Wildlife-livestock interface in the SE lowveld of Zimbabwe:

First Results on Disease Prevalence Surveys in Wild and Domestic Ungulates

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CLLP Study

Undertaken with Vet. Student in 2006-2007

Questionnaire-based study with farmers at diptanks

TransFrontier Conservation Areas and Livestock Production at the Wildlife/Livestock Interface: Small-Scale Farmer Questionnaire-Based Study in the South-East Lowveld of Zimbabwe. In prep.

Prevalence of main diseases and parasites

- Ticks and TBD ***AHE#2***

Theileria spp

Boophilus spp/Babesia spp

Amblyomma spp/E.ruminantium

- Zoonosis ***AHE#1***

Brucellosis

BTB

- FMD ***AHE#3 – CORUS***

- Other viral diseases

RVF, LSD, …

Ticks and TBD ***AHE#2***

Cf Lenin Jomane poster presentation

- Main objectives

Compare abundance and prevalence in different sites

Influence of the seasons on ticks abundance

Differences between wild and domestic ungulates

Zoonosis AHE#1

Brucellosis

Bovine tuberculosis

Hyp: endemic in wild and domestic ungulates

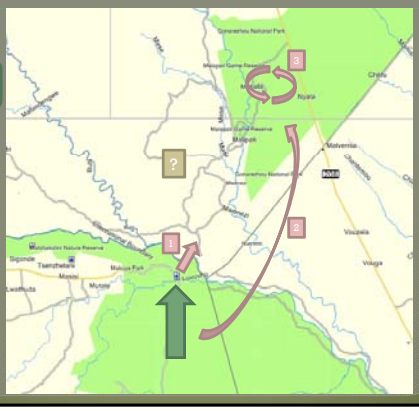
Malipati: n=411; prev = 13%

Pesvi: n=479; prev = 15,8%

Wildilfe: n>100 prev = 0%

Zoonosis AHE#1

Bovine tuberculosis



Zoonosis AHE#1

Bovine tuberculosis

Comparative IDR test

Pesvi: n=329; 9 positives

Malipati: n=180; 2 positives

2 animals slaughtered for PM

Interferon gamma test

Buffalo: n=38; 4 positives

2 Buffaloes slaughtered for PM

Need culture results

FMD AHE#3 - CORUS

Circulation of FMD strains

Efficiency of BVI vaccine on cattle

Since 2000, recurrent outbreaks in SEL

SAT 1, 2, 3 present in wildlife in the past

Hyp: FMD endemic in wildlife and cattle

FMD AHE#3 - CORUS

Preliminary serological results

	SAT1	SAT2	SAT3	0 strain	1 strain	2 strains	3 strains
Buffalo	35	26	25	2	5	12	19
n=38	92,1%	68,4%	65,8%	5,3%	13,2%	31,6%	50%
Impala	0	0	0	24	0	0	0
n=24	0	0	0	100	0	0	0
Kudu	7	9	3	12	4	3	3
n=22	31,8%	40,9%	13,6%	54,5%	18,2%	13,6%	13,6%

Probangs at OVI

Rift Valley Fever

Outbreaks in 2008 & 09 in SA

In cattle & buffalo farms

Hyp: Role of wild ungulate species

Hyp: Role of rodents

Wildlife sera under testing at OVI

Lump Skin Disease

Disease often reported by farmers

Few data on wildlife

Hyp: Role of wild ungulate species

Wildlife sera under testing at OVI

Conclusion

Collaboration: Veterinary Services, Parks, Research Institutions, SANParks

Surveillance data is produced at the W/L interface

Host-pathogen community interactions

Relating to contact study

Preliminary results

Molecular data pending

Thank you