



A mature *Euphorbia perangusta*. Only half a dozen were seen at this site. Photo: R. Peckover.

***EUPHORBIA PERANGUSTA* ON THE BRINK OF EXTINCTION**

Can we help?

by **Ralph Peckover**, winner of the best article by an amateur botanist in Veld & Flora for 1998

During 1985 the then Transvaal Department of Nature Conservation brought out a comprehensive report on the status of *Euphorbia perangusta*. At this time it was classified as endangered as there were less than 200 plants left in their natural habitat - a range of low quartzitic ridges in the Groot Marico area of the North West Province. The largest colony had around 108 plants (including seedlings) whilst the other colonies had a few to a dozen or so plants.

On a visit to the succulent collection of the National Botanical Institute (NBI) in Pretoria during the late 1980s, I asked the late Dave Hardy if I could collect some seed of *E. perangusta* that had fallen beneath the plants from the largest colony in habitat for propagation purposes. Dave agreed and I hurriedly collected around twenty seeds which I took home and immediately sowed. Nearly all the seed germinated within a week and the seedlings were about 30 mm tall at the end of the first season.

The next spring I transplanted the seedlings into beds under shade-cloth where, besides the odd irrigation, they were 'rain-fed' and thrived in the red granitic soil. At the end of the second growing season, the plants had 3-4 branches and even began flowering the following September. Here a few seeds were collected and so began an exponential multiplication of *E. perangusta*. By the mid 1990s, I had over 700 of these plants which were sold locally as well as exported overseas.

In the early 1990s I approached Nature Conservation about the possibility of planting some back into their original site and eventually, in February 1998, planning become reality. I set off early one morning to meet two officials of the North West Province Dept of Nature Conservation at Rustenburg. We drove together with the 150 euphorbia plants in the back of the bakkie (pick-up) to Groot Marico and then to the farm where they grew. The vegetation of the area was bushveld and the slight ridge had scattered trees on it as well as the unmistakable *Croton gratus* with its silvery leaf undersides. At first I saw only one or two plants but when we really searched the area, which was only about 50x30 m (and the area of the largest colony), we could find no more than thirty or forty plants. What had happened to the other seventy plants since 1985?

The original report gave two main reasons for the decline and demise of *E. perangusta*. During the early 1980s, South Africa experienced severe droughts and porcupines were seen to chew away the base of plants detaching them from their rocky foothold. The plants would then die, as a soil niche is scarce on the rocky ridge. The second agent was a

caterpillar that bored into the stems and killed the plants. It appears as if collector pressure was moderate as this is not a very sought-after plant. I can only surmise that pest and parasitic pressure so reduced the natural population that by February 1998 there were probably fewer than 100 plants left in habitat. This is probably how plants become extinct - a slow process where the species eventually just disappears. Should we stop this natural phenomenon from occurring?

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Anyhow, ethics aside, we as humans want to help and we set about planting 100 seedlings at this site. Tags were labelled from 1-100 and each plant transplanted between the rocks was given a numbered tag and its details were noted (size and number of branches per plant). The task of writing and planting out was carried out alternatively by all three of us and at the end of one

day's hard work we had trebled the population at this site. We returned to camp that evening where we toasted *perangusta*.

We still had fifty plants to plant out and it was thought that if we could find a suitable habitat in the nearby nature reserve, we should try to plant these too. The whole morning was used to seek for a suitable habitat but as this plant is so specific, none was acceptable and I returned to Pretoria with the fifty plants, until a suitable site was found for them.

A recent survey showed that despite the tags being chewed by kudus, an estimated eighty-eight out of 150 new plants had settled down and most had sent out new branches. We are planning a more detailed survey of this site and hope to plant out 100 or so new plants at the other populations in order to boost their numbers. It is debatable as to whether our help will prevent this species becoming extinct, and if it does not disappear within say twenty years, will it survive for the next 100 years with pressure from parasites and human population pressure? Only time will tell. ☺

Richard Newbury writing up details of the transplanted *Euphorbia perangusta* seedlings. Photo: R. Peckover.

