

CEPF SMALL GRANT FINAL PROJECT COMPLETION REPORT

I. BASIC DATA

Organization Legal Name: Council for Scientific and Industrial Research (CSIR)

Project Title (as stated in the grant agreement):
Retention and Restoration of the Biodiversity of the Little Karoo

Implementation Partners for This Project:
Gouritz Initiative Forum and its members

Project Dates (as stated in the grant agreement): July 1, 2007 – August 30, 2008

Date of Report (month/year): August 2008

II. OPENING REMARKS

Provide any opening remarks that may assist in the review of this report.

The Little Karoo region, which falls within the Succulent Karoo Biome, is an area of great biodiversity, much of which is threatened or vulnerable. One of the major threats is a result of the lack of useful information on sound management practices within the natural vegetation of the region. This lack of information is largely due to the collapse of extension services which government agencies previously supplied. These services are no longer provided and landowners and managers (especially at the municipal level) urgently require spatial information on the ecosystems they manage.

The maps and underlying spatial data produced through this grant used the Little Karoo Vegetation Map compiled by Vlok, J.H.J., Cowling, R.M. and Wolf, T., in 2005 as a basis. This original work was for the SKEP and Gouritz Initiative projects supported by the CEPF grant no. 1064410304. The work is also based on the detailed land cover and degradation map of the Little Karoo prepared by Mark Thompson on a CEPF grant.

III. NARRATIVE QUESTIONS

1. What was the initial objective of this project?

The main aim of this project was to develop urgently required spatial data, so as to capacitate land-use decision makers and in particular produce a series of maps, the contents of which are highlighted below:

- i) A map in electronic format (shapefiles for GIS systems) of the present grazing carrying capacity of the natural vegetation for ostriches.
- ii) Maps in electronic format (shapefiles for GIS systems) indicating suitable habitat and the present carrying capacity of the natural vegetation for each of the herbivore game species that could be considered in the region

- iii) A map in electronic format (shapefiles for GIS systems) that provides a flammability index and fire frequency regime of the natural vegetation in the region.
- iv) Maps in electronic format (shapefiles for GIS systems) that indicates restoration needs and potential sites for projects in relation to urban areas where there are high unemployment levels for gannaveld and spekboom veld.
- v) Present and disseminate the maps and information produced to the Gouritz Initiative Forum stakeholders.
- vi) Endeavour to discuss the products developed during the project on national radio and / or print media as a means of reaching a broader group of stakeholders.
- vii) Deposit of all relevant data and materials on easily available websites.

2. Did the objectives of your project change during implementation? If so, please explain why and how.

No, the overall objectives remained the same throughout the project and were met.

3. How was your project successful in achieving the expected objectives?

The purpose of this project was to develop this urgently required spatial data, thereby capacitating land-use decision makers within the Little Karoo to make sound decisions on vital aspects that affect the ecology, biodiversity and economy of the Little Karoo region. To achieve this, the products were developed in conjunction with local stakeholders. This approach was adopted in the hope that these partners and stakeholder groups would endorse and take ownership of these products and in turn distribute them further.

In total we produced a series of 24 maps together with their underlying spatial data sets. These included a map of suitable areas and carrying capacity for ostriches, 16 carrying capacity maps for game species suited to the Little Karoo, three maps detailing aspects of fire ecology needed to maintain biodiversity and two veld restoration maps each for the Spekboom and Gannaveld habitat types.

Members of our team attended three Gouritz Initiative Forum meetings during February, April and July 2008. At each of these meetings we were given an opportunity to present the different datasets we had developed to the regional stakeholders present, as well as to participate in the review and discussion around these products.

A member of our team, Jan Vlok, participated in a radio panel discussion during January 2008. The discussion dealt with problems in the game industry related to extra-limital species and the carrying capacities of different vegetation types in the Southern Cape including the Little Karoo. He also participated in a further radio panel discussion on the potential of using spekboom for veld (vegetation) restoration and carbon sequestration in the Little Karoo. During this discussion mention was made of the restoration potential maps developed through this project. The radio discussion resulted in a number of enquiries from interested land owners.

4. Did your team experience any disappointments or failures during implementation? If so, please explain and comment on how the team addressed these disappointments and/or failures.

No. We were successful in developing the products through a combination of available baseline data and expert local knowledge. The maps and their underlying data have been made available to the Gouritz Initiative (<http://gouritz.com>) and the South African National Biodiversity Institute (<http://bgis.sanbi.org>) and they are in the process of loading them on their websites. They have also been requested by people working in the region.

5. Describe any positive or negative lessons learned from this project that would be useful to share with other organizations interested in implementing a similar project.

We were fortunate to be able to build on previous work. In particular, the maps and underlying spatial data produced through this project made extensive use of the Little Karoo Vegetation Map compiled by Vlok, J.H.J., Cowling, R.M. and Wolf, T. in 2005 as a basis. This original work was done for the SKEP and Gouritz Initiative projects supported by CEPF grant no. 1064410304. Additional data in the form of a detailed land cover and degradation map of the Little Karoo (Thompson *et al.* 2008), also funded by the CEPF, were fundamental to this study.

A further positive lesson is that participation and consultation within local stakeholder groups during product development, as well as media coverage greatly facilitate a broad interest and use of products. For example, the Little Karoo Farming Co-operative expressed interest in the veld restoration maps while the South African Ostrich Business Biodiversity Project was consulted during the development of the Ostrich carrying capacity map. Copies of the game maps have been supplied to lecturers in game management at the Saasveld Campus of the Nelson Mandela Metropolitan University. Another example of this uptake is that the Department of Water Affairs and Forestry's (DWAF) fire advisor for the Southern Cape has expressed an interest in the fire maps as a basis for encouraging the formation of fire protection associations in the fire prone habitat types of the Little Karoo.

A final lesson is the power of spatial data. The ability to depict these products as maps, with towns, roads and farm boundaries make them user friendly and easier to interpret than data in tables and reports.

6. Describe any follow-up activities related to this project.

We need a continued forum through which we can discuss sound veld management in Little Karoo. We believe the Gouritz Initiative Forum is an ideal opportunity as its meetings are hosted by the Department of Agriculture at their offices in Oudtshoorn. To date it has been well attended by their officials, as well as landowners and representatives of agricultural unions.

The spatial data, as well as the maps, are being disseminated through the Gouritz Initiative Forum and will soon also be available from the Biodiversity GIS (BGIS) unit responsible for the management of the South African National Biodiversity Institute's

spatial biodiversity planning information. This will allow for a wider audience to access the data and maps.

7. Please provide any additional information to assist CEPF in understanding any other aspects of your completed project.

See attached CSIR Report No. CSIR/NRE/ECO/ER/2008/0118/C

IV. ADDITIONAL FUNDING

Provide details of any additional donors who supported this project and any funding secured for the project as a result of the CEPF grant or success of the project.

Donor	Type of Funding*	Amount	Notes
		\$	
		\$	
		\$	
		\$	

****Additional funding should be reported using the following categories:***

- A** *Project co-financing (Other donors contribute to the direct costs of this CEPF project)*
- B** *Complementary funding (Other donors contribute to partner organizations that are working on a project linked with this CEPF project)*
- C** *Grantee and Partner leveraging (Other donors contribute to your organization or a partner organization as a direct result of successes with this CEPF project.)*
- D** *Regional/Portfolio leveraging (Other donors make large investments in a region because of CEPF investment or successes related to this project.)*

V. ADDITIONAL COMMENTS AND RECOMMENDATIONS

Currently the financial viability of many of the previous agricultural practices in the Little Karoo is marginal at best, and landowners and managers are eager to explore new land use options. The project enabled us to capture much of the required data and to develop some useful maps, as well as to discuss the initial products with important stakeholders.

The game and ostrich maps derived from the project clearly show that animal carrying capacities are very low so many of the current agricultural practices are not sustainable. The lesson emerging from this project is that there really needs to be a change in land management if the people of the region wish to ensure that something remains of the natural capital for the next generation to survive and to build upon.

We would like to take this opportunity of thanking the CEPF for the grant that made this work possible.

VI. INFORMATION SHARING

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