

THE KRUGER NATIONAL PARK

PROVISION OF WATER FOR WILD LIFE

Two years have passed since Colonel J. A. B. Sandenbergh, the Warden of the Kruger National Park, launched a public appeal to provide water for the wild life of the park. Subscriptions were invited for two purposes : the first to provide boreholes so that in the dry season animals could find water within reach of their grazing, the second to form a general fund to build dams to retard the run-off of rain water.

There was a magnificent response to the appeal, and in August, 1950, Colonel Sandenbergh was able to report that the Borehole Fund had reached £10,600 and the General Water Fund £3,862. Besides this, four windmills were given and the drilling contractors drilled two holes free of charge. The Transvaal Provincial Administration contributed by granting the National Parks Board £2,000 a year for the provision of water for game.

Work was immediately started, and in some places drinking points were crowded with animals within fourteen days of the commencement of pumping. Even during the first year after the funds were opened the semi-dry conditions which existed during the winter were tremendously relieved by the new water supplies.

Although the General Water Fund was not sufficient for the construction of major dams, preparations were made to start building them in areas where boreholes were not practicable. In 1950 it was already hoped that by the end of 1953 the park would be able to withstand droughts however severe ; so that there would no longer be any necessity for thousands of animals to leave their sanctuary in search of water. Following the completion of dam construction it was intended, by the progressive rebuilding of the natural water barriers, which in the course of centuries have been eroded away, to embark on a long-term policy of water and soil conservation.

Colonel Sandenbergh has been so very kind as to send the Society the following report upon the position in August, 1951 :—

“ It is naturally rather early to make a definite statement regarding the changes which may lead to permanent changes of orbit. (*Movements of animals due to alternating rains and drought.*—ED.) As you already know, we have established water in areas where the grazing is exceptionally good and

where formerly there was no water in an endeavour to change local ecology of our wild life. It was designed so that their former orbits which, on occasion took them beyond the boundary of the park, would be changed to orbits which would keep them within the park.

“ To date we have established fifty successful boreholes and wells, and on these we have erected windmills loaded to about 60 per cent of capacity in order to take advantage of our normal and fairly constant light breezes. In locating these points we have tried as much as possible to avoid isolating them, deeming it better to have them so grouped that they support each other.

“ We have made drinking places as natural as we possibly can, and it appears evident that even a dam with a fairly high wall to a certain extent prejudices the game. The ideal type is a flat pan-like surface situated in open country with good clear approaches. Fortunately, we have been able to achieve this in most places. Another thing that we have discovered is that the surface area of the water must be as big as possible to form a real attraction. It would almost seem that the animals, looking at a stretch of water, make an estimate of its duration, and if it appears as though it will only last for another week they seek other and better water. Where it appears, say for argument's sake, that the pan will hold water for a month, they take up residence. The liking for a water point is therefore in direct proportion to the surface area of the water exposed! The quality of the water does not seem to worry the game at all, and they partake just as readily of extremely brackish water as they do of good sweet water.

“ We have also found that our elephants like to wash in these mud pans but very seldom appear to drink from such waters. An experimental type of drinking point for elephants has been evolved with, I think, some considerable success. Briefly, there is a 30 ft. diameter concrete reservoir 3 feet deep sunk flush with the surrounding ground. This is three-quarters filled with river sand and into it we pump water from the mill; a screened overflow takes the surplus to a mud pan. Elephants then come along to this reservoir and, with their fore-feet, make themselves a hole in the sand and drink what I think they believe to be filtered water. The mud pans they use for bathing purposes.

“ As I said in the beginning, it is still too early to measure the degree of our success, but from what we have already observed it would appear that we are on sound lines. Areas where we formerly had no resident population have already been occupied by a wide range of species. Our eland, which frequently

used to leave the park, now do not do it nearly so frequently and they can be far more readily seen. In some areas of the park species formerly never seen there have appeared and are thriving. By no means the least valuable result is the relief we are affording to the grazing on the banks of our permanent natural water supplies.

“It has been argued, of course, that a water point supplied from a mill to an ordinary mud pan may become infested with parasites that would normally be killed in the rainwater pans when the veld dried during the dry season. I think that this is very likely, but the control is really very simple. All we have to do is to turn on the brake on the windmill and let the pan dry for a time. Another argument used against our scheme was that we would lower the water table. Before we embarked on this scheme we procured the most expert advice possible, and we received every assurance that our underground water supplies would not in any material way be affected. This can well be imagined if one bears in mind that we have only one borehole or well for approximately every 65,000 acres.

“In a few years’ time we shall have found out far more than we know to-day, and we hope that our experiment will play a valuable part in the preservation of wild life, not only here, but in other parts of Africa.”
