Summer 1982

## DESERT DWELLERS

## by Clive Walker

**Abstract:** An aerial survey conducted by the Endangered Wildlife Trust during November 1981 in Kaokoland and Damaraland in South West Africa/Namibia revealed only 84 desert elephants (Loxodonta africana africana), 60 desert giraffes (Giraffa camelopardalis) and 15 desert black rhinoceroses (Diceros bicornis). A five year drought has taken its toll but poachers and hunters have also contributed to the dwindling numbers. According to Philip J. Viljoen, studies over the past 18 months have established the definite existence of a subpopulation of elephants which are restricted to the desert regions of Kaokoland and Damaraland, with little or no genetic exchange with eastern populations. No east/west migration patterns could be distinguished. There is no evidence to support the hypothesis of a surviving race of tall elephants.

Stretching as far as the eye can see, rock upon rock littering the plains and crawling up the side of steep mountains to their summits like edge-to-edge carpeting in pale shades of mauve and red, Damaraland and Kaokoland are lost worlds into which few have been privileged to venture until recently. These areas comprise 4,000,000 hectares (nearly 10,000,000 acres, or 40,470 km<sup>2</sup>) in the northwest corner of South West Africa/Namibia and are parallel to the famed Skeleton Coast, reaching north to the Kunene River and the Angola border (Fig. 1).

Fascinating plant life, found nowhere else on the African continent and dating back thousands of years, provides some sustenance to elephant not yet fully explained in this barren land (Fig. 2). This is also the home of the black rhinoceros who possesses the agility of a goat and the home of the giraffe who appears to drink rarely. Not a great deal has been written about these unusual areas and less about their wildlife. This fact prompted Professor Koos Bothma of the Eugene Marais Chair of Wildlife Management, University of Pretoria, to institute a study, with the cooperation of the South West Africa/Namibia Nature Conservation Department, into the lifestyle of the elephant, giraffe, and rhino. With a grant from the Southern Africa Nature Foundation, Philip J. Viljoen commenced work in 1980 on a study of these three mammalian species living within a desert environment (see Anonymous, 1979).

Living on the edge of the desert and occasionally venturing to the high water on the Atlantic Ocean, these elephants have long been an object of much speculation as to size and ability to survive under extreme conditions. Elephants are regarded as tough and adaptable, but when one is flying over a seemingly endless sea of sand and rock and suddenly catches sight of a lone bull elephant, one begins to ask oneself what is he doing there in the first place. ELEPHANT

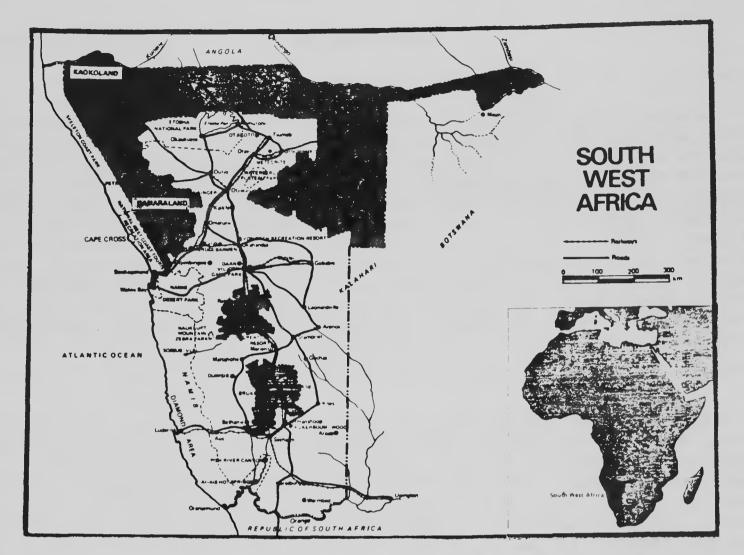


Fig. 1. South West Africa/Namibia. Kaokoland and Damaraland (top left) are the homes of the desert elephants and other desert dwellers.

In October 1980 the Endangered Wildlife Trust commenced an aerial survey lasting five days, which, for the moment, has answered some questions and provided very useful data on numbers and distribution. In an area as vast as this, an aircraft is essential to ground research, and in twenty-five hours of flying, the survey team covered distances across plains and high mountains rising sheer out of the desert and cutting deep gorges, flanked with life-sustaining vegetation, fountains and pools of clear water, terrain impossible to cover on foot in a reasonable amount of time. Some elephants traverse these immense distances (upwards of 90 km at night, or 56 miles) in search of water and food, while others remain in the river courses. That these elephants are unique, there is no doubt. As to unusual size, I have yet to find evidence of this; all those I have observed appear normal (see Walker, 1981 and Walker, 1982).

In 1978 a safari concession is reputed to have shot an elephant measuring 4.4 m (14.4 ft) in Damaraland. The legendary "Fenykovi" elephant shot in 1955 in southern Angola measured 4.1 m (13 ft and 2 inches) but it was not as large as several bulls recorded in Rowland Ward's records of big game (see Best, 1981 and Jackman, 1981). A desert elephant immobilized by the Endangered Wildlife Trust in November 1981 measured only 3.05 m (10 ft). Of the nine prime bulls remaining alive and living within the desert none is

136

01

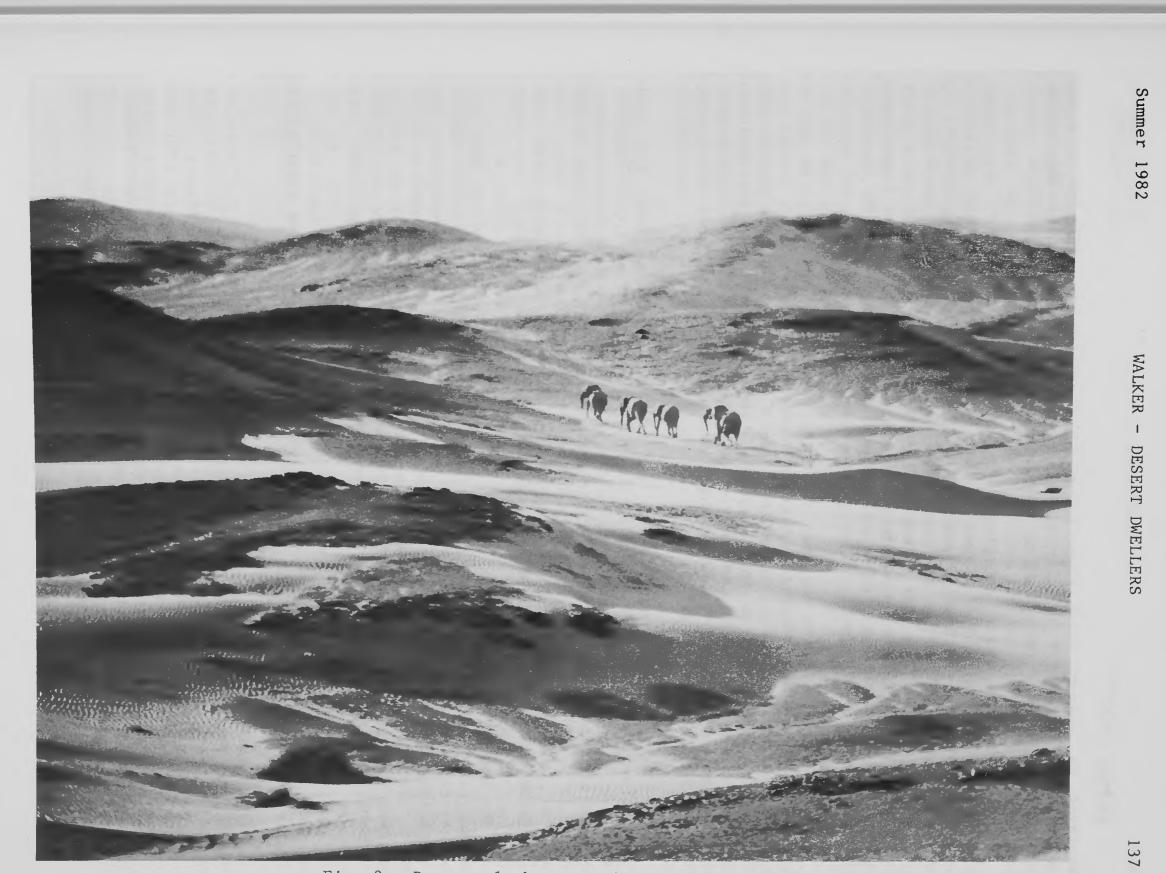


Fig. 2. Desert elephants. Photograph by the author.

## ELEPHANT

SI

P t

m h

0

believed to measure more than 3.5 m (11.5 ft). One bull has a track measuring 65 cm (21.3 in.) in diameter. Information suggests that these desert dwellers have large feet in relation to their height.

These aspects raise questions not previously noted, such as, their ability to walk over the most amazing rock structure, a feat which elephants in southern Africa would avoid. Slowly and carefully they make their way up mountain slopes and across the plains, along ancient pathways, performing a "soft shoe shuffle" as they place each foot into a cleared area and shift loose rock aside. Their soles are worn smooth and polished to a light cream color; they move with a distinct highstepping gait from years of living in this rockstrewn landscape.

Although no definite physical difference, such as, long legs, height or length, could be discerned, this population of elephants probably represents a separate gene pool. This is evident from the tusk growth form of the nine prime bulls. The tusks of these bulls all show the same curve and angle in relation to the forehead, irrespective of length, as opposed to bulls from the eastern populations of Namibia which show a variance in curve and angles, or in fact, no curves at all.

The rhino by contrast has no difficulty in running over the most formidable surface and, with the agility of mountain goats, appears equally capable of scaling steep mountains. After a full day's search in one valley, we were told by our pilot that three of them were there all the time on the top of a steep escarpment. One rhino in the study area has a known home range of 2,000 km<sup>2</sup> (772 sq mi) which is not surprising considering the lack of vegetation and water available to these animals.

The rhino has had a tough time in these parts, at the hands of man, but thanks to the timely takeover by the South West Africa/Namibia Nature Conservation Department, the rhino has a chance. Stricter penalties for illegal shooting should accord a measure of protection for this species which has a far worse reputation than it deserves. Sharing their world in the northern parts are the nomadic Ovahimba. The Ovahimba have tolerated the elephant but not so the rhino. As water is precious in Kaokoland, the Ovahimba prize their cattle above all, and the arrival of a rhino in the midst at a waterhole has not endeared him to the Ovahimba who have recently adopted guns. Only 15 black rhino remain which can definitely be regarded as restricted to the desert areas.

The recent survey and immobilizing program has revealed the effects of hunting and poaching on the large mammals in this region. Unlike elephants in Etosha National Park to the south, many of the bull elephants carry sizable ivory. The shooting of a large bull by safari hunters in 1981 was quite legal; the killing underscores the urgent need to fully protect these elephants. During the five day aerial survey, five armed poachers were sighted well into the desert. Four elephants were found dead within sight of our base camp; only the ivory had been taken. Further downriver three more Summer 1982

carcasses were found with heads and feet cut off by chain saw. The latter seven killings were illegal but there was no hope of apprehending the poachers because of a lack of law enforcement staff in the region at the time.

The sight of three giraffes on the summit of "Grootberg", hundreds of meters above the valley and in a place where one would imagine a human would have to go on "all fours", clearly illustrates the amazing ability of these creatures (see Viljoen, 1981). This animal is no less remarkable than the elephant and rhino, and the apparent capability to go for prolonged periods without water underscores the need for reliable information on the lifestyles of all three species.

There is clearly a great need to support and encourage every effort by the authorities in protecting an area inhabited by animals and plants which are unique on the continent of Africa. Without swift action, valuable research on these creatures will be the final chapter rather than the hope for their future. Sadly for most people, their only view of these rare animals who walk where few men venture will be in photographs and paintings.

## **REFERENCES:**

Anonymous. 1979. R30 000 for game study in South West Africa. Afr. Wildl., 33(5):53. (See also a note on p. 207 in Elephant Vol. 1, No. 4.) Best, A.A. (ed.). 1981. Rowland Ward's records of big game. 18th Edition (Africa). Rowland Ward (Publications) Ltd., Newbridge Mill (England), 560 pp. Jackman, B. 27 December 1981. The death of a desert giant. Sunday Times of London. Viljoen, P.J. 1981. Giraffes in the desert. Afr. Wildl., 35(1):31-33. Walker, C. 1981. Desert giants. Afr. Wildl., 35(1):26-27. Walker, C. (ed.). 1982. Quagga comment... Quagga (Journal of the Endangered Wildlife Trust), Number 1:23.

Author's address: Endangered Wildlife Trust of Southern Africa, P.O. Box 645, Bedfordview 2008, Johannesburg, REPUBLIC OF SOUTH AFRICA.