

TAKING TRACK REHABILITATION ONE STEP FURTHER

By Antje Burke

In the context of making land useful again after the impacts of mining and exploration, I have often lamented that rehabilitation of habitats does not receive the attention it should in Namibia. In the light of economic pressures, rehabilitation after mining is often restricted to removing infrastructure and pollution, and securing potentially dangerous situations, such as mine voids. That is at best. More often, not even this very basic rehabilitation takes place, and cases of abandoned mines and their dangerous remains have been covered repeatedly in the Namibian press. Never mind dealing with the impacts of exploration activities, which are by many considered minor and not worth thinking about rehabilitating. Tracks and drill-lines created by exploration can nevertheless have far-reaching impacts, particularly in wilderness areas where unspoilt landscapes are the main asset.

But it does not need to be like that. The southern Namib, and particularly the Sperrgebiet, is one such wilderness area in Namibia. Mining and exploration companies operating in the Sperrgebiet, one of the world's 25 biodiversity hotspots – the Succulent Karoo Biome – have realised its potential and, by and large, are very sensitised. They have, under the watchful eye of dedicated staff at the Ministry of Environment and Tourism, made an effort to minimise their impacts. One such example is a

programme on track rehabilitation undertaken by Ambase Exploration, the exploration branch of the newly established Skorpion Zinc Mine some 20 km outside Rosh Pinah.

In collaboration with Trygve Cooper, the Chief Warden of the area, staff at Ambase have developed a remarkable programme to rehabilitate tracks in this magnificent, largely unspoilt desert area. Using machinery and practices used in agriculture, a handful of people, and a lot of common sense, Ambase staff have managed to make tracks disappear in areas where they would normally last for decades. In support of the rehabilitation programme, the Southern Namib Restoration Ecology Project (part of the GTZ-sponsored Namibian National Biodiversity Programme) set out during the growing season in winter (August-September) 2003 to evaluate the success of the track rehabilitation. Pioneering plant relocation (transplants) as a rehabilitation tool is certainly "cutting edge" in Namibia. However, at present we know little about how well it works, how it should be done, and what is required to make it successful, using our indigenous flora. The Sperrgebiet is one of Namibia's prime hotspots of biodiversity, contains a remarkable number of range-restricted plant species, and is hence an area where one has to tread softly, even in the context of pursuing a conservation-worthy goal, such as rehabilitating tracks. So before Ambase's pioneer activities in track rehabilitation could be recommended for implementation in

the broader area, we were interested to find out how well plant relocation worked in this area.

Towards the end of August I set out with two keen students, one from the Polytechnic and one from the University of Namibia, who volunteered and were selected following an innovative recruitment process. Our task appeared very straightforward – to gather data on survival rates of relocated plants. Alas, a simple question turned into a complicated exercise, once we got into the field and tried to adapt standard survey techniques to the unique situation in the Obib valley, where most of our work took place. Picture this: a narrow valley trending east-west with a partially sandy, partially gravelly bottom, a drainage line snaking through the centre of the valley and hundreds of different succulents eking out a living in this piece of desert. Many look alike, but they are actually all different species. And if that were not enough, we were too early for the peak of the growing season, as the rains had been late. As a result many plants were only starting to become active and very few flowers were to be seen. Now flowers, and particularly fruits, are essential when trying to identify succulents. So there were major challenges ahead. In response to these we had to be selective and focused on a few species that were identifiable, positively active and that were likely to provide us with an adequate sample size. We also had to take variability between habitats into account and, something which Ambase staff noticed

LEFT: Counting survival rates of plants on a rehabilitated track provided a good indication of the long-term effects of the track rehabilitation techniques pioneered by an exploration company in the southern Namib. RIGHT: A delight to all gardeners, quartz slopes of the Obib valley support a diversity of succulents unrivalled in Namibia.



