The Tierberg Karoo Research Centre

If ow many of us are aware of the internationally known research facility on Prince Albert's doorstep? Kokkedoor isn't the only attraction of note. The Tierberg Karoo Research Centre (now known as Tierberg LTER, the latter standing for Long Term Environmental Research) has been around for many years and has contributed a great deal to today's scientific knowledge of arid lands ecology, especially that of the long overlooked Karoo.

It started in 1975, when the CSIR set up the Terrestrial Ecosystem Programme to embark on nationwide biome based research. The biomes included in the programme were, among others, the Forest Biome, the Grassland Biome and the Savannah Biome, and the research had a strong focus on management issues. In 1986 the Karoo Biome Project was developed out of the innovative and ambitious minds of several rangeland and pasture scientists, namely Prof Brian Huntley, Roy Siegfried, Richard Cowling



Canadian scientist, Dr Thomas Leuteritz, (left) talks to a group of Prince Albert Primêr learners about the work being done at the Tierberg Karoo Research Centre

and Dr Piet Roux, who had specific management questions about the Karoo. At this stage Prof Richard Cowling at the University of Cape Town and Dr Piet Roux at Grootfontein, Middelburg, edited a series of reports on the Karoo Biome Project, synthesising knowledge of the Karoo and highlighting research priorities.

The Karoo Biome Project started with the selection of a suitable site that had to meet certain strict criteria. At this stage, a team of scientists, including Sue Milton and Richard Dean, were assigned the ambitious task of establishing the research centre. A site was eventually selected about 30 km east of Prince Albert on the farm Tierberg.

In 1987 the farmhouse on Tierberg was prepared as accommodation for researchers and students, a 100 ha site on the farm was fenced to exclude domestic livestock and a weather station was erected.

Tierberg LTER falls within the region where the Arid Karoo biome meets the Succulent Karoo biome and where rainfall is unpredictable as it falls within an intersection of the summer and winter rainfall region. A weather station has been intermittently measuring all weather characteristics at the site since 1987.

N.G. KERK LEEU-GAMKA 60 JAAR VAN GENADE - AFGESTIG VAN PRINS ALBERT (1954) FEESNAWEEK: 29 EN 30 NOVEMBER 2014

PROGRAM:

SATERDAG 29/11/2014

OGGEND: STALLETJIES OP KERKGROND EN LEKKER KUIER
AS U DALK 'N STALLETJIE STAANPLEK WIL HUUR MOET U VROEGTYDIG BESPREEK VOOR 10/11/14
BY KONVENER CARINA SCHEUN - 083 581 1400
STALLETJIES OPSTEL BEGIN 6VM TOT 4NM OPRUIM DAN

AAND: SPITBRAAI, DANS, KONTANT KROEG OP ABRAHAMSKRAAL
BESPREKINGS MOET GEDOEN WORD VOOR 10/11/14
KONTAK KONVENER MARIETJIE BOTES 072 119 2922
6-7 NM BYEENKOM OP PLAAS EN 7 NM BEGIN ETE
LEKKER KAROO KUIER

SONDAG 30/11/2014

OGGEND: EREDIENS BY N.G. KERK TE LEEU-GAMKA OM 9:30 VM VINGERETE NA DIENS OM TE GROET

VERLANG U VERBLYF? KONTAK KONVENERS MIEN GOUWS 023 521 2154 MARIETJIE BOTES 023 521 2119

> ENIGE ANDER NAVRAE KONTAK AMANDA ROSSOUW 082 82 85 160

Because of the grazing history of Tierberg LTER and of the two surrounding farms, the site offers immeasurable value for long-term ecological monitoring and management research of arid and semi-arid habitats.

Research by various international and local collaborations and independent scientists at Tierberg LTER has produced at least 99 published scientific papers, 26 popular articles and books since 1989. Not to mention the many scientists who received their PhD and Masters degrees through work on Tierberg, the many studies done by post-doctoral scientists and the many school groups that have benefited from the interaction and training activities with these professionals on Tierberg.

The objective of the Tierberg Karoo Research Centre is to understand the ecological processes underlying and governing the current and future state of Karoo habitats. In order to do this, all components of a habitat (fauna, flora, and non-biological aspects) need to be understood and this is exactly what the

Tierberg Karoo Research Centre set out to do. All research done serves as baseline information from which future studies can build.

Much has already been achieved through results from long term experiments looking at the influence of grazing history on plant cover, demography, seed set, survival of seedlings, competition among plants and composition of the rangelands.

Many other studies have focused on the interaction between plants, birds, ants, termites and the effects of rainfall patterns. International collaborators have used available data to model long-term responses of vegetation grazing value to land use and rainfall patterns, and researchers from other overseas and South Africa institutions have studied bees, tortoises, and ant communities.

There are still large research gaps that still need to be filled at Tierberg, some of which include studies on spiders, scorpions, and other invertebrates, soil studies, atmospheric studies, microbial community studies, community structure and land-use studies.

Thanks to the generosity of Jannie Kitshoff, the owner of Tierberg farm, the South African Environmental Observation Network (SAEON) recently acquired ownership of the 100 ha Tierberg Research Centre. SAEON envisions further building on the Tierberg legacy and filling the knowledge gaps by continuing with current long term data monitoring, continuing and expanding existing experiments, informing new research avenues, promoting non-botanical studies, promoting studies on ecosystem processes and studies on rehabilitation, restoration and management practices, and further expanding baseline data sources and publishing important findings.

With a successful history, Tierberg LTER now guided by SAEON, has a bright future ahead; not only in its scientific contributions but also by contributing to a brighter future for all.

- Liesel Hein -



Swartberg Hotel



77 Church Street, Prince Albert / Tel: 023 5411 332

Coffee Shop

Breakfast, Lunch, Cakes

Victoria Room Restaurant

Open daily for dinner, including Sundays

Bakery

Fresh bread every day / Cakes baked on order

Ladies Bar

Happy hour Fridays 17h30 - 18h30

Sunday Lunch

Every Sunday from 12h00 - R75.00 per person

Bookings essential