Modelling the impact of roadkill on the conservation of wildlife biodiversity in the Skukuza section of the Kruger National Park, South Africa.

MSc Speed oral presentation
By
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Background

• Roadkill or road ecology studies and publications in protected areas are few in SA, since it is a new field emerging.

• Road Ecology is the interaction between organism and the environment linked to roads and vehicles (Franklin et al. 2002).
Background continued

• Road ecology tries to understand the ecological impacts of roads, traffic, and the landscapes affected and address the relationship between the natural environment and the road system (Forman et al. 2015).
Aim and Objectives

Aim: To generate & asses a roadkill-risk map for the Skukuza section of the KNP.

Objectives:

- Determine wildlife roadkill hot/cold spot areas.
- Compare roadkill rates on the paved & unpaved roads.
- Record traffic volumes & speeds on the selected roads.
Study Area
Methodology

Quantitative (numerical data)

- recording GPS coordinates for identified roadkill.
- Camera trapping information of vehicles using selected roads (transect).
- Arc GIS for analysis and map production
Data collection and procedure

- Ecological seasons, cold-dry (July – August), the hot-wet (November) and hot-dry (February) 30 days each season.

- The transect covers four different roads, in which two are paved and two unpaved roads in the park.

- Total Kilometres covered will be 88.01 per day.
young water monitor
Tree squirrel
Goals or expected outcomes

• To design a predictive map of roadkill occurrence and testing model through Arc GIS software.
• To understand the causes roadkill in protected areas.
• To reduce roadkill rates.
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