

**NOTICE FOR ENGAGEMENT & TERMS OF ENGAGEMENT**  
**OF**  
**RESEARCH SCHOLAR**  
**FOR THE PROJECT TITLED “STUDY ON BEHAVIOUR AND REPRODUCTIVE**  
**BILOGY OF MARKHOR (*Capra falconeri*)”**

**A. Background**

Padmaja Naidu Himalayan Zoological Park is a medium sized, high-altitude zoo that specializes in the conservation breeding of endangered Eastern Himalayan fauna species, including Markhor.

Markhors (*Capra falconeri*) are among the most endangered mammal species, and several conservation measures, including ex situ breeding, are implemented to prevent their extinction. It is classified as schedule I animal under WPA 1972 and listed as endangered under IUCN. Markhor occurs mainly in highly fragmented populations of relatively small local size (<100 individuals) that are threatened by habitat loss, uncontrolled poaching, illegal trophy hunting, and disturbance, together with forage competition from domestic livestock (Shackleton 1997; Weinberg et al. 1997). Most of the total world population is found in Pakistan and is estimated to encompass about 3,200–3,700 animals, with numbers generally decreasing (Shackleton 1997; Weinberg et al. 1997). The ex - situ reproductive biology of Markhor has not been studied so far, and the understanding of this aspect is of utmost importance for conservation of this endangered species.

**B. Objective:**

- 1) Maternal care and survivability of the calves
- 2) characterize reproductive hormones in zoo-housed male and female Markhor, including pregnancy in the female, using non-invasive fecal steroid hormonal monitoring.
- 3) characterize behaviors of zoo-housed Markhor, emphasizing reproductive behaviors and activity budget; and
- 4) assess the influence of season on births in North Bengal and reproductive hormonal and behavioral activity. Fecal samples will be collected 3 to 5 times per week from adult males and females. Extracted hormones will be analyzed using an enzyme immunoassay for progesterone and androgen concentrations. Behavioral observations will be collected for 2 years using an ethogram.

### **C. Place of Work-**

PNHZ Park, Dowhill Satellite Zoo

### **D. Scope of work for the Research Scholar**

- You will review the available literature by referring articles from journals, books and conference proceedings related to the project objectives
- You will prepare a framework and timeline for the project according to the objectives of the project
- You will create a comprehensive ethogram of Markhor behaviour through published literature and observation of zoo animals
- For hormonal analysis you will prepare the samples, learn and conduct lab methods and analyse data
- Travel to and stay at Institutions with molecular lab facility
- Preparation of comparative document on food habits of Markhor in captivity and the wild
- Data analysis and publication in peer reviewed journals and popular articles with approval of the Director PNHZ Park.
- Prepare scientific reports, briefs, and presentations with approval of the Director PNHZ Park.
- Maintaining all related files, registers and other related documents as guided by the research PI & with approval of the Director PNHZ Park.
- Any other duties as assigned by the Director, PNHZ Park.

### **E. Other details**

1. **Duration:** The employment/ contract is for a period maximum up to two (2) years. The appointee will be engaged on probation for one (1) month, engagement may be extended for a further period. The Park may not extend the engagement after probation period of one (1) month, the park need not assign any reason in such case. The engagement may be periodically renewed maximum up to two (2) years after the probation period, in case the Park & West Bengal Zoo Authority decide to continue with the engagement.

2. **Working hours:** When working from PNHZ Park office and Dowhill Satellite Zoo, the working hours are from 10:30 am to 5:30 pm with half an hour break for lunch for 5 days a week. When working at other Institutions, the working hours will be as per the Institution. The candidate may be required on off days and beyond duty hours on the discretion of The Director, PNHZ Park.
3. The Research Scholar will be required to be in/outside the Markhor enclosures for observation and data recording purposes for long hours. It requires him/her to be physically fit.
4. **Remuneration: Rs 22,400/- p.m.** Remuneration is all inclusive of House Rent Allowance and other benefits. Expenses for travel, and lodging will be paid by Padmaja Naidu Himalayan Zoological Park as per the discretion of the Director for the project related travels.
5. The Park is under no obligation to continue the engagement and may discontinue the engagement with one (1) month notice without assigning any reason for discontinuation.
6. The Research Scholar will not use any data related to and collected for the study for commercial purposes. All scientific papers and reports will be owned by Padmaja Naidu Himalayan Zoological Park. No outside publication in any short of online/offline platform is allowed unless specially approved by the Director, PNHZ Park.
7. The Research scholar will not disclose any data related to and collected for the programme for commercial purposes. All scientific papers and reports will be owned by Padmaja Naidu Himalayan Zoological Park and the park should be acknowledged in any publications/ presentation/ research articles made regarding the study. All materials produced or acquired under the terms of engagement- written, digital, pictures, films, graphics or other forms, shall remain the property of PNHZ Park, West Bengal. The appointee shall not have any right to use such knowledge outside the engagement, without prior written permission of the Director, PNHZ Park. No such data should be copied by appointee without authorisation.
8. Any data in any form recorded in personal mobile phone/ camera should be immediately and as soon as possible transferred to a hard disk or computer of PNHZ Park and no data related to the Park and the project should be kept in personal mobile phones and cameras.
9. The Research Scholar will not disclose any information related to the Park and the research project to outside personnel. All knowledge and information not within the

public domain which may be acquired during the project, shall be, for all time and for all purpose, regarded as strictly confidential and held in confidence, and shall not be directly or indirectly disclosed to any person whatsoever, except with the written permission of the Director, PNHZ Park.

10. The engagement is subject to the conditions specified in the agreement to be signed by the selected candidate.

#### **F. Eligibility**

1. **Educational Qualification:** The applicant must have MPhil/MSc in Life Sciences/Biotech/ Zoology/ Wildlife Science with minimum 60% marks or equivalent CGPA from a recognized University/ (attach a copy of the scorecard).
2. **Experience:** Candidates having exposure to wildlife research are encouraged to apply. Freshers may also apply.
3. Be proficient in English communication skills for report writing, presentations etc.
4. Be proficient in computer skills like Microsoft Office
5. Laboratory experience is preferable.

#### **G. Selection**

The selection of the applicant will be based on the qualification, academic performance, experience, exposure and merit of the applicant. The shortlisted candidates will be interviewed on the above criteria and the best suited candidate will be engaged.

#### **H. General Instructions:**

1. Interested candidates may send their CV as per attached format with a passport size photograph along with signed photocopies of candidate's professional certificates to the following email address latest by **06.12.2021 (5 p.m)**  
**Email: [pnhzp@yahoo.com](mailto:pnhzp@yahoo.com)**
2. Only shortlisted candidates will be communicated to appear in the interview and no other communications in this regard will be entertained.
3. No TA/DA will be paid for appearing in the interview.

**Application Format - “Application for Research Scholar for The Project Titled “Study on Behaviour and Reproductive biology of Markhor (*Capra falconeri*) at PNHZ Park, Darjeeling”**

1. Full Name:
2. Date and Place of Birth:
4. Sex: M/F
5. Marital Status:
6. Nationality:
9. Father’s Name:
10. Address for Correspondence:
  
11. Permanent Address:
  
11. Phone No.:
13. E-mail Address:
14. Academic Record:
  - A. GATE/CSIR/UGC/Other fellowship details: Mention examination name, discipline, score, and year appeared.
  - B. Qualifying degree

Examination (Mention Specialization where applicable)	Name of School/College/Board/University/Institute with City & State	Year of Passing	Subjects	% of marks/ GPA obtained	Remarks
Class X					
Class XII					
Bachelors (Specialization)					
Masters (Specialization)					
Any other qualifications					

C. Details of project carried out with duration, place of work, area worked on, mentor/guide’s name, description of the project and contribution to the project (in not more than 5 sentences).

D. List of publications (if any):

E. Working Experience (if any):

F. Whether currently employed: Y/N

**DECLARATION:** I hereby declare that I have carefully read and understood the instructions and particulars on this application and that all entries in this form as well as in the attached sheets are true to the best of my knowledge and belief.

Date :

Signature

Place: