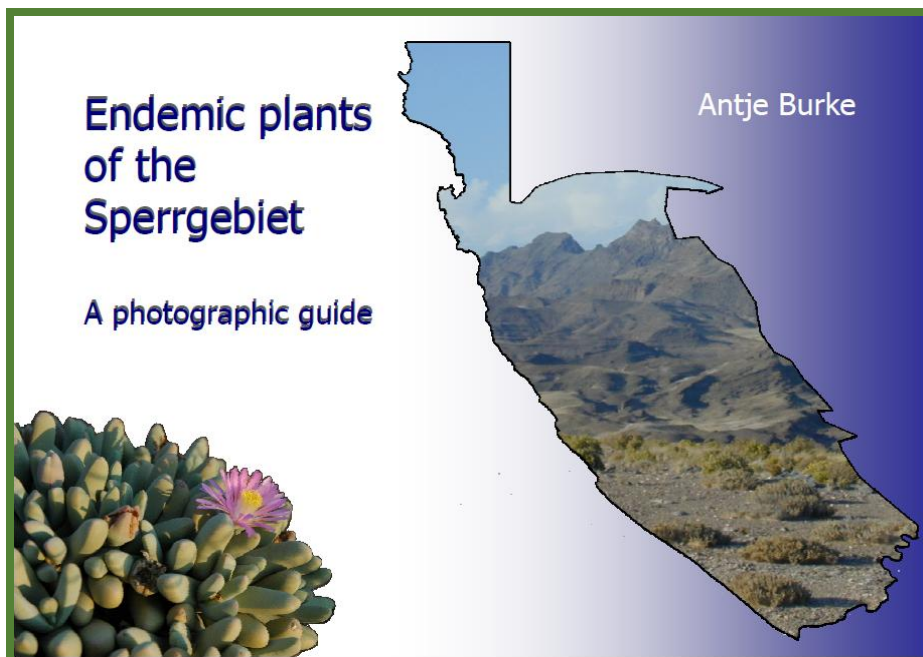


PRESS RELEASE

Highlighting the importance of the endemic plants of the Tsau //Khaeb (Sperrgebiet) National Park

The first wildflower guide for Namibia's plants in e-book format and in the public domain is now available!

by Antje Burke

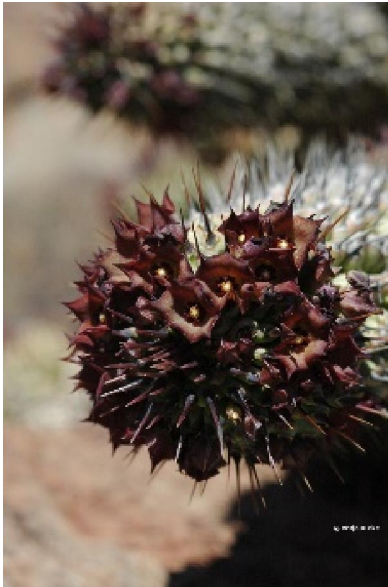


The south-west corner of Namibia not only harbours diamonds but something equally precious – the only large, continuous piece of the Succulent Karoo Biome which has not been altered by livestock grazing.

The Tsau //Khaeb (Sperrgebiet) National Park protects this piece of Succulent Karoo and its exceptional biodiversity. The park has not only the highest plant diversity among Namibia's parks, but also the highest number of plant species which only occur there and nowhere else on earth. These endemic species deserve particular attention because of their limited geographical range and numbers. Many are restricted to very special habitats within their already limited range. Any mining, infrastructure, tourism or other developments need to take this into account.

Apart from a moral responsibility to protect these species from extinction – and who knows what properties these endemic plants may possess that

could, for example, aid humankind in the fight against diseases – avoiding impacts on endemic species invariably leads to environmentally less harmful practices.



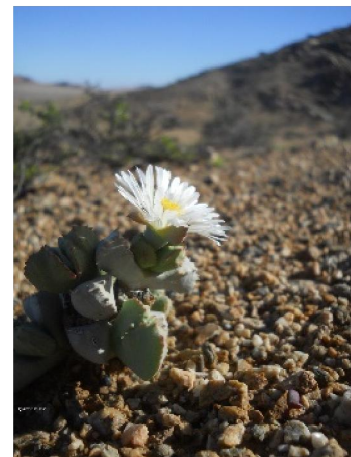
A good knowledge of the park's plant life and its habitats is therefore essential, particularly its endemics. Alas, due to the high plant diversity in the park overall, most endemics are not easy to recognise. Natural resource managers such as conservation and environmental officers thus face a tremendous challenge and may give up in despair.

However, it is not necessary to know every single plant species by its name in order to make wise decisions and recognise environmentally sensitive habitats. Recognising vulnerable species by growth and life forms was successfully pioneered in a mapping exercise with park staff on the Lüderitz peninsula, for example. However, one aspect that could not be adequately covered was recognising the plant endemics. The park

has some 30 plant species which only occur only there and no-where else on earth. Park staff therefore needs to ensure that populations of these park endemics are not compromised by inconsiderate developments.

Illustrated field guides are the most accessible form of learning to identify the flora. The two existing field guides (Burke 2003, Mannheimer et al. 2008) cover common plants in the park, but include only few endemics. While hard copy books have their place, plant identification has moved towards modern media in the form of websites, apps and open access publications. The park's Biodiversity Monitoring Framework, for example, uses digital tablets and an app for data capture. This app is linked to electronic guides for recognising groups of plants and alien species. This is in line with the Ministry of Environment, Forestry and Tourism's approach towards using digital tools for park management.

With the support of the Namibian Chamber of Environment this project focussed on identifying the endemic plants of the park and producing an e-book with four accompanying posters. This e-book will give conservation officers a much-needed tool and, with some practice, will enable them to recognise the most restricted plant species in the park. The first step, identifying which species are endemic to the park, sounds easy but proved complex and required extensive literature, and database research. The constant name changes in



the most diverse group of endemics, the mesembs (Aizoaceae, Mesembryanthemaceae or vygies) did not make this task easier. But eventually colleagues from the National Botanical Research Institute and I identified some 30 park endemics and another 30 species which are almost restricted to the park, extending just marginally across its borders into neighbouring areas.



The Environmental Education Centre at the park entrance near Lüderitz will also benefit from this project and receive some much-needed educational material. The posters on endemic plants accompanying the e-book supply information in a condensed format, tailored for non-specialists and thereby contribute to raising awareness.

Apart from serving an immediate need within the Ministry of Environment, Forestry and Tourism, this e-book is open access and therefore in the public domain. It will thus also be available to students, young professionals, tour operators, environmental practitioners and anybody with an interest in Namibia's fascinating flora. It is available for downloading on Namibia's Environmental Information Service (EIS) at <http://the-eis.com/elibrary/search/23084>. This is the first identification guide in e-book format for Namibia's indigenous flora.

Although this e-book is about plants, reading it will not require a degree in botany. I have written this for non-specialists and I have limited technical terms as far as possible. I have also included an illustrated glossary for terms that could not be avoided. A wide-ranging introduction gives insightful background to the reasons, patterns and conservation of plant endemics and I hope will spark an enthusiasm for these marvellous examples of adaptation to nature.

The e-book is structured according to the main growth forms - bulbs, shrubs, herbs and succulents - which should make it easy for non-specialists to find the right section in the book immediately. Within growth forms the plants are organised according to botanical relationship, i.e. plant families. Although recognising plant families becomes more technical, features of the main families are well-described in the introduction and accompanied by drawings which make it easier to recognise the families.

The e-book illustrates each of the over 60 species with photographs or sketches. It further gives a description of the plant, a map of its distribution and, to aid identification, highlights similar-looking species by naming important differences.

A paper in the Namibian Journal of Environment provides the scientific underpinning of this work (<http://www.nje.org.na/index.php/nje/article/view/volume4-burke3>) and the four posters are also available on the EIS at <http://the-eis.com/elibrary/search/23084>. All these products are freely available.

Please read, use and enjoy the first e-book on Namibia's indigenous flora. My dearest wish is that it makes plant identification more accessible and will ignite a spark in scores of young Namibians to protect Namibia's flora's into the future!



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28 September 2020