Wildlife Disease Surveillance in Sri Lanka: First results from Sri Lanka Wildlife Health Centre

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Introduction

- Wild animals are the reservoir for many pathogens causing
  - Infections in humans (zoonoses)
  - Emerging diseases of animals and humans
  - Mortality in wild animal populations
- Information on wildlife diseases and pathogens are sparse in Sri Lanka
- A general wildlife disease surveillance programme was initiated to
  - Identify wild animal reservoirs of human and animal diseases
  - Understand disease ecology
  - Promote wildlife health management

Methods

- Post mortem examinations were performed on wild animals found dead
- Tissue samples were subjected to histopathology and additional testing (microbiology, molecular biology)
- Suspected cases were tested for rabies using Fluorescent Antibody Test (FAT)
- Programme was coordinated by the Sri Lanka Wildlife Health Centre

Figure 1: Post mortem examination of wild animals

Results

- From January 2015 to January 2016, 32 necropsies were performed on 16 different species of wild animals

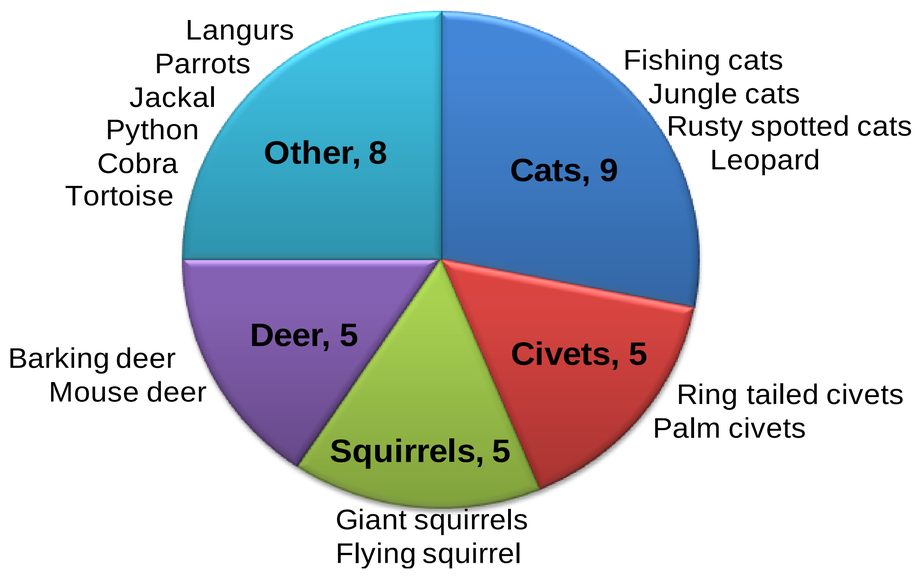

Figure 2: Species of animals subjected to necropsy

Results (contd.)

- Majority of wild animal deaths were due to trauma

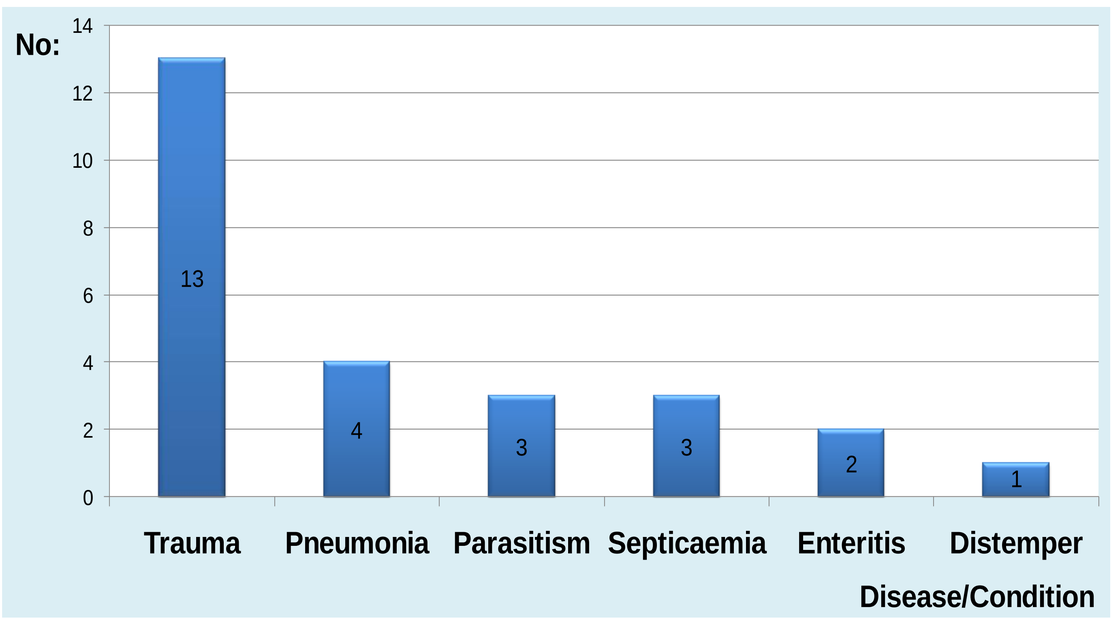

Figure 3: Diseases/ conditions diagnosed in dead wild animals

- A Ring Tailed Civet (*Viverricula indica*) was diagnosed with distemper by histopathology and insulated isothermal PCR (iiPCR)
- None of the samples tested were positive for rabies, although rabies is endemic in Sri Lanka and has been previously reported in some wild species

Conclusions

- **Detection of Canine Distemper in a Ring Tailed Civet (*V. indica*)**
  - This is the second reported and confirmed incidence of canine distemper in *V. indica* sp in the world [1]
  - This species could be a possible reservoir for distemper in dogs in Sri Lanka
  - Distemper could be an important neurological disease causing morbidity and mortality in wild animal species
- **Negativity for Rabies**
  - Negative results obtained for rabies could be due to low sample number achieved at this initial phase
- **Essence of surveillance continuation**
  - Wildlife disease surveillance should be an ongoing process and further studies are warranted on the basic findings of this programme

Reference

1.Techangamsuwan S, Banlunara W, Radtanakatikanon A, Sommanustweechai A, Siriaroonrat B, Lombardini ED and Rungsipipat A., 2015. Pathologic and Molecular Virologic Characterization of a Canine Distemper Outbreak in Farmed Civets. *Vet. Pathol.* 52(4):724-31

Acknowledgement

This project received funding from Canada's International Development Research Centre (IDRC) through the project entitled Building Research Excellence in Wildlife and Human Health in Sri Lanka