A total of 374 roadkills were observed on a 67 km transect that was driven daily over a 30-day period. These comprised 81 different species from all terrestrial vertebrate groups. Our preliminary data indicated that roadkill rates peaked at weekends, although this could not be related to traffic volumes which were not measured during this pilot study. Future testing will be implemented to obtain baseline rates of roadkill in the Greater Mapungubwe Transfrontier Conservation Area (GMTFCA) in the northern Limpopo Valley of South Africa, a World Heritage Site.

The prospect of excessive traffic in the way of labour, transport and other heavy vehicles on the eastern fringe of the GMTFCA, is a major cause for concern, since this comes with the proposed Vele Coal mine and associated power station site at Wiepe.

Determination of feedstuffs nutritional composition and diet nutritional quality of black rhinos in the National Zoological Gardens of South Africa

Mwimbi Ulrich[1], Francois Siebrits[1] and Khanyisile Mbatha[2]
[1] Tshwane university of technology, Department of Animal Sciences
[2] National Zoological gardens of South Africa, Research and scientific Services

Mwimbi Ulrich, Tshwane University of Technology, Pretoria, Staatsartillerie Road, Pretoria West
(012) 382 5323 / 076 34 77575; mwimbiku@tut.ac.za

The processes of making the right diet choices and limitations in the supply of nutrients are special challenges to diet management in the zoological communities. However, having a working knowledge of the nutrients needed by the animal, and what feeds will supply those nutrients, is one of the most important steps in managing an animal in captivity. For several years, the National Zoological Gardens of South Africa (NZG) suffered because of the absence of feeding and sound nutrition. The feeding practices were based on common nutritional knownledge, human understanding, and livestock nutrition. NZG food items are mainly composed of plants, vegetables, meat, fish, invertebrate and vertebrates, pellets and some supplement.

Literature survey and laboratory analyses were used to determine the nutrient composition of selected feedstuffs. Furthermore, the variation in the composition of feed components such as lucerne (*Medicago sativa)* and mealworms (*Tenebrio molitor)* according to season and developmental stages respectively, were determined as well as that of eggs and day old chicks according to processing methods. International Network of Feed Information Centres (INFIC) nomenclature were adopted to describe the items. The evaluation of the diet sheet were done with the Zootrition™ programme.

Results revealed that there were significant nutritional differences between lucerne procured in winter and in summer in terms of protein; between day-old chicks evicerated and non-eviscerated concerning protein and fat content ($p<0.05$); and in the case of ash content between eggs with and without shell. Calamari (*Loligo spp.),* Hake (*Merluccius spp.*), and Maasbanker (*Trachurus capensis)* did not differ significantly within species. Sardines showed significant differences between them. Lastly, fish differed signicantly between species ($p\leq0.05$).

Evaluation of the Black Rhinoceros (*Diceros bicornis)* diet sheet with Zootrition™ programme, in- house mix diet showed a high crude protein level and of calcium and phosphorus compared to the percentage recommended. Excess protein could lead to animal health problems characterised by obesity, bleached hair coat, anaemia, and ataxia. High content in calcium and phosphorus with strong imbalances between them and can alter the gut rate passage and bone deformities.

Southern African Wildlife Management Association

Symposium 2011

ATKV-Hartenbos Holiday Resort, Hartenbos Southern Cape

Host: University of Stellenbosch
Co-hosts: Nelson Mandela Metropolitan University – George Campus: Saasveld
Cape Peninsula University of Technology

Table of Contents:

The Human-Natural Resource Interface: Reconciling Conflicting Trade-offs?

18-21 September 2011

Organising Committee:

Louw Hoffman (University of Stellenbosch), Frans Radloff (Cape Peninsula University of Technology), Stefan Hattingh (Nelson Mandela Metropolitan University, George Campus: Saasveld) & Elma Marais (SAWMA Secretariat).

Nelson Mandela Metropolitan University
for tomorrow

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

Cape Peninsula University of Technology