.

Diseases of wild life are of importance first to wild species themselves, second they are often associated with or even responsible for similar diseases of importance to domestic animals and finally they directly or indirectly affect human health. In view of public health, economic and ecologic importance of wild life diseases, a project on epidemiology of the commonly occurring diseases in captive animals and birds with special reference to Pathology,* Orissa Veterinary College, Bhubaneswar, in collaboration with Nandankanan Biological Park. Until to-day, 50 research papers on wild life diseases have been published in various national and international Journals of repute. Notable diseases encountered during the last 15 years in various species of animals and birds are enlisted below:

I. INFECTIOUS AND HELMINTHIC DISEASES:

- | | |
|---------------------------------|--|
| 1. Tuberculosis | 45 cases are recorded in spotted deer, wild pigs, Barking Deer, Four horned antelope, monkeys and Birds. |
| 2. Rabies | African Lions |
| 3. Foot and mouth disease | In few ungulates |
| 4. Filaroides osleri | Leopard Cats |
| 5. Dirofilariasis | Foxes |
| 6. Echinococcosis | Wolves |
| 7. Hydatidiosis | Some Mammals. |
| 8. Fascioliasis | In some ungulates |
| 9. Hepatic amphistomiasis | Sambar Deer |
| 10. Stephanuriasis | Wild Pigs |
| 11. Anthrocephalus Logispiculum | Badger |
| 12. Ascariasis | Peafowl |

* was started in the year 1967 in the Department of Pathology,
WILD LIFE HEALTH VOLII. NO.I&II.

- :10:-
- | | |
|--------------------------|-----------------------------|
| 13. Tetrameriasis | In water Birds |
| 14. Chaunocephalus ferox | storks |
| 15. Aspergellosis | In different types of Birds |
| 16. Necardiosis | Mynah |
| 17. Sarcosporidiosis | In few antelopes |

II. NON-INFECTIOUS DISEASES :

- | | |
|--------------------------------------|--|
| 1. Tumours | 6 types of tumours in 5 species of mammals. 5 types of tumours in 12 species of birds. |
| 2. Intussusception of Proventriculus | Pea fowl |
| 3. Gout | In aquatic Birds. |

A. PRACTICAL PROGRAMMES OF RODENT CONTROL ON A WILD LIVESTOCK FARM

Dr. A.H.M. Azmathullah,
Dy. Director (A.H.) Nehru Zoological Park, Hyd.

Rats, Mice and other Rodents are a recognised menace on all the wild livestock farms. They not only cause considerable feed wastage but also a potent media as great discemenators of diseases from animal to animal.

There are mainly three forms of rats (a) Roof rats, (b) Floor rats, (c) Field rats.

SELECTION OF RODENTICIDE :

This is an important factor especially in-view-of availability of many brand rat poisons in the market. Rats are considered to be very sensitive, clever and having great sense of knowing each other and their family members. Any Rat poison used which kills them suddenly and in large numbers are discarded on the basis of findings, that such killings make them sensed the danger applied against them when they find missing large number of their family members among themselves. On experiment it has been found that they starve for six months continuously when they detect any danger to their lives.

Hence a slow poisoning is advocated. The best found is a Haemolytic Rodenticide (wherferin) sold in the market by name Rodafrin(c). Other mechanical devices have been proved to be of little practical use. Rodafrin is patented by pest control of India Limited.

HOW TO MAKE A RODENTICIDE BAIT:

Animal Feed concentrates used daily have to be chosen for making the bait, since any change in the bait ingredients will not be agreeably consumed by them. Hence the bait so prepared is found to be more tastier than the feed of animals, on which they have been eating all along.

FORMULA OF RAT BAIT:

The ratio is 1:19 i.e. one part Rodafrin and 19 parts feed and other ingredients.

Animal feed	... 15 parts
Jaggery	... 3 parts
Sweet Oil (common oil)	... 1 part
Rodafrin (c)	... 1 part.

Mix all these thoroughly. Keep this as a ready made bait, stocking it separately under label as Rat poison. Always use fresh baits. Since the consumption of bait shall be preferred by the rats which are freshly prepared being tasty.

HOW TO FEED THE BAIT:

Firstly, all, the rat holes are to be closed with wet mud inside and outside the premises of the animal quarters including feed godown and offices. All these buildings should be got closed and observed the next day for the fresh holes furrowed out, which are indicative to be actual live in-habitats of the rodents. Other may be considered to be pseudo or false holes. Now take the bait and make empty waste paper cones and fill with the bait, and the apex of the cones has to be got introduced inside the live holes. Keep this process going on for at least seven days and go on repeating the closure of all live holes, And the bait paper cones have got to be got going on replaced to the newly furrowed holes. This should be a continuous programme till the farm is completely eradicated of the rats. Before the animals are let loose in the runs the bait-coned papers are to be removed early morning and again replaced in the evening after the animals are sent to Night Houses.

Take empty small tins and nail them with half full of bait, to the posts, poles and to the chain-link in and outside of the animal enclosures. These have to be checked and refilled as and when required. Remember always freshly prepared bait has to be used. Likewise all the premises including feed godowns and quarters of the farm are to be provided with such bait utensils. By this method one finds that the rat start getting sub-conscious and comes out of their living-holes due to haemolytic effect of the blood and they are picked up by the crows and other predators, there by no stinking smell inside the premises is experienced, and the death rate is slow and continuous. Hence the risk of loosing suddenly a large number of rats is avoided, which gives rise to no alarm to the members of the Rodent family, and that they consume the bait without any fear which gives a 100 percent success. The action of the bait only starts effective after seven days of its commencement of consumption of the bait.

WARNING:

Care should be taken to see that this bait is not consumed by the inhabitant live stock. Spillage or over filling of may be avoided and always kept demarkedly separate, especially in feed godowns.

RESULT:

The reduction of the number of rates of the farm is the only surest result of this operation, because very rarely one can see dead rats in the premises or on the field.

LIST OF NEW MEMBERS OF INDIAN ZOO VETERINARIANS ASSOCIATION:
(Established 1982)

41. Dr. S.D. Gurung ... Asstt. Director-cum-Veterinary Officer, Padmaja.Naidu Himalayan Zoological Park, Jawaher Parbath, Darjeeling, West Bengal.

DONATIONS:

1. The gesture of Dr. S.D. Sharma, Honorary Life Member and Chief Patron of I.Z.V.A. in remitting a donation of Rs.101/- for the Association is highly appreciated.
2. I.Z.V.A. Members are thankful to Dr. L.A.K. Singh Ph.D., Research Officer, National Chambal Sanctuary Morena, M.P. for a donation of Rs.20/-
3. I.Z.V.A. Members are also thankful to The Principal & Student's Union of M/s. Ganga Typewriting & Short Hnad Institute, Chandulal Baradari Colony, Hyderabad for Donation of Rs.20/-

NEWS CORNER:

SILVER JUBILEE COMMEMORATION
OF
NATIONAL ZOOLOGICAL PARK
NEW DELHI

The National Zoological Park, New Delhi is going to Commemorate its silver jubilee in the first week of November, 1984. It is also proposed to hold a scientific symposium on "Zoo management in India" in this connection on 1/10 & 2/10/1984.

The symposium will be conducted in five sessions devoted to different aspects of Zoo Management, Viz. (i) Zoos and conservation (ii) Breeding of endanger species, (iii) Animal health care and disease control (iv) education interpretation and Research and (v) New Development in Zoo Management.

Papers are invited for presentation at various sessions of the symposium. Papers should present original studies and should highlight the importance of the over all theme of the session. The papers with proer titles and indication of the preferred session for presentation should reach the Director National Zoological Park, New Delhi.

The Indian Veterinary Research Institute (IVRI) Izatnagar, a major centre of Research on Animal Sciences, under the Indian Council of Agriculture Research (ICAR) is now a "Deemed University" Apart from the three existing campuses, at Izatnagar, Mukteshwar and Bangalore and three Regional Stations at Palampur, Calcutta and Srinagar, the Government is planning to set up a sophisticated animal disease Laboratory at Bhopal with UNDP assistance in the current plan period.

Dr. Mohammad Ali, Superintending Zoologist lead a team of members of Zoological survey of India and conducted faunal survey. During the course of survey, the team sighted, in the Project Tiger area of the SUNDERBANS, Calcutta, a Brown winged Kingfisher. And this they said was seen by zoologists after about a century in India.

--Live Stock advisor.

The Kerala Government has dropped the SILENT VALLEY HYDRO ELECTRIC PROJECT, and has notified that the project area would be included in the proposed silent vally National Park. Mr. M.G.K. Menan Chairman of the Expert Committee oppointed by the Centre, had suggested that in view of the ecological importance of the silent vally, the project should not be implemented for atleast two deecade.

New Times.

A Donkey at the LONDON ZOO is about to make scientific history. In a few weeks she will give birth to a Zebra. Seven days after conception the embryo zebra was flushed from the womb of its natural mother.

A remarkable two years project under taken by Zoo scientists has ended with the Successful transfer of a living embryo from one large animal to other.

--The Veterinarian.

Of the 12 PANDAS in Captivity all over world, one GIANT PANDA has died in a German Zoo, named Tjen.Tjen. It was a darling of the Berline Zoo. It dieg of Some infectious disease.

--Pashudhan.

Prime Minister Indira Gandhi has offered to give a baby Elephant to Japan. Disoclosing this the Japanese Prime Minister Mr. Nakasone told his press conference that this elephant would be named 'Indira Junior'. He said amids laughter that Mrs. Gandhi's offer was to his wife. However Mrs. Gandhi was not keen to name the elephant after her.

The New Baby Elephant would be presented to Japan Zoo and this would be a big attraction to the Children of Japan, he added.

....Deccan Chronicle.

The Assam State Soil Conservation Department has decided to construct an artificial lake and a Rose garden in the Tourist complex of the Kaziranga National Park to attract tourists. A Forest Museum is proposed to be constructed at Kaziranga next year to house a library, an auditorium and a picture gallery.

....The Hindu.

The rediscovery of the Yellow fronted gardener bowerbird in a remote rain forest in New Guinea by American Ornithologist JARED DIAMOND is more than just the end of a search for a species thought to be extenct. The bird supports an idea, scientists have long had: the brighter the feathers, the less work it takes to attract a Male.

...Readers Digest.



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