



# Friends of the Haenertsburg Grasslands

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Submission by  
**Friends of the Haenertsburg Grasslands (FroHG)**  
and the  
**Botanical Society of SA-Limpopo Branch**



In consultation with:

- David Letsoalo and Ben De Boer (BirdLife-SA)
- Dave Edge (Lepidopterist)
- Luke Perkins (WESSA)
- Members of the Haenertsburg Community
- Lepelle Northern Water
- Mark Botha (Cape Conservation Unit)
- Vincent Egan (Herpetologist)
- Pieter Winter (Botanist, SANBI)
- Rob Burrett (Archaeologist)
- Sonette Krynauw (previously of Mpumalanga Parks Board and Herbarium Curator at the University of Limpopo)
- Bronwyn Egan (Herbarium Curator, University of Limpopo)
- Letaba Water Users Association

*(owing to time limitations and serious omissions in the EMP which needed to be rectified and double checked not all of the above have had the opportunity to review the final document)*

Regarding the

**Basic Assessment Report for Ndowana Advanced Prospecting at Haenertsburg and  
Amended Environmental Management Plan**

**Date: 22 May 2009**

## Introduction

As decided at the public meeting of 28 April 2009 a joint submission has been prepared to assist the consultant Ms J. Phelan with improving the Environmental Management Plan compiled for the proposed advanced prospecting by Ndwana Exploration Two (Pty) Ltd, a joint venture between Mvelaphanda Resources (Pty) Ltd. and De Beers Consolidated Mines Limited near Haenertsburg, Limpopo Province, before submission to the authorities.

## Cumulative impacts

The approval of the Ndwana project would set a precedent for more prospecting in other non-protected areas of indigenous vegetation in the Woodbush & Wolkberg area in future. The cumulative impact of several prospecting projects will result in the degradation of the natural environment and threaten the biodiversity. The Botanical Specialist Study (p. 34) calls for the conservation authorities to set a clear threshold for the amount and type of prospecting to be allowed, if any, in the Wolkberg-Wodbush area in unproclaimed areas with conservation potential. Therefore, it is required that the independent EAP engage directly with the relevant authorities to communicate the ecological value of the Woodbush & Wolkberg area. Minutes of these meetings to be forwarded to FroHG.

## Rehabilitation

All the specialist reports confirm that the area which will be disturbed is very important to Limpopo Province and South Africa, yet very little effort has been made on the rehabilitation plan and there is very little guidance for plant rescue or monitoring. It should be noted that many of the red data plants in this area are not illustrated in the current botanical books. In addition more effort should be made to benefit local communities. The Vegetation Study states on page 15 that "an important factor when considering mitigation of impact by rehabilitation of disturbed grassland in this area is that it is impossible to restore to its original state within human time frames once the soil has been disturbed over more than a few m<sup>2</sup>". In addition "restoration science ecology is still being developed and refined" (p.8 of Butterfly Specialist Study). Further, the precautionary principle dictates that extreme care be taken when disturbing an ecosystem that supports "many rare and endangered species" (p18 of BA) within and bordering a threatened vegetation type.

The following is required before any further activities commence to ensure that adequate rehabilitation does occur:

- As grasslands are characterised by geophytes (plants that for most of the year are underground) the site must be burned to stimulate their growth as close as possible to the first rains and then surveyed two weeks later for important plants. These should be GPSed and photographed so that the sites are marked as no-go areas or removed to a holding nursery to be replanted afterwards.
- All important plants from an ethnobotanical or Red Data (RD) perspective should be GPSed and photographed prior to any activities beginning at the site so that they can be avoided or replanted in the exact places.
- The labour intensive methods of hand planting and hand seeding the area is must be used rather than using additives that could have other side effects.
- The holding nursery should be within one of the impoverished communities in the area and the people taking care of it should be trained to look after the plants.
- Seeds from *Athrixia* spp and grasses should be hand collected prior to any disturbances to the area by unskilled workers from local communities. *Athrixia* is one of a suite of plants that should be focussed on as it is highly important to the local informal economy as a tea and broom plant.
- The presence of goats presently kept by farm workers needs to be evaluated and incorporated in the plan as these animals may devour any new growth and cause erosion.

## Information Gaps

Although some good specialists were appointed there is no holistic management in this plan as these specialists have not been involved in the overall compilation. The impression is given that the work commissioned has been rushed. For example:

- There are many important medicinal and other useful plants in the area yet an ethnobotanical study has been omitted. The example of *Athrixia* is but one.
- The food plant of the special butterfly occurring on the *site Dingana clara* is not known so either this needs to be investigated further or the precautionary principle should be followed which is presently not the case.
- The short time period in which surveys were undertaken could have led specialists to miss other important species for example BirdLife SA points out that the bird study was undertaken over three days in October before

the special birds that have previously been recorded in the area have arrived to breed and feed. Two red data birds the Corn Crake and the Broad-tailed Warbler have been confirmed at the site but are omitted from the specialist report and consequently the EMP.

- As there is such a high concentration of potentially important plants in the area they should all be looked for intensively in ALL four seasons, concentrating on the flowering times of all the threatened plants in particular.
- No complete plant list was provided by the botanist. This should indicate alien invasive plants and their invasive categories, useful plants and threatened and protected plants (TOPS).
- In Table 4, page 16 of the Vegetation Study it is stated that two critically endangered plants, *Kniphofia crassifolia*, and *Chlorophytum radula*, may occur on the prospecting site. Yet no mention is made of these in the Basic Assessment (BA) or Amended Environmental Management Plan (EMPlan).
- Plant and animal identification tools be made available for the environmental control officer to do a proper job.
- Even though fire is a critical element of grasslands development it is not covered as part of the rehabilitation procedures in the EMPlan.

### Specialists

As this area has a high concentration of endemic and threatened plants and animals, it is recommended that in addition to the ECO and Botanist (mentioned on numerous pages e.g. p.13, p.18 of the EMPlan) the following additional specialists should urgently be appointed:

- **Restoration Ecologist** due to significant severity of impacts (p.44 – 47 of BA) and mention is made of rehabilitation specialist on p.37 of BA. To fine tune, monitor and manage the proper restoration of the area to a state equivalent to or better than present.
- **Herpetologist** due to significant severity of impacts (p.41 of BA) and also for an additional survey to verify the presence of *Tetradactylus eastwoodae* a species presumed to have been extinct (p.8 of Herpetological Specialist Report)

In addition best practice suggests that gaps in the specialist reports should also be attended to.

Ideally the EMPlan and rehabilitation procedure should have been peer reviewed by other EAPs and environmental experts with experience in restoration ecology. For instance, much work has been done in the Sekhukhune District by the mining industry to rehabilitate and protect natural ecosystems.

### Time Factor

As grasslands are growing and flowering mainly in spring and summer, the presence of red data butterflies (e.g. *Dingana clara*), birds (at least four red data birds confirmed) and reptiles (eg *Tetradactylus eastwoodae*) are also more likely at this time and it is obvious that the months of September to March should strictly not be used for any prospecting activities.

The prospecting operations are expected to last 18-24 months (p.48 of Appendix G) yet monitoring will only take place until closure. (Table 8 of Appendix G). This is not adequate as alien invasive plants in particular gums and wattles will be spread to disturbed areas and may only germinate after fire and rain. It is recommended that monitoring and rehabilitation procedures and any amendment thereto continue on the same basis for a total period of at least 5 years although the EMPlan (p.25) states up to 10 years. This period can be shortened in consultation with FroHG.

### Transparency and Monitoring

Currently the process has been run in a very unsatisfactory and confusing manner for the following reasons:

- Minutes of the meeting held on 28 April have not been received to date.
- At the meeting of 28 April Ms Phelan stated that the upper site would not be disturbed at all. In addition her powerpoint presentation states there will be no road. This concurs with the botanists report that the upper site should be a no-go area. However the EMP clearly states that a road may be constructed in this area for the proposed prospecting.
- DWAF officials have not been consulted or provided with information to make inputs even though this is an important catchment area and there is a threat of water pollution.
- The consultant is not registered with a professional body nor is she in the process of being accredited by one.

- The protected area status of Colberg was not investigated thoroughly.
- The issue of where water will be extracted from has not been resolved.
- There is an assumption that the lower sites are not important which is not correct owing to its value as a buffer zone and that springs and wetlands that may have been planted still have the potential to be rehabilitated.
- The Letaba Water User Association has stated that over extraction of 159% is currently happening at Ebenezer Dam. Consequently it is prudent to restore the catchment area so that areas like the proposed prospecting site capture more not less water to satisfy agriculture and livelihoods.
- Despite the findings of the specialist reports and SANBI's rating of the grasslands having the highest conservation priority in Limpopo, only a Basic Assessment has been commissioned.

For these reasons and because of the remoteness and poor road infrastructure of the site IAPs feel that they should volunteer assistance to the authorities in Polokwane in the role of monitoring and that the EMP details exactly what is expected in terms of operation, monitoring and closure. FroHG would undertake the following:

- A monthly minuted meeting made available to the authorities between FroHG and the ECO to be held in Haenertsburg where concerns are raised and solutions discussed and actioned. Activities for the next month will also be outlined.
- If there is any non-compliance with the EMPlan then FroHG is immediately notified in writing and a solution to mitigate negative effects received within 10 days.
- Access to the site at any time without prior notice.
- When large diameter drilling or mechanised pitting is due to take place or new footpath, track, or road is due to be constructed then FroHG must be notified a week prior to commencement of these activities.
- The ECO and all specialists should only be appointed after their qualifications and experience have been approved by FroHG.
- FroHG and/or other community organisation to meet with prospective specialist before they are appointed to the post.
- Meetings with prospective specialists to discuss terms of reference and results of work to take place in Haenertsburg with FroHG representatives.
- Progress reports to be submitted to DME (C.8.1 of EMPlan) to be copied to FroHG.

The above would serve as daily internal monitoring and evaluation system whereas the ISO 140001 Environmental Monitoring System (C.8.2 of EMPlan) would function as the external auditing tool.

### **Closure**

Again referring to C.8.1 of EMPlan (p.34) FroHG as an IAP will not be satisfied with the rehabilitation if the above submissions have not been incorporated into the Amended Environmental Management Plan.