

Mountains

Between

Desert

and

Escarpment

Leave Windhoek on the road towards Gamsberg Pass and turn off after 100 km and then continue south-westwards through the undulating hills of the Khomas Hochland. The road eventually descends the breathtaking Spreetshoogte Pass through the Great Western Escarpment, continuing down towards the broad plains and ochre dunes of the Namib Desert. If you turn right just after the mountainous gorge at

Büllsport (petrol is available here), you reach the Naukluft after a leisurely five hour drive on good gravel roads.

The secluded campsite nestles in a shady grove of Tamarisk trees and provides an ideal base for exploring nearby ravines. However, the prospect of magnificent views invites the visitor to venture into the mountains towering above.

There are several day-hikes which start at the camp

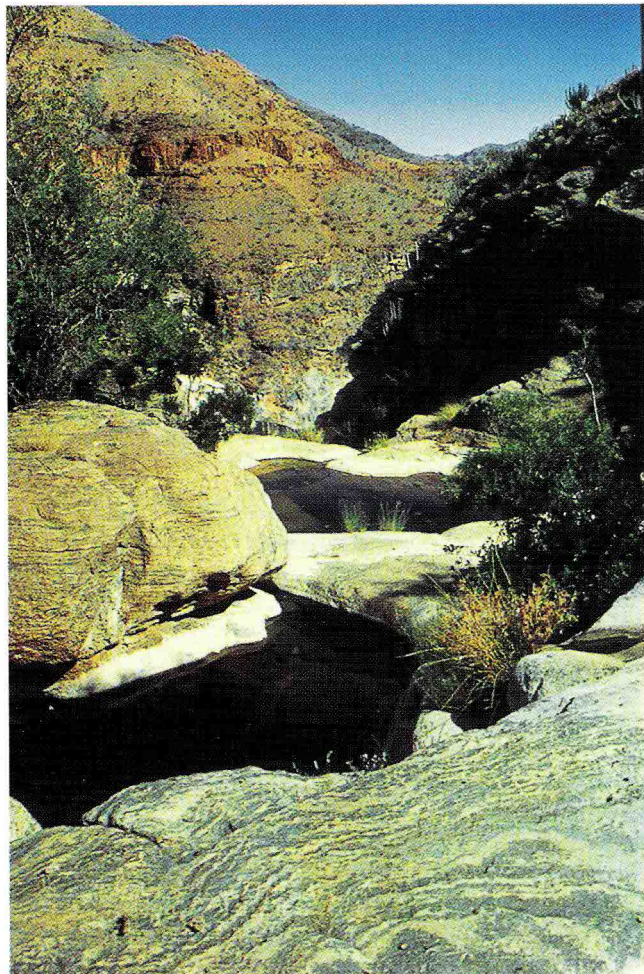
site and make their way beneath immense leafy Fig trees anchored in rocky riverbeds, past crystal clear pools, eventually reaching superb mountain viewpoints before a winding descent to camp. The riverbeds are teeming with birdlife. Many, such as Redeyed bulbuls, Pied barbets, Mountain chats and Laughing doves are almost permanently at the campsite. Baboons there have also unfortunately become habituated to humans, and will opportunistically raid unsecured tents, picnic baskets and cooler boxes. You will hear the loud barking of Rock dassies, perhaps alarmed by a soaring Black eagle. At night you may hear their plaintive cries, the shriek of a Barn owl, the clattering hooves of Mountain zebras or a kudu or klipspringer dislodging a stone on its way to water.

Originally a sanctuary for Hartmann's Mountain Zebra, the farm Naukluft was proclaimed in 1986 and formed the nucleus of the Mountain Zebra Park. Adjoining areas were subsequently purchased to enlarge the reserve. Today a wide corridor connects the Naukluft Mountains with the Namib Desert, thus forming the Namib-Naukluft Park which is, substantially larger than the whole of Switzerland,

the largest in Africa and the fourth largest national park on earth. Zebra or gemsbok and other antelopes can migrate freely to areas where sufficient rains have created life-sustaining patches of grass. "The zebra come down from the plateau and move out over the plains, sometimes disappearing into the dunes, where we can't monitor them easily," says Peter Bridgeford, the conservationist in charge of this section of the park.

To experience the mountains from a zebra's perspective – on foot – is one of the most rewarding of the activities offered by the Ministry of Environment and Tourism in the Naukluft Mountains. Besides the day-trips around the camp, the four-to-eight-day hiking trail is a real challenge for the active and fit. This demanding trail of 120 km takes hikers through deep ravines, past caves and perennial springs, on to the plateau and offers overwhelming views into the desert on the western side and the Great Escarpment on the east. While climbing, hikers will probably notice an abundance of the bizarre looking stem-succulents, such as *Commiphora glaucescens*, *Cyphostemma bainesii*, *Euphorbia virosa* and *Moringa ovalifolia*, on the steep

Visiting the Naukluft Mountains is both challenging and rewarding for those who love the great outdoors



hillsides. Once on the relatively flat top the vegetation changes dramatically to low Karoo-type shrubs and brush.

The fascinating mountain plateau is also now accessible by vehicle, on a recently established overnight 4x4 trail. This carefully planned trail follows pre-existing rough tracks which may tax even an experienced driver's abilities. The utilisation of this section of the park is exemplary since the few small camp sites, hiking trails and the 4x4 trail only cater for a few people at a time and it is essential to make a reservation well in advance.

Following the trails, one can observe evidence of human habitation many centuries old. Stone

Water is abundant in the Naukluft and because of its high quality and good taste is sold bottled in shops in Windhoek.

implements indicate that early hunter-gatherers foraged and sought shelter in these mountains. Graves and ruin evoke the Namas' fierce skirmishing with the Schutztruppe, when with

their leader Hendrik Witbooi they had sought refuge here in the late 19th Century. Laboriously constructed tracks, abandoned farmhouses, dilapidated windmills and water pumps are relics of more recent occupation by pioneering farmers.

Equipped with plant press, soil sampling kit, canteens and camera we set off following Peter Bridgeford's long-standing invitation to begin a botanical survey of the plateau. We anticipated this particular area would reveal the most interesting

plants because of its special topography. The mountains' geographic position places them under the influence of both summer and winter rains, although the former provide most precipitation. Occasionally even snow occurs, such as in August 1994. The mountains stretch south-westward, far into the Namib Desert. Because of their altitude they receive more precipitation than the surroundings. Large quantities of this water are stored underground and slowly released at seeps and into rock pools around the foot. Thus the Naukluft presents a particularly favourable plant habitat, encircled by desert. Botanically and geologically it is an island. The larger part of the mountains themselves are composed of dolomite and limestone, while the surrounding areas consist of igneous rocks such as granite, gneiss and also sedimentary formation. This unique combination, which previously made scientists believe the area a probable centre of plant endemism in Namibia, is certainly sufficient justification in itself for the existence of the park.

Several field seasons later, we still have not covered the massive mountain entirely, but we expect the continuing research to explain the environmental factors determining the distribution and composition of this distinctive mountain flora. The total analysis of the distribution range of all plant species found in the Naukluft Mountains will give an indication of climatic conditions in the past and subsequent

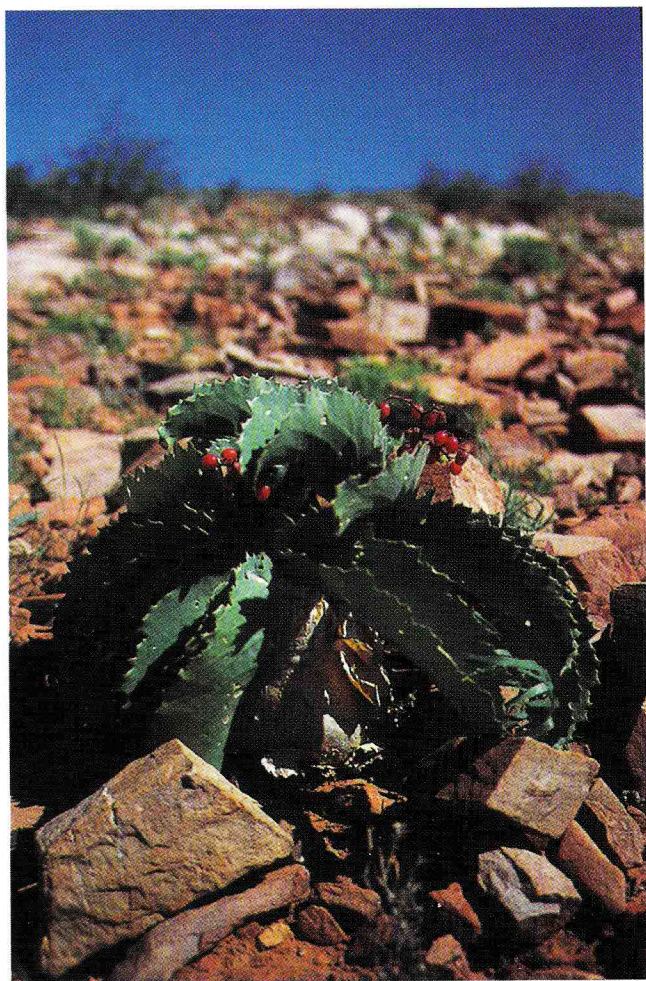


A steep ascent to the plateau on the 4x4 trail.

vegetation history concomitant with the change in climate. This might help to understand which way the vegetation may change in response to environmental changes such as the expected global rise in temperatures.

Although the Naukluft Mountains do not now appear to include plants only occurring here and nowhere else in Namibia, it is still evident that about 20% of the so far 340 recorded species are endemic to the region or to Namibia. Ecologically, preliminary results confirm the composition of the mountain vegetation to be influenced by soil chemistry as well as the nature of the habitats (eg. slope and altitude).

Besides many encounters with birds, zebras, kudu and tortoises which seem unaccustomed to any



The red "grapes" of *Cyphostemma bainesii* unmistakably reveal its ancestry.

threat from humans, we were lucky enough to see the entire plateau blooming after good rains and have established the present limit of distribution of many plant species. Recorded at their northernmost limit are, for example, succulent-leaved shrubs which are prominent in the winter rainfall region of the southern Namib and Namaqualand. Others like the fig species, *Ficus cordata*, *F. ilicina* and *F. sycomorus*, the resurrection bush (*Myrothamnus flabellifolius*) and various stem-succulents occur in rocky habitats all along the escarpment. *Cyphostemma bainesii*, for example, which resembles a misshapen pineapple, is in fact related to the common grape. The tortuous *Commiphora* species, reminiscent of giant bonsais, contains fragrant, aromatic resin similar to the closely related myrrh. Botanically, the most curious record is a relative of the alpine gentian, *Sebaea grandis*, which has up to date only been recorded in the Otavi Mountains.

Whether scientist, simple nature lover, fit hiker, keen birder, or intrepid off-roader, the Naukluft range has something special and has been developed into an extremely valuable asset of our national park. As an open air classroom promoting environmental awareness among its wide spectrum of visitors it can scarcely be surpassed.



by Antje and John Burke

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