

## **Project Update: September 2009**

### Work-to-date

#### **Biodiversity field research**

Fieldwork has been completed with final sampling taking place in February 2009 on the fire plots in the mesic savanna of Kruger National Park. Since then many months have been spent sorting spider and insect specimens and beginning the identification process. Spider identification has been helped with the close collaboration of Dr Ansie Dippenaar-Schoeman from the Agricultural Research Council, Pretoria. Identification is still underway to get specimens identified to species-level.

The termite identification has been made possible through collaboration with Dr Paul Eggleton of the Natural History Museum, London. MSc student, Andrew Davies spent a very productive six weeks working with Dr Eggleton at the Natural History Museum. During this time he was able to complete the majority of his specimen identifications to species level and returned to South Africa having considerably improved his taxonomic skills! He is now one of a handful of people with termite taxonomic experience in southern Africa.

In addition to specimen identification, Andrew has been working on the preparation of a short note on the paucity of fire and termites studies in Africa. This will be submitted for publication in an international scientific journal within the next couple of weeks.

MSc student Bradley Reynold's project on spiders and fire featured in the July edition of the SANSA newsletter (South African National Survey of Arachnida) (see: SANSA article\_July2009.jpeg)

#### **Conferences**

Both MSc students presented papers at national and international conferences this year. In April 2009 the core 'Burning for Biodiversity' research group presented at the 7th Savanna Network meeting in Kruger National Park, South Africa. Later in the year Bradley Reynolds attended the International Congress for Conservation Biology in Beijing, China (11-16<sup>th</sup> July) and presented his research work (paper entitled '*The effects of long-term burning regimes on savanna spider assemblages*'). Due to logistical arrangements with sample identifications, Andrew Davies attended the 10<sup>th</sup> International Congress of Ecology in Brisbane, Australia (16-21<sup>st</sup> August). He presented results from his research at a symposium on fire ecology with a talk entitled '*Fire and termite dynamics in a southern African savanna*'. Both presentations attracted much interest.

#### **Education & Communication**

Posters introducing the Burning for Biodiversity project and providing information about why and how savannas should burn, and the effects of fire on biodiversity have been

completed. The posters have been produced in both English, and the local language Shangaan, with the aim to provide information for local, national and international visitors to Kruger National Park (see: [B4Bposter\\_English.pdf](#) and [B4Bposter\\_Shangaan.pdf](#)). Posters have been widely distributed at a range of locations within the park including the school media centre, environmental education unit, rest camps, picnic sites, the plant nursery, the primary school, and the library. In addition several other external environmental education units have received copies.

In early 2009 project leader, Kate Parr, spoke to high school learners about fire and insect biodiversity at the Mopani Further Education & Training College in Phalaborwa (Limpopo Province, South Africa). Kate was accompanied by Mr Hendrik Sithole from South African National Parks who also spoke about the fascinating world of ants! A total of 36 learners and six teachers came from six local high schools and colleges in the surrounding area (Lepato M. High School, Ntshuxeko High School, Mopani SE FET College, Maphokwane High School, Nkateko High School, Lebeko High School).

The successful afternoon concluded with a discussion about insect diversity, including many interesting and diverse questions from the students, and an opportunity for the students to view ants for themselves using microscopes. The afternoon was organised in collaboration with SAEON (see: [SAEON newsletter\\_April2009.pdf](#)).

### **Future**

Ant specimens will be identified in November and December. Other future work includes preparing publications arising from the field-based research. A 'Burning for Biodiversity' fire-managers workshop is planned for October 2009 which will bring together researchers, field rangers and park managers.