

Short communication

**PREVALENCE OF GASTROINTESTINAL PARASITISM IN RESCUED
WILD MAMMALS OF MAHARASHTRA**

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Abstract: This study aimed to assess the parasitic status of various herbivores and carnivores rescued from different regions. The animals were housed at the Manikdoh Leopard Rescue Centre and the RESQ Charitable Trust in Maharashtra. To investigate this, fresh faecal samples were collected from herbivores, including Gaur, Langur, Chital, Sambar, Black buck, Indian gazelle, Hare, Bats, and Porcupines. Carnivores sampled included Leopard, Rusty cat, Asian Palm Civet, Jackal, Striped Hyena, and Mongoose. In total, 100 fresh faecal samples were collected from all rescued mammals and transported to the Department of Veterinary Parasitology, Nagpur Veterinary College, Nagpur.

Following sample analysis, 50% of mammals were found to be positive for gastrointestinal helminths. The highest occurrence was reported for *Spirometra* spp., followed by *Eimeria* spp., *Strongyle* spp., and *Toxocara* spp. Out of 100 faecal samples, the maximum prevalence of *Eimeria* spp. (32 %) was observed, followed by *Spirometra* spp. (21%), *Strongyle* spp. (10 %) and *Toxocara* spp. (6 %). Species-wise, the highest prevalence was observed in leopards, followed by black buck and spotted deer. Age-wise, the highest prevalence was observed in females than in males. These findings indicate that parasitic infection is quite common in wild animals and deserves attention.

Keywords: Wildlife parasitology; *Spirometra*; *Eimeria*; *Strongyles*; *Toxocara*; rescued mammals; faecal examination; epidemiology.

Introduction

Wildlife undergoing rescue, translocation, or rehabilitation often experience elevated physiological stress, predisposing them to parasitic infections. Gastrointestinal (GI) parasites negatively influence nutrient absorption, immune competence, and overall survival potential. Understanding the parasitic load in rescued wildlife is essential for evidence-based health management and disease prevention strategies in conservation settings. Parasitic infections increase susceptibility to highly pathogenic diseases. Stressful conditions in captivity or rescue

situations worsen immunity. GI parasites cause nutritional deficiencies and reduced host immunity.

Materials & Methods

A total of 100 freshly voided faecal samples were collected from rescued mammals of Manikdoh Leopard Rescue Centre & RESQ Charitable Trust. The faecal samples of herbivore animals (Gaur, Langur, Chital, Sambar, Black Buck, Indian Gazelle, Hare, Bats, Porcupines) and Carnivores (Leopard, Rusty-Spotted Cat, Asian Palm Civet, Jackal, Striped Hyena, Mongoose) were collected. Samples were transported under cold chain and processed at the Department of Veterinary Parasitology, Nagpur Veterinary College, Nagpur. The collected samples were processed by standard qualitative and quantitative faecal examination methods, including flotation, sedimentation, and microscopic identification based on morphological keys.

Results and Discussion

After processing the faecal samples, the overall prevalence of GI parasites was 50%. The samples found positive for different nematode and cestode infections. Samples were found positive for the ova of *Strongyle* spp. 10%, *Toxocara* spp. 6%, *Eimeria* spp. 32% and *Spirometra* spp. 21%. Females showed higher infection rates than males, potentially due to reproductive stress and hormonal influences. The highest prevalence is found in Leopards, followed by Black Buck and Spotted Deer. High prevalence of *Eimeria* spp. indicates faecal oral contamination cycles within enclosures, while *Spirometra* spp. Infections in carnivores suggest exposure to intermediate hosts such as amphibians or reptiles. Strongyle infections in herbivores reflect possible environmental contamination in holding areas.

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