



## MONGOOSE RABIES IN ZAMBIA

Authors: SAWCHUK, A. M., and ROTTCHER, D.

Source: Journal of Wildlife Diseases, 14(1) : 54-56

Published By: Wildlife Disease Association

URL: <https://doi.org/10.7589/0090-3558-14.1.54>

---

BioOne Complete ([complete.BioOne.org](https://complete.BioOne.org)) is a full-text database of 200 subscribed and open-access titles in the biological, ecological, and environmental sciences published by nonprofit societies, associations, museums, institutions, and presses.

Your use of this PDF, the BioOne Complete website, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-of-use](https://www.bioone.org/terms-of-use).

Usage of BioOne Complete content is strictly limited to personal, educational, and non - commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

## MONGOOSE RABIES IN ZAMBIA

A. M. SAWCHUK and D. ROTTCHER, Department of Veterinary and Tsetse Control Services,  
Central Veterinary Research Station, P.O. Box 50, MAZABUKA, Zambia.

**Abstract:** A preliminary survey suggests that the selous mongoose (*Paracynictis selousi*) does not play a role in the epidemiology of rabies in Zambia.

### INTRODUCTION

Mongoose have been incriminated as a reservoir of rabies in Cuba, Grenada and the Republic of South Africa.<sup>1,4,6</sup> To establish if this is true in Zambia, a preliminary survey was undertaken in a 5 Km<sup>2</sup> area adjacent to Mazabuka township (15° 50'S 27° 43'E) in the Southern Province. This area was chosen because of a high prevalence of both jackal and canine rabies. The most common mongoose in the area is the selous mongoose (*Paracynictis selousi*).

### CASE REPORT

Twenty selous mongoose were shot during the months of April and May 1976. Corneal, brain and salivary gland smears were examined for rabies by the Fluorescent Antibody Test.<sup>3</sup> Viral isolation was attempted on brains and

salivary glands,<sup>5</sup> and sera were collected for determination of rabies antibodies by the mouse serum neutralization test using 50 MLD<sub>50</sub> and rabies strain CVS-610.<sup>2</sup>

No rabies antigen, virus or neutralizing antibodies were detected in any of the samples. Despite the small sample size and limited collection period, the completely negative results are surprising. This might be explained by the fact that this species lives almost entirely on termites and insects, in contrast to the more carnivorous species elsewhere. Also, they are nocturnal and shy, therefore, they would have little contact with other animals. Thus the selous mongoose likely does not play a role in the transmission of rabies. Further work will have to be done to determine if this is true of other mongoose species in Zambia.

### Acknowledgements

The authors would like to thank the Director of Veterinary and Tsetse Control Services for permission to publish this paper.

### LITERATURE CITED

1. ANONYMOUS. 1973. U.S. Department of Health, Education and Welfare. Rabies in Cuba. CDC Vet. Publ. Hlth. Notes. Jan. 1973, 1-2.
2. ATANASIUI, P. 1973. Quantitative assay and potency test of antirabies serum and immunoglobulin. *Laboratory Techniques In Rabies*. W.H.O., Geneva, 3rd ed: 314-318.
3. DEAN, D. J. and M. K. ABELSETH. 1973. The fluorescent antibody test. *Laboratory Techniques In Rabies*. W.H.O., Geneva, 3rd ed: 73-84.
4. EVERARD, C. O. R., G. M. BAER and A. JAMES. 1974. Epidemiology of mongoose rabies in Grenada. *J. Wildl. Dis.* 10:190-196.

5. KAPROWSKI, H. 1973. The mouse inoculation test. *Laboratory Techniques In Rabies*. W.H.O., Geneva, 3rd ed: 85-93.
6. SNYMAN, P. S. 1953. Rabies in the Union of South Africa. *Bull. Epiz. Dis. Afr.* 1:94-97.

*Received for publication 27 April 1977*

---