



Caryn Penderis

32 – 23/12/1980

Wildlife Science

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South Africa

My main research focus attempting to answer the many gaps in our current understanding of semi-arid savanna browse production in southern Africa. My PhD, on the determinants and measurement of savanna browse production, was completed through the University of KwaZulu-Natal. I enjoy problem solving and the dynamics of model building and testing. I thrive in the outdoors and love being involved in research that takes me out into game reserves. A primary focus of my research is to have management, grassroots application, impacting current game management and conservation.

CURRENT RESEARCH

Topic

Semi-arid savanna browse production: determinants, measurement and prediction

Methodology

- Cumulative shoot growth measurement of key savanna tree species.
- Regression tree analyses
- Multivariate adaptive regression splines
- Partial volume: available browse biomass regression

Application

- The development of models for the determination of browser carrying capacity on game reserves/ ranches.
- Carbon stocks estimation
- Ecosystem monitoring
- Management of bush encroachment

UKZN main Publications

1. Penderis CA and Kirkman KP (in press). Using partial volumes to estimate available browse biomass in southern African semi-arid savannas. *Applied Vegetation Science*.
2. Penderis CA and Kirkman KP (in press). Savanna browse production: I Determinants and measurement. *African Journal of Range and Forage Science*.
3. Penderis CA and Kirkman KP (in press). Savanna browse production: II Prediction. *African Journal of Range and Forage Science*.

Past Researches

1. Development of a computer-based model for estimating browser carrying capacities in semi-arid and sub-humid savannas in KZN
2. 42st Annual Grassland Society of southern Africa congress in 2007 – platform presentation entitled: Predicting browse patterns: Is it feasible?
3. Kruger National Park networking meeting in 2008 – platform presentation entitled: Predicting browse production for evergreen, semi-deciduous and deciduous savanna tree species in northern Zululand

Future Interests

1. Further development and testing of browser carrying capacity models
2. Community resource development and management
3. Conservation research

Extra Interests

Church, Being in the bush, Photography, Sport (swimming, gym), Dance (zumba, modern, ballet), Reading