

OFFICE OF THE DIRECTOR, NANDANKANAN ZOOLOGICAL PARK,
MAYUR BHAWAN, SAHID NAGAR, BHUBANESWAR – 751 007.

No. 1824 /Dated. 26.12.2006.

To

The Member Secretary,
Central Zoo Authority,
Bikaner House, Annexe-VI,
Shahjahan Road,
New Delhi – 110 -011



Sub : Research Project on Ecto and endo parasites of captive zoo animals and birds to be taken up by the Nandankanan Zoological Park, Bhubaneswar.

Ref : F.No.9-6/2006-CZA(M) Dated 13.12.2006.

Sir,

With reference to your above cited letter, I am furnishing herewith the following clarifications in response to the observation made on the research project proposal on "Ecto and Endo parasitic infestation in captive wild animals".

1) The list of species of wild animals and birds to be studied for prevalence of ecto and endo parasite infestation at Nandankanan Zoological Park is enclosed as Annexure-A (Mammal) and annexure-B (Birds).

2) The proposed study would be jointly undertaken by the Nandankanan Zoological Park and the Orissa Veterinary College. To accomplish the objectives laid down in the present proposal, there need be a good communication between the Nandankanan Zoological Park and experts from various disciplines like pathology, parasitology and medicine. It would be difficult to assign the present investigation exclusively to any of the faculty members of the college, as the present strength of teaching and non-teaching staff of the faculty is inadequate to meet the day to day activities. Different biological samples would be collected from various enclosures in a scientific and systematic manner for further processing in the Orissa Veterinary College by the concerned experts. Examination, collection and preservation of the samples/ecto and endo-parasites especially during post-mortem examination is a part the study. The findings of the studies would be recorded systematically with statistical analysis for better interpretation of the results. The photographs of eggs and different stages of parasites would be stored for future reference. The instruments/equipments available at the Orissa Veterinary College i.e. centrifuge, BOD incubator, refrigerator, deep freeze, research microscope with camera, microtome, computer, scanner etc. would be utilized for the above said purpose. It would be extremely difficult to achieve the goal without the full time support of a field assistant and laboratory technician who would be engaged exclusively for the project work at Nandankanan Zoological Park and at the Orissa Veterinary College. The field assistant would assist the Zoo vets to collect the samples

3
04/10/07

SOCBKS

Dr. Parashram
19
By bird
4/11/07

docket the same and would process the material for their investigation by the Doctors at the Nandankanan Zoo and carry the samples to the OVC for further investigation. He would also help in data management. The Lab Assistant would assist the Doctors at the Nandankanan and also assist the Doctors at the OVC for analysis of the samples, preservation.

3) The budget allocated of Rs. 90,000/- towards the conveyance charges between the Nandankanan and Orissa Veterinary College is badly essential for dispatch of the samples from the Nandankanan Zoological Park to the Orissa Veterinary College. Besides, the movement of the experts/investigators from either side at periodic intervals is essential. Similarly the technical asst. and the lab Asst are to commute between Nandankanan Zoological and OVC for dispatch of the samples their analysis and to assist the Doctors both at OVC and the Nandankanan. The allocated amount will be utilized judiciously for the said purpose. So keeping this in view the amount earmarked towards travel cost is justified.

Yours faithfully,


Director,
Nandankanan Zoological Park

Encl: As above.

Annexure – A (Mammal)

Sl. No.	Name of the Species	Sl. No.	Name of the Species.
Mammal		Mammal	
1.	BEAR, HIMALAYAN BLACK (<i>Selenarctos thibetanus</i>)	20	TIGER, BENGAL (White) (<i>Panthera tigris tigris</i>)
2.	BEAR, SLOTH (<i>Melursus ursinus</i>)	21	Baboon, Hamadryas (<i>Papio hamadryas</i>)
3.	BLACK BUCK (<i>Antelope cervicapra</i>)	23	Chimpanzee (<i>Pan troglodytes</i>)
4.	CAT, JUNGLE (<i>Felis chaus</i>)	24	Hippopotamus (<i>Hippopotamus amphibious</i>)
5.	CIVET, COMMON PALM (<i>Paradoxurus hernaphoroditus</i>)	25	Hyaena, Striped (<i>Hyaena hyaena</i>)
6.	CIVET, SMALL INDIAN (<i>Vivernicula indica</i>)	26	Lion Hybrid (<i>Panthera leo</i>)
7.	DEER, BROW ANTLERED / SANGAI (<i>Cervus eldi</i>)	27	Mithun (<i>Bos frontalis</i>)
8.	DEER, MOUSE (<i>Tragulus memmina</i>)	28	Monkey African Red-Patas (<i>Erythrocebus patas</i>)
9.	DEER-SWAMP/BRASINGHA (<i>cervus duvauceli</i>)	29	BLUE Bull (<i>Boselaphus tragocamelus</i>)
10.	ELEPHANT, INDIAN (<i>Elephas maximus</i>)	30	PORCUPINE INDIAN (<i>Hystrix indica</i>)
11.	LANGUR, NILGIRI (<i>Presbytis Johni</i>)	31	Porcupine, Indian Albino (<i>Hystrix indica</i>)
12.	LEOPARD (<i>Panthera Pardus</i>)	32	Zebra (<i>Equus burchellii bohmi</i>)
13.	MACAQUE, ASSAMESE (<i>Macaca assamensis</i>)	34	Deer, Barking-Muntjac (<i>Muntiacus muntjak</i>)
14.	MACAQUE, BONNET (<i>Macaca ulatto</i>)	35	DEER, SAMBAR (<i>Cervus unicolor</i>)
15.	MACAQUE, RHESUS (<i>Macaca ulatto</i>)	36	Deer, Spotted /Chital (<i>axis axis</i>).
16.	PANGOLIN (<i>Manis crassicaudata</i>)		
17.	RATEL (<i>Mellivora capensis</i>)		
18.	RHINOCEROS, INDIAN ONE HORNED (<i>Rhinoceros unicornis</i>)		
19.	TIGER, BENGAL (<i>Panthera tigris tigris</i>)		

Annexure - B (Bird)

Sl. No.	Name of Species.	Sl. No.	Name of Species.
Bird.		Bird.	
1.	BUDGERIGAR (Melopsittacus undulates)	19.	MUNIA, BLACKHEADED (Lonchura malacca)
2.	CASSOWARY (Casuarius casuarius)	20.	MUNIA, SPOTTED / NUTMEG MANNIKIN (Lonchura punctulata)
3.	COCKATIEL, WHITE/(Nymphicus hollandicus)	21.	OWL, BARN (Tyto alba)
4.	CAKATOO, LESSER SULPHUR CRESTED (Cacatua sulphurea)	22.	PARAKEET, MOSTACH / INDIAN RED BRESTED (Psittacula alexandri)
5.	COCKATOO, GREATER SULPHUR CRESTED (Cacatua galerita)	23.	PARAKEET, ALEXANDRINE (Psittacula eupatria)
6.	CONNURE BROWN EARED (Aratinga patagonus)	24.	PARAKEET, BLOSSOM HEADED (Psittacula cyanocephala)
7.	CONNURE JANDAYA (Aratinga jandaya)	25.	PARAKEET, ROSE RING (Psittacula krameri)
8.	CONNURE NANDAY (Nandayus nenday)	26.	PHEASANT, BHUTAN GREY PEACOCK (Polyplectron thibetanus)
9.	CRANE SARUS (Grus antigone)	27.	PHEASANT, GOLDEN (Crysolophus pictus)
10.	DOVE	28.	PHEASANT SILVER (Lophura nycthemera)
11.	DOVE, DIMOND (Geopelia cuneata)	29.	SPARROW JAVA
12.	DOVE, WHITE CHINESE	30.	KITE, PARIAN (Milvus migrans)
13.	FINCH, BENGAL (Lonchura striata)	31.	KOEL (Eudynamis scolopacea)
14.	FINCH, LONG TAILED (Peophila cincta)	32.	LORRY PURPLE CAPPED (Lorius domicellus)
15.	FINCH, STAR (Peophila ruficauda)	33.	LORRY YELLOW BACKED (Lorius qarrulus flavopalliatu)
16.	FINCH, ZEBRA (Peophila guttata)		
17.	KITE, BRAHMINY (Haliastur Indus)		
18.	MACAW, GREEN WINGED (Ara chloroptera)		

**Minutes of the 44th Meeting of the
Technical Committee of
Central Zoo Authority held on 23.1.2007**

The 44th Meeting of the Technical Committee of Central Zoo Authority was held on 23rd January, 2007 under the Chairmanship of Addl. DGF (WL) in the Members Room of the Central Zoo Authority, Bikaner House, Shahjahan Road, New Delhi. The following were present:

- | | | |
|----|--|----------|
| 1. | Shri G. K. Prasad,
Addl. DGF (WL),
Ministry of Environment & Forests | Chairman |
| 2. | Sh. S. K. Patnaik
Addl. PCCF(WL) (Retd.),
Government of Orissa | Member |
| 3. | Shri S.C. Sharma,
Addl.DGF(WL) (Retd.),
Ministry of Environment & Forests | Member |
| 4. | Dr. L. N. Acharjyo
Veterinary Officer (Retd.)
Nandankanan Biological Park,
Bhubaneswar | Member |
| 5. | Shri P. R. Sinha
Director,
Wildlife Institute of India,
Dehradun | Member |
| 6. | Shri D. P. Singh
US (IFD)
Ministry of Environment & Forests
on behalf of Director, IFD (MoEF) | Member |
| 7. | Dr. B. R. Sharma
Member Secretary,
Central Zoo Authority | Convenor |

At the outset, the Chairman welcomed the Members to the Meeting of the Technical Committee of the Authority. After this the Agenda Items proposed in the meeting were taken up for discussion.

5.	Institutional charges @ 10%	2.62
	Total	28.82

B. Small Grant Fellowship

- (i) **Parasitic infestation (ecto and endo parasites) in captive animals – a collaborative study by Nandankanan Zoological Park, Bhubaneswar and Orissa Veterinary College, Bhubaneswar**

(Amount in Rs.)

S.No.	Purpose	1 st Year	2 nd Year	3 rd Year
1.	Remuneration of Field Assistants @ Rs. 5,000/- x 12 months	60,000.00	60,000.00	60,000.00
2.	Remuneration for Laboratory Technician - @ Rs. 5,000/- x 12 months	60,000.00	60,000.00	60,000.00
3.	Conveyance	30,000.00	30,000.00	30,000.00
4.	Miscellaneous expenditure like purchase of glasswares, chemicals, stationeries and other items	45,000.00	45,000.00	45,000.00
5.	Documentation and reporting	5,000.00	5,000.00	5,000.00
	Total	2,00,000.00	2,00,000.00	2,00,000.00

- (ii) **Standardisation of record keeping in zoos (including identification and marking of animals) - a study by Padmaja Naidu Himalayan Zoological Park, Darjeeling, West Bengal**

S.No.	Item	1 st Year	2 nd Year
1.	Remuneration for Research Scholar	96,000.00	1,00,800.00
2.	Purchase of computer and internet connection	42,000.00	-----
3.	Stationery and consumables	10,000.00	5,000.00
4.	Preliminary workshop	50,000.00	-----
5.	Postage and communication	5,000.00	5,000.00
6.	Books	-----	15,000.00
7.	Miscellaneous expenditure	30,000	45,000.00
	Total	2,33,000.00	1,70,800.00
	Grand Total for 2 years		4,03,800.00