

A little goes a long way – the unique southern Namib flora

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All photos by **Antje Burke** ©, except photo 10, by **John Burke**



Photo 1: The “window plant” (*Fenestraria rhopalophylla*) is a perfect example for coping with limited water and hiding from strong and sand-blasting winds.

Having experienced several cycles of often dramatic climatic fluctuations from hyper-arid to warm subtropical and to relatively benign winter rainfall conditions, responses to these conditions have been stored in the evolutionary memory of the southern Namib flora and still expressed in its flora to this day.

Today the vegetation in the Sperrgebiet, between Oranjemund and Lüderitz and a 100 km semi-circle to the north and east is part of the southern Africa's Succulent Karoo Biome and recognised as one of the world's top biodiversity hotspots (Myers et al. 2000). The varied long-term climatic history, the fact that the area is today positioned at the interface of two major bioclimatic regions in Africa and a tremendous variety of topographic diversity have

made it one of Namibia's most diverse floras. Nearly a quarter of the country's entire plant diversity is literally locked up in the restricted diamond area, known as the Sperrgebiet (Burke & Mannheimer 2004).

Nevertheless the study area is arid with an annual mean rainfall ranging between 20-70 mm, which makes this remarkable diversity even more astounding. But rains are not the only sources of moisture to sustain life here. Fog and dew play an almost equally important role and even more so, as they occur throughout the year, while rains are more restricted to a particular season.

Superficially the vegetation on the vast open plains appears fairly homogenous with expanses of succulent shrubs at no more than

