

Environmental Review 2000

The year 2000 will be remembered for its very heavy rainfall. 1022mm of rain fell over the 1999/2000 wet season with 778mm in 2000 alone. The significance of this is clear when measured against the annual average of 568mm. The wet weather replenished the water table, which resulted in natural pans holding water for much of the dry season (most only dried up at the end of September), and the re-emergence of seepines including year-round flow from a natural fountain in the south of the property (this did not flow in the winters of 1998 and 1999). Both the Timbavati and Tswaysemotso rivers had extended periods of water flow. The abundant moisture also led to unusual bird, mammal and butterfly sightings. On the negative side, there was significant erosion and soil loss associated with human development and utilisation of the property. Once the soil had reached saturation point, all run-off was channelled towards areas of least resistance, most notably the road network where drainage measures were soon nullified as mitre drains silted-up and drainage humps were incised and eroded. Spillways for the three intact catchment dams also proved inadequate in the unprecedented rains and massive impact was the result as water overflow carved new channels, in one instance significantly lowering the capacity of a dam. The necessity to keep operating as a commercial lodge exacerbated the problem and led to increased rutting and erosion of all major tracks. After some delays contractors moved onto the property and commenced work in late November on gravelling a road between Ngala Lodge and the new, Ngala Tented Safari Camp on the Timbavati River. This work should go a long way to limiting vehicle impact on the road network in future wet seasons and also included the rebuilding of a concrete causeway across the Timbavati River aimed at enabling fording of the river in wet summer seasons.

On a positive note, the very high fuel load resulting from the rains allowed for an effective fire to be put through a small area of approximately 1000ha in September. This appears to have been very effective against *Acacia exuvialis*, the most serious encroacher on the granite soils of the north of Ngala. Only the smallest *Colobospermum mopane* seedlings were affected by the burn, however, and fire can probably only be used as a prevention of Mopane encroachment of seepines and not as a corrective measure.

The annual aerial census revealed healthy Buffalo, African Elephant, White Rhino, Blue Wildebeest and Burchell's Zebra populations. Also of significance were regular sightings of a small Nyala population (four), single sightings of Sharpe's Grysbok and Common Reedbuck, and the continued residence of a Black Rhino bull on Ngala.

In addition to the field projects conducted by our own team, Ngala also contributed data to an MSc. study of Lion and Spotted Hyena diet and population density being carried out in the Associated Private Nature Reserves and was part of the focus of a PhD on the sustainability of eco-tourism operations in the proposed Gaza-Kruger-Gonarezhou Trans-frontier Park. Contributions were also made to a survey of Lowveld bird species in our area of the Northern Province.

Our annual thanks go, of course, to Errol Pietersen, the Kruger National Park section ranger responsible for Ngala, and to Brian Harris in his capacity as warden of the Timbavati Private Nature Reserve.

Chris Roche

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