Yesterday, today and tomorrow

The story of the Haenertsburg grasslands of Limpopo

by **Cathy Dzerefos,** Limpopo Branch, Botanical Society

TOP: The quaint village of Haenertsburg, surrounded by grassland and plantations, lies in the foothills of the Wolkberg. Photo: Jane Moncreif.
ABOVE RIGHT: Women undertake a round trip of 40 km to collect *Athrixia phylicoides* for making tea and brooms. Photo: Cathy Dzerefos.
ABOVE LEFT: The small mauve flowers and yellow disc florets of *Athrixia phylicoides*. Photo: Sylvie Köhne.

The Pedi people refer to the Haenertsburg area (in Limpopo Province) as 'Byadladi' meaning 'a place where there are plenty of root foods' or 'a place of plenty'. Gold diggers arrived in 1887 and established Haenertsburg, but were disappointed as mining proved unprofitable. During the gold rush the grassland was used by fortune hunters to graze their horses and cattle.

Although many left for richer gold reefs on the Witwatersrand, Haenertsburg was not entirely abandoned. Its proximity to the lowveld, cooler climate and absence of malaria made it an ideal base to stage military action against Chief Malaboch in the Blouberg, the Rain Queen Modjadji in Duiwelskloof and Chief Makgoba, to whom the name of the nearby Magoebaskloof alludes.

Felling of indigenous trees in the Woodbush forest to supply the Witwatersrand and Polokwane was started by five deserters from the Thirteenth Light Infantry after the Sekhukhune campaign of 1879. (One of these, James Smith, undertook carpentry work for Sir Herbert Baker in the Union Buildings.) Arthur Eastwood, the first Government Forestry Officer arrived in 1903 with the task of halting indiscriminate felling. Indigenous timber was used to construct wagons, carts, buildings, furniture and mine supports. By 1910 the Transvaal Department of Agriculture and Forestry established the first plantations near the Woodbush Forest Station. Eucalyptus and pine trees were planted in what was erroneously considered to be 'unimproved grassland'. Ironically, this was regarded as a forward thinking conservation measure, providing an alternative to indigenous timber.

The rampant destruction of the grassland habitat for plantations led to the demise of associated flora and fauna. The little known *Chlorophytum radula*, was re-discovered 120 years after the first collection by Rehmann - probably on the same day he collected the one and only known specimen of *Kniphofia crassifolia* which is considered extinct. The only reason for the survival of *C. radula* is its preference for rocky

habitat that is unsuitable for timber.

Eastwood's long tailed seps (*Tetradactylus eastwoodii*), a small lizard known only from two specimens collected in open montane grassland at Woodbush over seventy-five years ago is believed to be extinct. The fate of *Acontophiops lineatus* (Woodbush legless skink) and *Afroedura pondolia mulitiporis* (Methuen's day gecko) also seem uncertain. There is only one known nest in Limpopo of the critically endangered blue swallow (*Hirundo atrocaerulea*). In 1905 C.H.B Grant collected four blue swallows from the Woodbush area that are displayed in the British Museum so it is assumed that along with their grassland nesting sites these were more abundant in the past.

The Haenertsburg grassland occurs on a granite-based portion of the Drakensberg escarpment which extends north from the Wolkberg and is geologically distinct. Local botanist Pieter Winter has drawn attention to a number of noteworthy plants. *Aloe lettyae* and *Indigofera rehmannii* are endemic to this high-rainfall, granitic area. Granitic soils tend to be deeper and are favoured for planting crops or plantations. *Wahlenbergia brachiata* is endemic to the Wolkberg and the Woodbush range and *Hemizygia rehmannii* is endemic to the 'Transvaal' escarpment. Mpumalanga tree enthusiast and author Ernst Schmidt has discovered a new tree species, closely related to *Gymnosporia grandifolia*. This is also home to several distinct forms of more widespread species, such as *Bersama transvaalensis*, now considered to be part of *Bersama tysoniana*, and variant forms of *Protea caffra* and *Protea simplex*.

Many grassland plants have traditional uses, for instance, the leaves of *Athrixia phylicoides* are used to make 'bos' tea and the remaining hard stems for hand-brooms. Unfortunately the roots are also harvested, which may place pressure on the remaining population particularly as human populations expand while grassland areas decrease. This aromatic shrub is used for coughs, sores and boils as well as an aphrodisiac.

The Haenertsburg grassland boasts a large colony of *Scilla natalensis* (blue squill), which has a conservation status of 'vulnerable'. The plant can live to at least twenty years, but bulbs less than four years old are harvested and sold for muthi. The blue squill is used as a birthing aid, an enema, or to heal tumours, boils, sores and fractures. Ground leaves are fed to a child who is late in walking.

Proximity to Haenertsburg village and plantations has had negative repercussions for the grassland as there is a lot of mowing, ploughing and burning of fire breaks. Less than a decade ago the entire grassland next to Haenertsburg was burnt every winter. Today landowners and biologists are starting to implement block and rotational burning to ensure that biodiversity is protected.

Sadly the grasslands have also been used for dumping, and timber trucks, off-road vehicles, motorbikes and quad bikes have created destructive paths and tracks. Uncontrolled grazing of domestic livestock and the mock 'horses and hounds' hunt has destroyed the population of *Aloe lettyae*.

Birds and Vervet monkeys help to spread invasive exotic plants from gardens into the grassland and forest patches. *Rubus cuneifolius* (American bramble) introduced for making jam, quickly colonizes paths and riverine areas becoming a hiker's nightmare. The attractive *Lilium formosanum* (formosa lily) is also spreading and it is rumoured that prominent members of the community scattered the seeds into pristine grassland areas while hiking! Local road hawkers sell the lilies as cut flowers to passing traffic. The ex-Limpopo Branch secretary, Clare Bell, recently collected the light round seeds for wedding confetti. (She first microwaved the seeds to prevent them from germinating.)

The degradation of the Haenertsburg grassland is at last being challenged and rectified with funding from the Botanical Society and the National Lotteries Board. This funding is being used to involve the community and raise environmental awareness and appreciation. An Environmental Management Plan, including biodiversity protection and low impact recreational opportunities, will be developed. Stevens Lumber Mill, Silicon Smelter and the Earthwatch Institute have made further funding available to search for blue swallow nests.

At long last the grasslands in Limpopo are attracting funding and interest and are being recognized as important ecosystems.

To visit the area, visit the site www.magoebaskloof.com or contact Lizzie on 015 276 4972 for information.

TOP: The endemic *Aloe lettyae* flowers from February to April in the tall grass. Photo: Sylvie Köhne.
CENTRE: *Indigofera rehmannii* is endemic to the Woodbush range. Photo: Sylvie Köhne.
BOTTOM: *Scilla natalensis*, an important medicinal plant, has the ignominious reputation of creating strife in a family or a community. Photo: Mike Strever.

Acknowledgements
Pieter Winter (National Botanical Institute, Pretoria) is gratefully acknowledged for providing information on biodiversity and reviewing the article.

The author
Cathy Dzerefos is a resident of Haenertsburg and a private Environmental Consultant. Her research has a strong emphasis on ecological and socio-economics of rural areas within the Savanna and Grassland Biomes. She is a founder member of the Limpopo Branch of the Botanical Society.