




African Lion (*Panthera Leo*) Bovine Tuberculosis Disease Risk Assessment Workshop

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Why is this a critical project?

- Spatial distribution of the disease is increasing more rapidly than expected
- Host range of BTB is increasing progressively with 12 species documented
- Insufficient data to demonstrate the effects of BTB
- Scientific and conservation communities opinions differ on effects of BTB on lions
- Policy-makers recognised a need to determine appropriate strategic directions to address the knowledge gaps

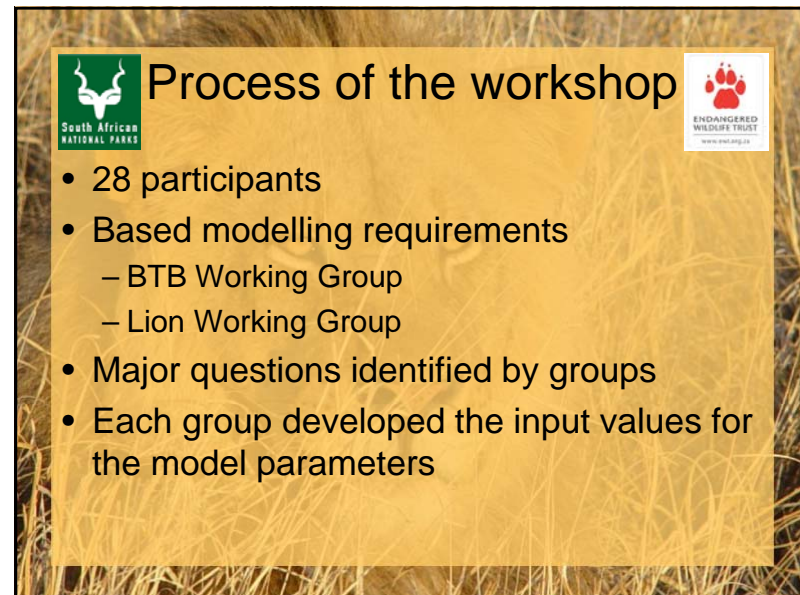


Purpose of the workshop

- Evaluate the current status of lions in KNP
- Collate current knowledge of BTB in lions
- Review research and clinical findings
- Investigate potential population outcomes
- Identify knowledge gaps
- Identify strategic direction

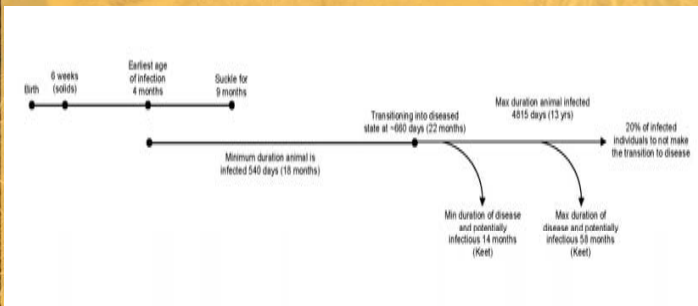
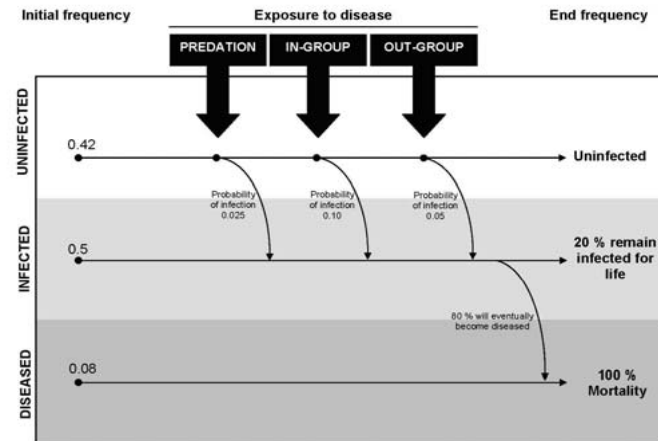
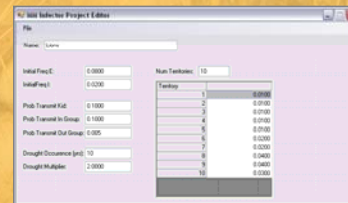



CONSERVATION BREEDING SPECIALIST GROUP
SOUTHERN AFRICA



Process of the workshop

- 28 participants
- Based modelling requirements
 - BTB Working Group
 - Lion Working Group
- Major questions identified by groups
- Each group developed the input values for the model parameters



Modelling

- Baseline lion demographics and disease parameter values applied to a full KNP landscape
- Confirmed that transmission parameters (in-group, out-group and predation) are most sensitive

Conclusions

- Many of the parameter input values still need ground-truthing and therefore the focus must be to address critical knowledge gaps
 - Epidemiology of BTB in lions and buffalo
 - Demographics of KNP lions
- As indicated by the models
 - BTB transmission rates in lions

What has been accomplished?

- Solicited input from a broad range of stakeholders
- Helped build mutual understanding
- Implementation of a 6 year demographics study of KNP lions
- Research to validate both antibody and interferon-gamma diagnostic tests for BTB in lions

THANK YOU

