



THE NERINE FROM MISTY MOUNT

THE CONSERVATION STATUS OF *NERINE MASONIORUM* IN THE EASTERN CAPE.

by **Tony Dold**, Selmar Schonland Herbarium, Rhodes University,
Elize Cloete, University of Transkei Herbarium and
Dez Weeks, Institute for Water Research, Rhodes University

N*erine masoniorum* is a well-known plant in cultivation and features in many nursery catalogues both in South Africa and abroad. It was introduced into cultivation before 1930 when Louisa Bolus described it in *South African Gardening and Country Life* together with *Nerine angulata*. Here it is already noted 'they are grown in several gardens, notably in Mr. Lucas' garden, where they have thriven perfectly. In England Miss Mason's brother has raised many hundreds of plants from seed to aid the Assyrian mission'. Marianne Mason collected the plant near Mqanduli just south of Umtata and sent material to Bolus, who named the plant after her and her brother. Mason reportedly also saw the plant growing in the same habitat somewhere between Umtata and Butterworth but did not collect a specimen.

N. masoniorum is one of four species belonging to the *N. appendiculata* group characterized by obvious pubescence on the stems and pedicels. According to herbarium locality records, it is also known from the Libode district, Umtata, Misty Mount and 'Encocos'. If one plots these localities on a map it becomes clear that this species is very localized, possibly even more so than the specimen localities indicate. For example, the specimens from 'Libode district' and from Umtata are possibly from the same Misty Mount locality as this is between Umtata and Libode which is only

20 km to the east. The type locality, 'Near Mqanduli', must also be very nearby as the town of Mqanduli is only 25 km south of Umtata. Encocos, correctly spelled Nkaukazi, is a sprawling informal settlement less than 5 km south-west of Misty Mount on the Umtata road. Altogether there are only six existing herbarium collections in five herbaria in South Africa.

The species habitat is clearly defined by two requirements, large exposed dolerite sheets and daily incoming mist off the coastal plains. Misty Mount, as the name implies, receives a regular drenching of mist that collects on the dolerite sills and moistens the thin layer of soil along the edges. The majority of plants are in this layer within 30 cm of the rock margin but others occur in the grassy patches between the bare rocks. The thin layer of clay-rich soil also hosts *Selaginella dregei*, a typical sheet rock plant that forms mats around the rock margins. The surrounding grassland is rich in orchids (*Disa crassicornis*, *Satyrium parviflorum*, *Habenaria epipactidea* and *Corycium nigrescens*) and the rare *Sandersonia aurantiaca*. Just further inland are seemingly ideal habitats with dolerite sheets, known as iDwala in Xhosa, but these are too far off the escarpment for the mist to reach and are therefore devoid of *N. masoniorum* plants. Just 12 km south-west of Misty Mount the same rock formation at

Buntingville is so much drier that it is home to a rich succulent flora.

If we are to assume, based on the herbarium collections, that *N. masoniorum* exists only in a 40 km radius (east and south) of Umtata then we may have to assume that Misty Mount is the only remaining population. Certainly Elize Cloete and her colleagues at University of Transkei have not found it elsewhere after fifteen years of botanical collecting. The Misty Mount population has been closely monitored by Elize for the last ten years and unfortunately has recently become threatened by 'urban sprawl' in the form of informal settlements. In April this year the nearest newly demarcated plot was only 2 m from the main population of plants. Together with people come domestic animals and at Misty Mount the most immediate threat to *N. masoniorum* are pigs. The characteristic Transkei domestic pig eats anything and everything in the shallow soil where the majority of bulbs are found. Nature Conservation authorities have been approached on several occasions in the past to intervene on behalf of *N. masoniorum* but apparently the land is administered as Tribal Trust land and it would therefore take an enormous amount of negotiation to secure it. Furthermore, East Cape Nature Conservation simply does not have the manpower to effect this, let alone manage the area if it were set aside for protection. Umtata's population is approximately one million people and is growing steadily. The expansion naturally follows major roads for easy access and unfortunately this includes the road right through Misty Mount *en route* to Port St Johns.

Despite the poor representation of herbarium specimens, *N. masoniorum* has only recently been acknowledged as rare. In 1995 Craig Hilton Taylor asked the Schonland Herbarium for Eastern Cape contributions to the *Red data list of southern African plants* and as there was no doubt that *N. masoniorum* was a candidate, it was listed as **rare**. Soon afterwards a permit was obtained to distribute about 500 seeds to botanical gardens worldwide. Based on the new IUCN *Red Data List* categories (www.sabonet.org/reddatalist/database.html) it is clear that the status of *N. masoniorum* should be revised to that of **critically endangered**. 🍷

*A full list of references in the scientific literature is available from the Publications Manager at the Botanical Society, Private Bag X10, Claremont, 7735. Tel (021) 797 2090, fax (021) 797 2376, e-mail <botsocsa@gem.co.za.>

**PRECIS (2000). Pretoria Computerized Information System, National Herbarium, National Botanical Institute, Pretoria.

Acknowledgements

Thanks to Dr Hugh Glen for explaining the Tokyo Code of Nomenclature and Janine Victor for explaining the IUCN Red Data categories. Thanks to the curators of BOL, NBG, PRE and for herbarium specimen data.



Above. Misty Mount showing the thick incoming mist, exposed dolerite sheets and, ominously, the encroaching houses. Opposite page. *Nerine masoniorum* at Misty Mount.

THE NAMING OF *NERINE MASONIORUM*

The spelling of the species' name has been different in various publications, causing some confusion. Louisa Bolus' original description in *South African Gardening and Country Life* in 1930 gives *N. masonorum*, while the *Flowering Plants* contribution by W.F. Barker five years later gives *N. masoniorum*. Subsequently other authorities* all revert to the original *N. masonorum*. A recent listing from PRECIS (2000)** uses *N. masionorum*, but this is a spelling error. The SABONET (Southern African Botanical Diversity Network) online *South African Plant Red Data List* (<http://www.sabonet.org/>) shows that the correct name is *N. masoniorum* because the specific name *masonorum* refers to only one person while *masoniorum* correctly refers to both the brother and sister after whom the plant was described. It is interesting to note that the name has a male genitive inflection as this takes precedence when a male and female are being honoured together.