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# Reviving the ecosystem in Bushbuckridge Nature Reserve



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## MISG-SA25

## Tourism Sector

### Industry Attractions

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**Date:**

20 January 2025

**Venue:**

Wits University



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# INTRODUCTION

- The Bushbuckridge Nature Reserve is geographically located in the north of Mpumalanga Province, under Bushbuckridge Local Municipality.
- It shares a boundary with Kruger National Park and local communities near the Injaka dam.
- The area is about 7000 hectares, co-managed by the Mpumalanga Tourism and Parks Agency (MTPA) and Communal Property Associations (CPA) through Integrated Management.
- Interestingly, it is 100% land claimed by Sisonke CPA (95%) and Injaka Watervaal (5%).

# Map: Bushbuckridge Nature Reserve



# BACKGROUND

## Strengths

- The Bushbuckridge Nature Reserve aims to be a world-class Nature Reserve.
- It can contribute to conservation as mandated by the National Biodiversity Act (Act No. 10 of 2004) and the Mpumalanga Nature Conservation (Act No. 10 of 1998).
- The reserve's value as a significant catchment area and its position in the Kruger to Canyons Biosphere Reserve as an ecological corridor should be considered an added advantage.
- Presently not open for commercialisation!

## Opportunities

- It plans to offer its visitors and future generations a safe and unique nature experience at its best (Bushbuckridge Nature Reserve Management Plan, 2016-2022).
- The envisaged activities in the nature reserve will link the Blyde River Canyon Nature Reserve and the Kruger National Park to maintain and improve the movement of animals and plants through reserves and potentially improve the resilience of ecosystems to climate change.

## Weaknesses

- Areas adjacent to the Reserve have undergone habitat losses, and the size and densities of human settlements have increased in Bushbuckridge (Coetzee et al., 2010).
- The activities of impoverished communities are seen as a major driver of landscape change.
- The increases seen in human-impacted vegetation suggest rural settlements depend on adjacent communal lands for cattle grazing, fuelwood, and medicinal plants, amongst other ecosystem services.
- These further stress the importance of the nature reserve as a conservation area and the need for detailed terrestrial biodiversity data.

# Background

## Threats

- On the other hand, as is experienced in other nature reserves, human-wildlife conflict and coexistence are serious challenges.
- This is not an exception for Bushbuckridge Nature Reserve, which includes livestock of the communities residing in the boundary that enters the Reserve since some of the fence is down.
- Nyhus (2016) believes that human interactions with wildlife are a defining experience of human existence, although these interactions can be positive or negative.
- It is understood that naturally, people compete with wildlife for food and resources and have eradicated dangerous species, co-opted and domesticated valuable species, and applied a wide range of social, behavioral, and technical approaches to reduce negative interactions with wildlife (Nyhus, 2016:147).
- **If such conflicts are not addressed, they eventually lead to the extinction and reduction of numerous species and uncountable human deaths and economic losses.**

# Problem to Investigate

- Design or develop a mathematical model to determine what can be done to revive the ecosystem of Bushbuckridge Nature Reserve since there is currently no life or meaningful activity.
- This design should also assist with presenting viable tools for controlling the ecosystem versus human-wildlife conflict.

# ACKNOWLEDGEMENTS

- University of South Africa
- University of the Witwatersrand
- University of Johannesburg
- Centre of Excellence in Mathematical and Statistical Sciences
- Mathematics in Industry Study Group -SA
- Mpumalanga Tourism Parks and Agency (MTPA)
- Bushbuckridge Local Municipality

**Thank you for listening!!**

