CRITICAL ECOSYSTEM PARTNERSHIP FUND

Succulent Karoo Hotspot Briefing Book

Prepared for: Improving Linkages Between CEPF and World Bank Operations, Africa Forum, Cape Town, South Africa—April 25 –27, 2005

SUCCULENT KAROO HOTSPOT
BRIEFING BOOK

Table of Contents

CRITICAL ECOSYSTEM PARTNERSHIP FUND

The Succulent Karoo

Succulent Karoo Biodiversity Hotspot

CEPF INVESTMENT PLANNED IN REGION
$8 million

QUICK FACTS

The Succulent Karoo is the only arid region recognized as a biodiversity hotspot.

Only 3.5 percent of the hotspot is formally conserved.

Dwarf shrubland dominated by leaf succulents is found throughout the hotspot, a unique vegetation among Earth's deserts.

Nearly one-third of the floral species of the region are unique to the hotspot, such as the stone plant found in the Namaqualand region (see photo, overleaf)

Other notable plant species found in this hotspot include the botterboom, a stem succulent that has glossy leaves in winter and red flowers in summer, and the halfmens, a stem succulent that can grow up to four meters tall.

Stretching along the Atlantic coast of Africa, from southwestern South Africa into southern Namibia, the Succulent Karoo biodiversity hotspot covers 116,000 square kilometers of desert. It is one of the 25 richest and most threatened reservoirs of plant and animal life on Earth. These biodiversity hotspots cover only 1.4 percent of the planet yet contain 60 percent of all terrestrial species diversity.

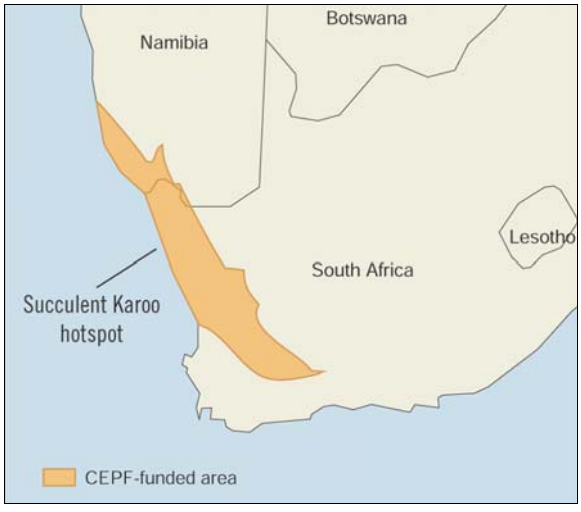
The Succulent Karoo boasts the world's richest succulent flora, as well as high reptile and invertebrate diversity. Compared to other hotspots, the vegetation remains relatively intact. A sparse population (only 300,000 people) and the fact that more than 90 percent of the hotspot is used for natural grazing have eased the conversion pressures on this region. However, only 30,000 square kilometers of the original vegetation remains in a relatively pristine state.

THREATS

The hotspot is vulnerable to several land use pressures, particularly overgrazing on communal lands, ostrich farming in the southeast, mining and the illegal collection of plants and animals for trade. Climate change is expected to have a serious impact on the region's biodiversity.

CEPF STRATEGY

The Critical Ecosystem Partnership Fund's strategy for this hotspot is based on the results of the Succulent Karoo Ecosystem Planning (SKEP) process. Conservation International's Southern Africa Hotspots Programme facilitated



CEPF focuses on seven geographic priority areas in the Succulent Karoo hotspot.

this comprehensive and participative process as part of CEPF preparations to expand to the hotspot. The project team included special advisors and four coordinating organizations: the Botanical Society of South Africa, Eco-Africa Environmental Consultants, the Institute for Plant Conservation and the National Botanical Institute.

SKEP, which means "to serve" or "to create" in Afrikaans (the predominant language in the hotspot), involved more than 60 scientific experts and over 400 local stakeholders representing government, academia, nongovernmental organizations, private sector interests and local communities. SKEP developed an overarching framework for biodiversity conservation and sustainable development in the hotspot.

The CEPF strategy focuses on catalyzing activities in under-funded priority areas to achieve biodiversity conservation by involving specific land users such as the agricultural sector, mining companies and communal authorities.

The investment strategy, called an ecosystem profile, will be funded for five years, beginning in 2003.

STRATEGIC FUNDING DIRECTIONS

The CEPF strategy for the Succulent Karoo ensures funding is directed where it is needed most and where it can do the most good.

CEPF investments in the Succulent Karoo hotspot are guided by six strategic directions. Each project must be linked to one of these to be approved for funding:

1. expand protected area corridors through public-private-communal partnerships in the priority areas of Bushmanland Inselbergs, Central Namaqualand Coast, Namaqualand Uplands, Knersvlakte, Hantam-Roggeveld, Central Little Karoo and Sperrgebiet
2. engage key industrial sectors in meeting conservation objectives identified by SKEP
3. retain and restore critical biodiversity in areas under greatest land-use pressure
4. mainstream conservation priorities into land-use planning and policy-making
5. increase awareness of the Succulent Karoo hotspot
6. create the capacity to catalyze the SKEP program

ABOUT US

CEPF is a joint initiative of Conservation International, the Global Environment Facility, the Government of Japan, the John D. and Catherine T. MacArthur Foundation and the World Bank.

The partnership aims to dramatically advance conservation of Earth's biodiversity hotspots—the biologically richest and most threatened areas. A fundamental goal is to ensure that civil society, such as community groups, nongovernmental organizations and private sector partners, is engaged in biodiversity conservation.

CEPF acts as a catalyst to create strategic working alliances among diverse groups, combining unique capacities and eliminating duplication of efforts for a coordinated, comprehensive approach to conservation challenges.

HOW TO LEARN MORE

For more information about CEPF and how to apply for grants, visit www.cepf.net. Further SKEP details are also available on the site.

Ecosystem Profile

THE SUCCULENT KAROO HOTSPOT

NAMIBIA AND SOUTH AFRICA

Final version
February 12, 2003

CONTENTS

INTRODUCTION

The Critical Ecosystem Partnership Fund (CEPF) is designed to safeguard the world's threatened biodiversity hotspots in developing countries. It is a joint initiative of Conservation International (CI), the Global Environment Facility (GEF), the Government of Japan, the MacArthur Foundation and the World Bank. CEPF supports projects in hotspots, areas with more than 60 percent of the Earth's terrestrial species in just 1.4 percent of its land surface. A fundamental purpose of CEPF is to ensure that civil society is engaged in efforts to conserve biodiversity in the hotspots. An additional purpose is to ensure that those efforts complement existing strategies and frameworks established by local, regional and national governments.

CEPF aims to promote working alliances among community groups, nongovernmental organizations (NGOs), government, academic institutions and the private sector, combining unique capacities and eliminating duplication of efforts for a comprehensive approach to conservation. CEPF is unique among funding mechanisms in that it focuses on biological areas rather than political boundaries and examines conservation threats on a corridor-wide basis to identify and support a regional, rather than a national, approach to achieving conservation outcomes.

The Succulent Karoo hotspot, which covers an area of approximately 116,000 km^2 in Namibia and South Africa, is an appropriate recipient of CEPF investment for several reasons. The region's levels of plant diversity and endemism rival those of rain forests, making the Succulent Karoo an extraordinary exception to the low diversity typical of arid areas and the only arid ecosystem to be recognized as a global biodiversity hotspot. Nearly one-third of the floral species of the region are unique to the hotspot and the region boasts the richest variety of succulent flora in the world (just under one-third of the Succulent Karoo's flora are succulents). In addition to its floral diversity, the hotspot is a center of diversity for reptiles and many groups of invertebrates.

The Succulent Karoo hotspot is under extreme pressure from human activities, including overgrazing, mining, illegal collection of wild plants and animals and the impact of climate change. However, there are many opportunities for conserving the hotspot's remarkable biodiversity due to the low human population density, large areas of extant (albeit severely grazed in places) habitat, low costs of conservation in most of the region and good opportunities for biodiversity-friendly forms of land use in many areas.

The Ecosystem Profile

The purpose of a CEPF ecosystem profile is to provide an overview of the root causes of biodiversity loss in a particular region and to couple this assessment with an inventory of current conservation investments and activities in order to identify the niche where CEPF investments can provide the greatest incremental value.

The ecosystem profile is intended to recommend strategic opportunities, called strategic funding directions. Civil society organizations will propose projects and actions that fit into these strategic directions and contribute to the conservation of biodiversity in the targeted region. Applicants propose specific projects consistent with these funding

directions and investment criteria. The ecosystem profile does not define the specific activities that prospective implementers may propose, but outlines the conservation strategy that will guide those activities. Applicants for CEPF grants will be required to prepare detailed proposals identifying and describing the interventions and performance indicators that will be used to measure the success of the project.

Defining Biodiversity Conservation Outcomes

An emerging trend across the conservation community is the realization that biological diversity cannot be saved by *ad hoc* actions. Threats to biodiversity are simply too severe to allow scarce conservation resources to be invested in poorly targeted projects, or programs with no baselines for monitoring. For CEPF, this trend has led to the development of a focus on conservation outcomes: the targets against which the success of investments can be measured.

Biodiversity is not measured in any single unit, but rather is distributed across a hierarchical continuum of ecological scales. This continuum can be condensed into three levels: species, sites and landscapes. These three scales are admittedly arbitrary, and interlock geographically through the presence of species in sites and of sites in landscapes, but are nonetheless identifiable and discrete. Given threats to biodiversity at each of these three levels, quantitative, justifiable and repeatable targets for conservation can be set in terms of extinctions avoided, areas protected and corridors created.

Generally the conservation community has adapted the concept of corridors as a mechanism for conserving important species and sites. Existing protected areas in these crucial environments are often too small and isolated to maintain viable ecosystems and evolutionary processes; indeed, in many hotspots, even the remaining unprotected habitat fragments are acutely threatened. In such circumstances, conservation efforts must focus on linking major sites across wide geographic areas in order to sustain these large-scale processes and ensure the maintenance of a high level of biodiversity. Such networks of protected areas and landscape management systems are *biodiversity corridors*.

BACKGROUND

The ecosystem profile for the Succulent Karoo hotspot is based on the results of the Succulent Karoo Ecosystem Planning (SKEP) process. This comprehensive and participatory process was initiated in September 2001 and completed one year later. The project team, facilitated by CI's Southern Africa Hotspots Programme as part of CEPF preparations to expand to the hotspot, included special advisors and four coordinating organizations: the Botanical Society of South Africa, Eco-Africa Environmental Consultants, the Institute for Plant Conservation and the National Botanical Institute. It also included 10 conservation champions, well-connected and respected individuals with biodiversity or social development expertise who raised awareness about the process and gathered vital information within their own communities.

SKEP, which means "to serve" or "to create" in Afrikaans (the predominant language in the hotspot), involved more than 60 scientific experts and more than 400 local stakeholders representing government, academia, NGOs, private sector interests and local

communities. SKEP pioneered a unique approach to conservation planning that integrated high-level scientific expertise with sociopolitical, economic and institutional concerns. SKEP developed an overarching framework for biodiversity conservation and sustainable development in the hotspot from which the best niche for CEPF investment and other funding support could be determined. The CEPF profile for this hotspot is one of many SKEP products.

Summary of SKEP Priority-setting Process

The objectives identified for the SKEP planning phase were to:

- identify a hierarchy of priority areas, using sound biological assessments and systematic conservation planning techniques, and actions through a broad stakeholder process to guide conservation efforts and donor investment in the hotspot
- leverage existing biological and socioeconomic initiatives to contribute to the identification of these priorities and engender innovation and consensus in the form of a long-term conservation plan
- expand human resource capacity to implement the plan by including training and mentorship opportunities as part of the planning process
- secure the institutional and government support required to ensure effective implementation of the plan by linking conservation to regional development needs

Although previous scientific studies had prioritized various areas within the Succulent Karoo, biodiversity priority-setting at the hotspot level had not taken place. Information on habitat types was inconsistent between the two countries and species-level data was held in numerous formats by various organizations and individuals. The SKEP participants took on the ambitious task of gathering spatial information and expert opinion on trends in the distribution of biodiversity and important ecological processes for the hotspot. Data on the distribution of important taxa and ecological process was obtained via a workshop and numerous follow-up contacts, resulting in a comprehensive dictionary of the data and known gaps where scientific information is still needed. Data on the extent of land transformation was gathered from satellite imagery and augmented by participatory mapping workshops and meetings with local experts from agriculture, mining, tourism, conservation authorities, communal lands and local government sectors in each of four subregions: Namibia-Gariep; Namaqualand; Hantam Tanqua Roggeveld; and Southern Karoo (Figure 1). SKEP results can be found in reports available on www.cepf.net and in the form of GIS files and associated databases for each main land use.

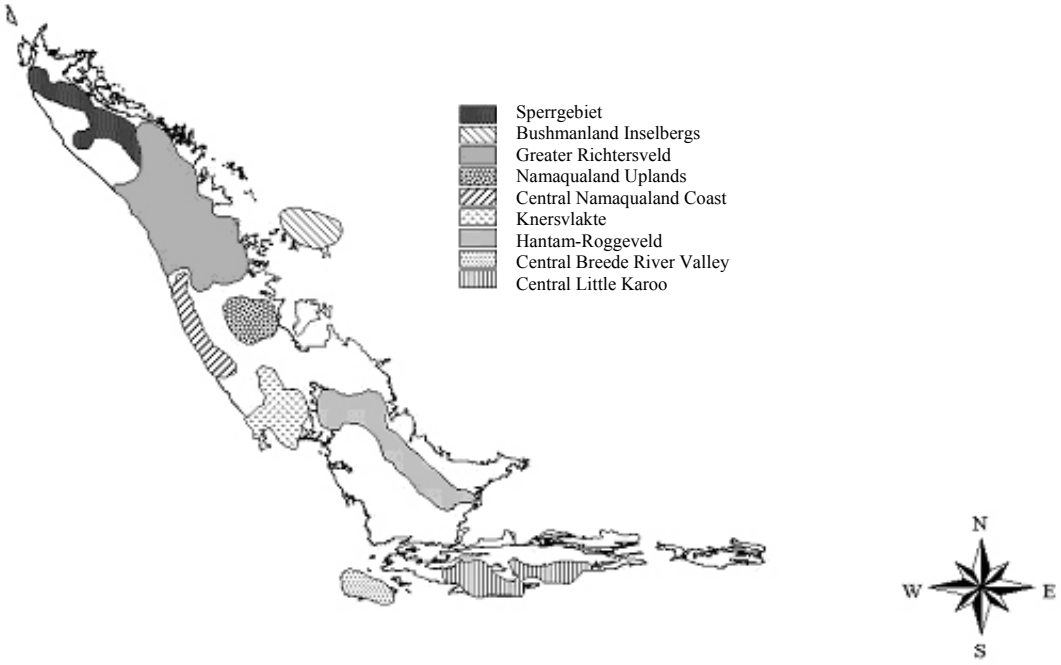
With this new understanding of the distribution of biodiversity and transformation pressures in the hotspot, SKEP's team of scientists determined what would be needed in terms of area to ensure that the region's species and the ecological processes that support them are conserved and then set conservation targets for biodiversity features such as vegetation types, river ecosystems, sand movement corridors and the presence of Red Data and endemic species based on this assessment. Appendix 1 of this document lists the total area, the amount of land already transformed and the area conservation targets

for each of the 135 vegetation types defined by the National Botanical Institute of South Africa and the National Botanical Research Institute of Namibia within the Succulent Karoo.

Figure 1. **Subregions in the SKEP Planning Domain.** The planning domain is larger than the Succulent Karoo hotspot. Additional information on how the domain was defined can be found in the SKEP documents on www.cepf.net.

Using a GIS-based computer program that uses an iterative algorithm to show maps of options for achieving these targets, a SKEP "Framework for Action Map" was produced that highlights areas essential for achieving conservation targets as well as areas that require additional research for refining and defining finer-scale outcomes for the SKEP Program. This map was then evaluated in light of the stakeholder information on land-use pressures and nine priority geographic areas were identified as the most efficient locations for achieving the conservation targets of SKEP and refined on the basis of their ability to contribute to the maintenance of Red Data List species and maintaining important ecological processes, particularly in the face of climate change. The nine priority areas are illustrated in Figure 2 and Appendix 2 details the contribution to achieving conservation targets that would be secured if the areas were brought under conservation management practices.

Figure 2: Priority areas for conservation in the Succulent Karoo hotspot, as defined through the SKEP process.



Defining Conservation Outcomes for the Succulent Karoo

The SKEP process also set out to identify important sites, species and corridors for biodiversity conservation that could be adopted as 20-year conservation targets for the Succulent Karoo hotspot. The process undertaken thus far has focused on defining broad geographic priorities and targeted specific vegetation types. Nonetheless, the SKEP team recognizes the need to do a finer analysis of specific species and sites that would result in a more formal summary of the conservation outcomes for the Succulent Karoo hotspot.

The 20-year conservation targets that have been identified thus far for the Succulent Karoo are:

- 75 percent of the conservation targets set in the SKEP process for 135 vegetation types will be protected and conserved.
- Key climatic gradients and riverine corridors are taken into consideration in the creation or expansion of any protected areas.
- Globally threatened and endangered species listed in the Red Data sources will be under additional protection.
- Sites in the Succulent Karoo hotspot that house unique, endemic and globally threatened species will be identified and protected.

After a more fine-scaled analysis, these conservation targets will be formalized as conservation outcomes for the Succulent Karoo hotspot and an outcome map will be created.

BIOLOGICAL IMPORTANCE OF THE SUCCULENT KAROO

The rich biodiversity of the Succulent Karoo hotspot is due to an extensive and complex array of habitat types derived from topographical and climatic diversity in the region's rugged mountains, semi-arid shrublands and coastal dunes. The hallmark of the hotspot is its exceptionally diverse and unique flora, especially succulents and bulbs. Many species are extreme habitat specialists, mainly related to soil type and of limited range size. Local endemism (i.e. the restriction of species to extremely small ranges of <50 km^2) is most pronounced among bulbs and Mesembryanthemaceae and other succulents. Similar patterns of compositional change along gradients have been observed for certain groups of invertebrates. In addition to invertebrates, faunal diversity and endemism is high for reptiles, amphibians and some mammals.

Levels of protection

Only 3.5 percent of the hotspot is formally conserved. This protected area system, like most others in the world, is not representative of the region's biodiversity; consequently many biodiversity features are not protected. In particular, the protected area system has not been designed to accommodate the ecological and evolutionary processes that maintain and generate the hotpot's biodiversity.

Despite the documented diversity of the hotspot, global and local awareness of the significance and value of the Succulent Karoo is scant. While funding to secure land has made substantial progress, lack of funding to develop and manage these resources has resulted in a situation where the parks are largely protected only on paper. Grazing, collection of wildlife for trade and mining and prospecting continue unabated in some areas.

The complex sociopolitical environment also impacts the levels of protection for biodiversity in the hotspot. Two countries, three provincial/regional governments and more than 50 local government bodies are located within the hotspot. Decentralization of many of the administrative functions of the South African and Nambian governments to the provincial (regional in Namibia) and municipal levels has led to the expansion of the role of local government in conservation and land-use issues. Building the capacity of staff in local government to integrate biodiversity concerns into their planning and regulatory practices is an important opportunity for civil society to participate in and influence long-term planning for conservation.

In addition to land-use planning, influencing land users toward long-term conservation outcomes needs to be developed at the local level. Increasing the outreach capacity of conservation agencies and piloting innovative approaches for involving civil society in protected areas is essential for expanding the overall levels of protection for biodiversity.

SYNOPSIS OF PRESSURES ON BIODIVERSITY IN THE SUCCULENT KAROO

Irreversible land transformation in the Succulent Karoo hotspot is not extensive and although livestock grazing as a land use dominates 90 percent of the region, only 5 percent of the land has been transformed. Poor soils, low rainfall and inaccessible mountain areas have limited the expansion of agriculture, invasive species and urbanization pressures that have transformed so much of the adjacent Cape Floristic Region hotspot in South Africa. As a result of the demise of the historical herds of springbok that once grazed the area, grazing as a land use is not incompatible with biodiversity conservation if managed properly. Well-managed grazing can help maintain niches for plant diversity. There are sufficiently extensive areas of intact habitat for many options to design and implement large conservation corridors. Implementation will, however, require some restoration in mined and severely overgrazed areas and mechanisms to reduce grazing pressure. Nonetheless, the Succulent Karoo's biodiversity is decreasing at an alarming rate as a result of several direct pressures.

Current and direct pressures

The hotspot is vulnerable to several land use pressures (Table 1), particularly overgrazing on communal lands, ostrich farming in the southeast, mining and the illegal collection of plants and animals for trade. Anthropogenic climate change is predicted to have a serious impact on the region's biodiversity.

Of the land use pressures summarized in Table 1, the greatest threats to biodiversity are associated with overgrazing and mining. Overgrazing is most problematic in communal areas and in the Southern Karoo where ostrich farming has seriously transformed large areas. Agriculture is restricted to a limited number of riverine habitats that collectively occupy a small area. Similarly, off-road impacts are also restricted spatially. Over-harvesting of fuel wood is a major problem in communal lands.

Agriculture: The most extensive pressure on biodiversity in the Succulent Karoo is livestock grazing. Goat, sheep, ostrich and small game ranching are the dominant land uses in approximately 90 percent of the hotspot and although stock limits and grazing plans exist for much of the hotspot, signs of overgrazing are evident over much of the landscape. This is particularly true in communal lands where motives for maintaining livestock numbers that exceed the capacity are not simply profit driven and where limited incentives and economic alternatives exist. Ostrich grazing, unlike small livestock grazing, tremendously impacts veld by selective grazing of high protein plants and seeds and compacting soil, effectively creating dust bowls.

Mining: The entire northern extension of the Succulent Karoo is mineral rich and with various mining applications pending throughout the region, transformation from mining operations represents a significant pressure. Open caste and alluvial mining activities for diamonds along the coast and river flood plains have nearly transformed the entire coastline. New markets and discoveries of base metals such as zinc and copper as well as gypsum and quartz deposits continue to transform large areas of limited habitat types. In

addition to large corporations, uncontrolled prospecting by smaller companies and individuals is encroaching on the fragment patches of dune and coastal shrubland.

Other direct pressures: In addition to these indiscriminate pressures, collection of rare and commercially valuable species is a pressure as is an increase of unregulated tourism activities in many fragile ecosystems. Thus, although the increase in tourism to the region could certainly help create an opportunity for biodiversity conservation, it is currently having a negative impact on numerous species.

Table 1. Summary of pressures on biodiversity in the Succulent Karoo hotspot

Pressure	Key components	Examples
Agriculture	Cultivation	6% of the Southern Karoo converted for cultivation Wine and grape farming established along all major perennial river systems with arable soils
	Overgrazing by livestock	Extensive overgrazing throughout the hotspot, particularly on communal lands
	Ostrich ranching	Ranching of ostrich causing irreversible soil compaction and erosion as well as local extinction of many plant species, especially dwarf succulents and bulbs
Mining	Alluvial and coastal diamond mining	Diamond mining by five companies has impacted most of the coastline and much of the riverine habitat in the Namaqualand and Namibian/Gariep subregions
	Open-pit extraction of base-metals	Base-metal vein mining near the Namibia-South Africa border coincides with areas of highest diversity for succulents and the corresponding increase in migration to these areas in search of mining jobs has negatively impacted biodiversity.
	Small-scale prospecting and extraction	Mining concessions, with small-scale prospecting for gemstones is one of the biggest pressures on biodiverse inselbergs in the Namaqualand and Namibian/Gariep subregions

Harvesting of plants and animals	Illegal collection by and for international collectors mainly for the pet and horticultural trade	Wildlife trade threatens numerous species. Armadillo girdled lizard (*Cordylus catabractus*) is one of an unknown number of these that are threatened with extinction in the wild as a result of collection for the pet trade
	Illegal or over-harvesting of species for use by local inhabitants	Increasing population pressure having an unknown impact on several useful plant and animal species
Inappropriate tourism development	Expansion of 4x4 trails in sensitive environments by tourism companies	Uncontrolled 4x4 tourism impacts negatively on sensitive habitats and biodiversity in desert mountains and the coastal zone by compacting soil and running over succulents.

Opportunities for Sustainable Development

While not minimizing the critical nature of the threats to Succulent Karoo biodiversity, there are viable solutions and measures that, if designed and implemented properly, can be taken to maintain biodiversity and promote sustainable development. More than 90 percent of the region is used for grazing purposes, a land use that is theoretically compatible with the maintenance of biodiversity and ecosystem processes.

Implementation of conservation farming techniques, the development of which is already funded by GEF, will ensure that existing and future grazing activities will be sustained and reduce the chances of further desertification of this fragile ecosystem. Furthermore, opportunities for generating employment and regional development through ecotourism, drawing on lessons learned from several successful community-based ecotourism initiatives in both Namibia and South Africa, can be developed to take advantage of the region's spectacular scenery, diversity of succulents, brilliant spring flower displays and increasing interest in local cultures.

The perceived root causes of threats to biodiversity

The stakeholders in the SKEP process also identified root causes of the unsustainable practices that are directly impacting the Succulent Karoo's biodiversity (Table 2).

Table 2. Summary of root causes of biodiversity loss in the Succulent Karoo hotspot

Root Cause	Manifestation
Lack of awareness of the existence and value of biodiversity	Inadequate sense of ownership and pride in biodiversity Little or no reaction to land use pressures that result in biodiversity loss Lack of knowledge about innovative ways to reduce the negative impacts on biodiversity of sectors such as mining, agriculture and land use planning
Lack of awareness of the market value of biodiversity, except for items such as ostriches and diamonds, that already have commercial value	Lack of desire to mainstream biodiversity into economic sectors such as mining and agriculture (e.g. biodiversity-linked marketing of diamonds, "green branding of ostrich products) Inadequate development of biodiversity-based industries such as ecotourism and wildlife farming
Lack of capacity to undertake conservation actions and inadequate knowledge of possible alternative interventions	Lack of capacity to undertake conservation work in protected areas Lack of knowledge and capacity to catalyze and implement innovative conservation actions Inability to mainstream biodiversity concerns in land-use planning
Lack of alternatives to unsustainable use of biodiversity	Opportunity costs of economic sectors outweigh biodiversity value in the short-term (e.g. mining, agriculture) Livelihoods dependant on the unsustainable use of biodiversity (subsistence livelihoods in communal lands, commercial pastoralism)

SYNOPSIS OF CURRENT INVESTMENTS

National, provincial and local governments have historically invested significantly in conservation in the major game park areas of Namibia and South Africa. However, the arid environment of the Succulent Karoo has received little attention from government or donors until recently. Fortunately, several large foreign investments are being made into the establishment of new protected areas in the region and, to a lesser extent, into projects that will provide a foundation to link conservation and sustainable development. While government funding by the two countries necessarily focuses on social issues in the region, opportunities to integrate biodiversity issues into government programs are increasing. Some of the major existing projects are described below.

Expanding protected areas

Sperrgebiet

- The Ministry of Environment and Tourism in Namibia, $44,000 from the Danish Agency for International Development to develop an initial land-use plan for the Sperrgebiet
- CI Global Conservation Fund, $23,000 to refine the management zoning of the land-use plan and develop a national implementation strategy for the region.

Conservancies in southern Namibia

- Namibia Development Trust, $114,860 to facilitate and strengthen a network or community-based conservancies in southern Namibia by increasing awareness and conducting trainings around natural resource management and by supporting organizational skills for the development of community-based tourism initiatives

Richtersveld Ais-Ais Transfrontier Conservation Area

- Global Environment Facility, $877,000 (3 years) as part of the Richtersveld Community Based Conservation Project to design and implement livelihood projects and environmental guidelines for the Richtersveld Park
- Peace Parks Foundation, $1 million (3 years) to develop appropriate management programs and capacity for the Richtersveld and Ais-Ais National Parks as a single trans-frontier Park
- South African Government Poverty Relief Fund, $3 million (3 years) to create jobs through to develop infrastructure within the Richtersveld Park
- Swiss Development Corporation, $600,000 (3 years) to support the establishment of a community conservancy project adjacent to the Richtersveld Park, thereby expanding protection in this important region
- NORAD, $233,500 (2 years) to delimit boundaries of mining activities within the Richtersveld Contractual Park, to encourage community-based tourism efforts and to support the application of a Richtersveld World Heritage Site

Namaqua National Park

- Global Environment Facility, $7.85 million (5 years) for developing an environmental education center and program and establishing mechanisms to increase participation and benefits in the park by local communities
- Leslie Hill Succulent Trust, 49,000 hectares of land acquisition
- DEAT Poverty Alleviation Funds, $133,000 for job creation to develop core infrastructure
- National Parks Development Fund, $12,000

Tanqua-Karoo National Park

- Leslie Hill Succulent Trust, fine-scale plan to identify priority cadastrals for land acquisition to expand the park

Moedverloren Provincial Reserve in the Knesvlakte

- Leslie Hill Succulent Trust, 7,392-hectare land acquisition in 1999 to create the reserve

Provincial reserves in the Little Karoo

- Leslie Hill Succulent Trust, 4,800-hectare land acquisition in Groenfontein to expand the Rooiberg protected area
- WWF-South Africa, land acquisition in Vaalhoek to expand the Rooiberg protected area
- Leslie Hill Succulent Trust, 24,525 hectares in land acquisitions since 1995 to expand the Anysberg Provincial Reserve
- Leslie Hill Succulent Trust, 5,000-hectare land acquisition in Doringkloof to create a new protected area in the Barrydale area

Regional development projects

TRANSFORM/GTZ initiative, $80,000. This initiative in the Greater Richtersveld area is investing in the development of Community Property Associations to build capacity to determine and secure legal status for community land. Securing legal status is being accomplished through several options such as maintaining independence, incorporating into local government municipalities or developing a contractual relationship with another entity for the provision of services. This is being carried out through a process prescribed in the Transformation of Certain Rural Areas Act of 1998 and should be completed in the Richtersveld region in 2003.

South-North Tourism Route. Originally funded by DEAT ($100,000) and later supported by the local Rare Center for Tropical Conservation program, this project created community-based tourism nodes, a Web site and trained guides. However, limited marketing and seasonal tourism cycles have negatively impacted the full potential contribution of this project to biodiversity conservation.

Corporate foundations provide funds for community-development projects and skills training for staff being retrenched from mine closures in the area. Although these programs currently do not include biodiversity in their programs, several opportunities for doing so were identified during the SKEP process.

Research

In South Africa, both long-term and short-term research projects on biodiversity are being supported through small to medium-sized grants to eligible graduate students from a number of universities to enable them to study land-use effects on plant and animal communities in the Karoo; rehabilitation of degraded Karoo ecosystems; distribution, success and impacts of alien plants and animals in Karoo ecosystems; and social and ecological costs and benefits of ecotourism in the Succulent Karoo. Relevant topics studied include climate change modeling by the National Botanical Institute, funded by the Center for Applied Biodiversity Science, and surveys, sponsored by WWF-South Africa grants, to contribute information from the Succulent Karoo to the Frog Atlas Project. Numerous other studies have large implications for local conservation efforts.

For example, one initiative that can have important impact if effectively integrated into action in the Tanqua-Hantam-Roggeveld subregion is the GEF-funded Conservation Farming Project. This five-year research initiative began in 1998 and is aimed at assessing different livestock farming methods on three sites in South Africa. One of the sites occurs on the Bokkeveld Plateau, a priority area for geophyte conservation, and important recommendations for management for biodiversity in this priority region are already resulting from the study. The total grant for the project was $750,000, approximately one-third of which went to the Bokkeveld site.

Government-funded initiatives

Land-use planning is an area where both Namibia and South Africa are investing substantial resources that could be leveraged to support biodiversity conservation. In both countries, efforts to decentralize government responsibilities have led to requirements for local governments to produce regional development plans. The central Namibian government is sponsoring a regional development plan for the Karas, while in South Africa substantial funding by both government and donor sources is directed toward creating Integrated Development Plans. As part of these plans, spatial development frameworks are required which demarcate zones for urban expansion, rural development and conservation. While the financial outlay for these plans varies among the municipalities, districts and provinces, an indication of the higher level of investment from the Gariep region is $500,000 from government sources. A specific investment in conservation comes from the Western District Council where provincial authorities have invested $10,000 into the demarcation of boundaries for the Knersvlakte Biosphere reserve.

Other important government funding is being channeled to environmental education and poverty alleviation projects that contribute to biodiversity conservation. WWF-South Africa has supported the development of a new environmental education curriculum, which is scheduled to launch in 2003 throughout South Africa. The Namibia Biodiversity Program of MET has created posters and a toolbox for involving students in conservation. In the Breede River Valley, $360,000 has been budgeted for use in the Working for Water Project to remove invasive alien vegetation in 2002/03. Additionally, investment into development projects, such as the $100,000 invested in developing a guesthouse at Papendorp, and the purchase of additional land for communities, such as important land along the Namaqualand Coast for the Griqua Community, can be linked to conservation of the natural ecosystem with additional investment in long-term ecological and financial management.

Stakeholders in the Succulent Karoo Hotspot

Conservation in the Succulent Karoo will depend on the active participation of civil society. Addressing knowledge gaps, facilitating partnerships between non-conservation NGOs and biodiversity-focused institution, and involving communities, private farmers, and corporations inhabiting the hotspot will be essential. Examples of such groups are:

NGOs: There are a large number of NGOs dedicated to conservation and sustainable land use in the Succulent Karoo, most of which will be involved in supporting land users

to become stewards of the biodiversity on their lands. Several local, regional and international organizations currently work in both the Namibian and South African regions of the Succulent Karoo. **Eco-Africa Environmental Consultants** has been involved in promoting and working with local communities on cultural and natural heritage conservation and development projects in the Succulent Karoo for nearly two decades. Currently, the organization is involved in efforts to establish a trans-frontier conservation area and World Heritage Site in the Richtersveld, an initiative to work with local fishing communities on coastal care programs, and a Namibian Conservancy project. Eco-Africa was the coordinator for the sociopolitical component of SKEP. The **Peace Parks Foundation** works to assist government, nature conservation bodies and the local community to unlock the potential of trans-frontier conservation areas. **BirdLife South Africa** does not currently have any projects in the Succulent Karoo but has identified the Orange River Mouth as an Important Bird Area. **CI** established an office in the region in 1998 and a Southern Africa Hotspots Program in 2001. This program supports the implementation of the Cape Action Plan for conservation of the Cape Floristic Region and facilitated the SKEP planning process. Additionally, CI is active in a project to secure the Sperregebiet as a wilderness area and the creation of trans-frontier conservation areas along the boundary between Namibia and South Africa. CI will support the transition to implementation of a programmatic approach for conservation in the Succulent Karoo, but will then limit its focus to supporting the creation of mega reserves and biodiversity and business initiatives in the region.

WWF-South Africa has a strong local presence and significant ability to raise funds and awareness in the Succulent Karoo. WWF-South Africa manages the **Leslie Hill Succulent Trust**, purchasing land to expand protected areas in the Succulent Karoo. Over the last five years, it has invested in the creation and expansion of Namaqua National Park, Tanqua Karoo National Park, and the Anysberg and Groenefontein provincial reserves. Another significant NGO in the region is the **Botanical Society of South Africa (BOTSOC).** BOTSOC has more than 25,000 individual members and actively promotes conservation, cultivation, study and wise use of the indigenous flora and vegetation of southern Africa. BOTSOC's Cape Conservation Unit plays an important role in conservation of the hotspot and its activities include advocacy, planning and research. With strong links to scientific expertise on Succulent Karoo flora and fauna, the Conservation Unit coordinated the biodiversity component of SKEP. Founded in 1927, the **Wildlife and Environment Society of South Africa** is one of the oldest environmental NGOs in South Africa. In the Succulent Karoo, it is particularly active in the Southern Karoo sub-region where it works through volunteer groups to raise awareness and involve the public in environmental and conservation issues. **The Environmental Monitoring Group** is an NGO that has offices in Cape Town and Nieuwoudtville. The group is involved in several projects related to conservation in the Succulent Karoo, including policy advising to South Africa's National Programme to Combat Desertification and a community development program involving the sustainable production and marketing of organic rooibos tea in the Southern Bokkeveld area. Two other NGOs, the **Surplus Peoples Project** and the **Legal Resources Centre** assist landless, dispossessed and homeless communities to solicit and obtain land rights and housing. As land tenure is a crucial first step in developing conservation practices, the

efforts of these groups to support the transformation process in Namaqualand will be supported by CEPF.

Namibia is a large country with a relatively small population of 1.8 million people. As a result, it has relatively few conservation bodies in general and given the fact that the majority of the Succulent Karoo in Namibia has been off-limits to the public for nearly a century (90% of the Succulent Karoo in the country lies within the Sperrgebeit Diamond Concession), few organizations are active in this area of the country. However, the **Namibian Development Trust**, the **Desert Research Foundation** and the **Namibia Nature Foundation** are involved in wide range of projects in the Succulent Karoo region of the country, focusing on public awareness, capacity building, conservancy establishment, erosion control and research on the unique flora and fauna of the region. Other Namibian organizations, such as the **Wildlife Society of Namibia,** also have environmental outreach programs.

Agricultural Unions: There are several farmers associations under the agricultural unions present in the Succulent Karoo. They operate as subdepartments of the Department of Agriculture, endeavoring to establish agriculture as a sustainable land use and maintain biodiversity with the emphasis on soil conservation. Several of the agricultural unions were active participants in the information gathering and action-planning phases of SKEP. As the primary land users in the hotspot, building awareness about biodiversity and offering incentives for conservation through these groups will have a tremendous impact.

Conservancies: These are established by voluntary agreements between two or more landowners to manage the environment. Conservation objectives are achieved by cooperation and commitment to the conservation of the environment on private property. Through cooperation between the farming community and conservation authorities this concept has grown into a national conservation movement.

- Communal Private Farmer's initiatives
- Nababiep Nature Reserve

Community Groups: Many community-based initiatives headed up by individuals within the local community exist, including:

- Griqua National Council (Namibia)
- Papendorp/Ebenaeser Community Trust
- Onse Ground Aksie Group
- The Ladismith Action Group
- The Montagu Action Group
- The Community Property Association
- The communally owned Moravian settlement of Wupperthal
- The Youth Forum
- Communal Private Farmer's initiatives
- Farmers Associations

- South North Tourism Route Association: There is an emerging community-based tourism initiative that operates on the principles of sustainable, responsible and equitable tourism.

Private Sector Forums: Existing forum for industries having a large impact on biodiversity are important mechanisms for integrating biodiversity concerns into their practices. Numerous associations in target sectors of mining, wine, fruit, ostrich, and tourism exist in the Succulent Karoo. Linkages and cooperation between various governmental and parastatal organizations as well as conservancies can be addressed through these forums and SKEP has identified opportunities for influencing these associations as a high priority and high-impact activity. An example of how these forums can be used to contribute to biodiversity conservation comes from the ostrich industry.

CEPF NICHE FOR INVESTMENT IN THE REGION

As originally intended, CEPF preparation funding in the Succulent Karoo has developed a set of priority areas and actions for conservation and sustainable development. These priorities enjoy broad consensus and support as a result of the participatory approach used to identify them and these priorities now form a solid foundation for addressing biodiversity issues. However, to ensure that the Succulent Karoo is conserved and that the SKEP 20-year vision and targets are achieved, it is important to focus the initial CEPF investment on areas and actions that will catalyze the greatest impact now and in the long term. The specific niche for CEPF in the Succulent Karoo hotspot is to catalyze key activities in under-funded geographic priority areas using innovative mechanisms to achieve biodiversity conservation by involving specific land users such as the agriculture sector, mining companies and communal authorities.

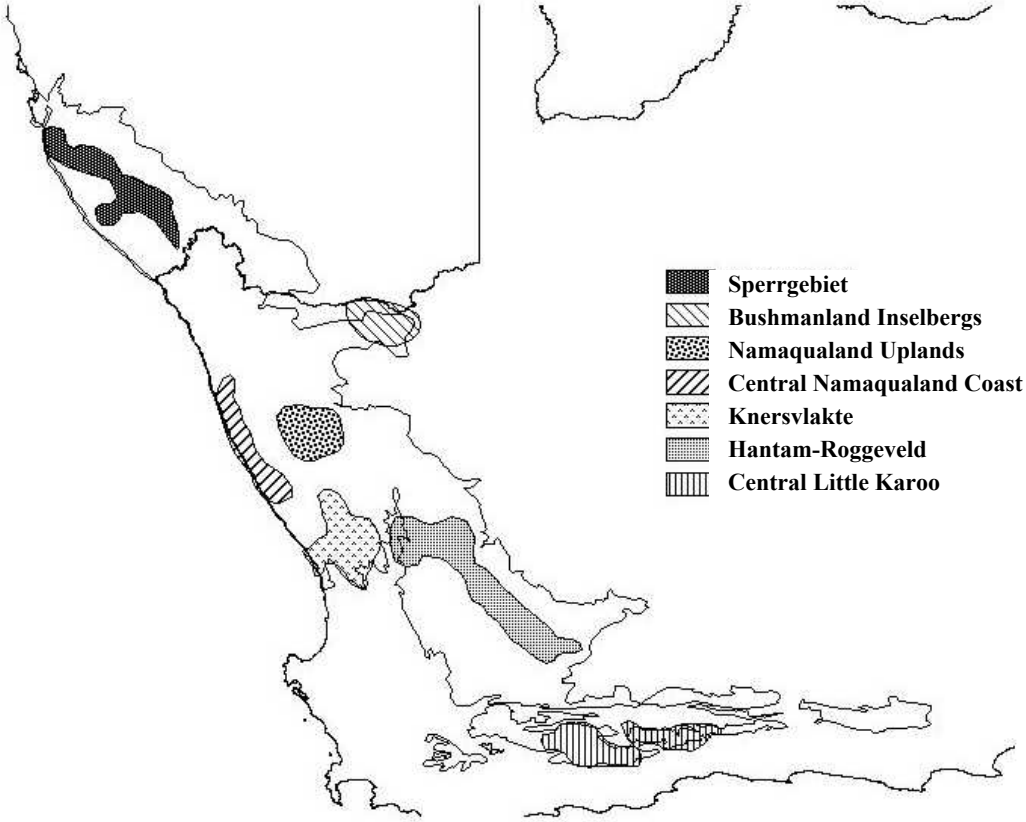
CEPF Geographic Priorities

Nine geographic priority areas were identified as a result of the SKEP process (see map on page 7). A full summary of the methodology for defining conservation targets and additional information on how these geographic priorities were determined can be found in the SKEP subregional and technical reports.

There is great synergy between the geographic priorities identified by the SKEP process and Important Bird Areas as defined by BirdLife International. BirdLife uses birds as the primary indicators and an international set of agreed criteria had previously selected seven Important Bird Areas that coincide with six of the nine geographic areas identified by the SKEP process as priorities for conservation. These are the Central Namaqualand Coast (SA099 Olifants River Estuary), Knersvlakte (SA 104 Lower Berg River Wetlands), Greater Richtersveld (SA 030 Orange River Mouth Wetlands), Central Little Karoo (SA 106 Swartberg Mountains & SA 108 Anysberg Nature Reserve), Bushmanland Inselbergs (SA035 Haramoep & Blackmountain Mine Nature Reserve) and Hantam-Roggeveld (SA 101 Cedarberg-Koue Bokkeveld Complex). The Important Bird Areas selected for South Africa form the basis of BirdLife South Africa's national and site-specific conservation action, advocacy and monitoring programs.

In developing this profile, CEPF determined that two of the nine areas identified as priorities for conservation by the SKEP process—the Greater Richtersveld and the Worcester-Robertson Karoo—have substantial existing investment. Therefore, while CEPF small grants will be available to increase civil society conservation projects in these two areas, the other seven geographic areas listed below from north to south and highlighted in Figure 3 will be the primary focus of CEPF investment.

Figure 3: Priority areas for CEPF investment in the Succulent Karoo hotspot.



1. Sperrgebiet

Sperrgebiet encompasses nearly all of the Succulent Karoo vegetation extant in Namibia and is the only area of the hotspot that could be considered a wilderness area. Since the area has been held as a mining concession for the last century, it has been strictly off-limits to the public, including scientists, for much of the last century. Large tracts of unspoiled dune and mountain landscapes typify the area, and the stark landscapes hide an unknown number of biodiversity gems. The few scientific studies that have been carried out in the 56,100-hectare area generated records for 776 plant species, including 234 endemics and 284 Red Data List taxa. In addition to the high concentration of endemic plants, amphibians and reptiles, wild populations of gemsbok, springbok and carnivores such as brown hyena live in this undisturbed environment. In fact, this unique wilderness

area boasts the highest levels of biodiversity in all of Namibia. Although mining has been the savior of the Sperrgibiet to date, exploration for new mineral riches beyond the already transformed coastal zones is a major land use pressure and periodic use of the eastern grasslands of the Sperrgebiet as "emergency grazing" are also a concern for conservation of this fragile landscape. Fortunately, establishment by the Namibian authorities of a Sperrgebiet National Park is well advanced. CI's Global Conservation Fund is supporting a scoping initiative to refine management zoning within the Sperrgebiet and design an implementation strategy for securing long-term protection for this unique wilderness area.

2. Bushmanland Inselbergs

The Bushmanland Inselbergs area is located on the northeast margin of the Succulent Karoo hotspot, just south of the Orange River and the border between Namibia and South Africa. The area is dominated by a plain of desert grasslands and peppered by inselbergs, ancient rocky outcrops in irregular patterns, throughout the landscape. These inselbergs are important refugia for plants and animals and act as stepping-stones for rock-loving species migrating east west across the sand-covered plains of Bushmanland. Isolation of populations has led to diversification within the dwarf succulent shrublands. In total, the 31,400-hectare area includes 429 plant species, of which 67 are found only in this hotspot and 87 are Red List species. Mining has impacted many of the inselbergs, and a proposed opencast zinc mine may impact on most of the spectacularly diverse Gamsberg inselberg which is home to two flagship endemics: *Conophytum ratum* and *Lithops dorotheae.* The red lark (*Certhilauda albescens*) is also an important endemic species to this part of the Bushmanland plateau, although severe overgrazing on communal lands in this region is impacting its habitat. One Important Bird Area (IBA), SA035 Haramoep & Blackmountain Mine Nature Reserve, is located in this priority geographic area and contains populations of the red lark.

3. Namaqualand Uplands

The Namaqualand Uplands encompass the highlands of central Namaqualand in the Northern Cape Province. The area is known for its spectacular displays of spring flowers and high diversity and endemism of bulbous flowers. The 33,500-hectare area includes 1109 species, of which 286 are Succulent Karoo endemics and 107 are Red List species. In addition to its diversity, the region contains large zones of transitional vegetation between succulent and *fynbos* habitats. These zones are considered crucial for conservation by experts for both species diversification and resilience to climate change. Conserving this area will provide an important corridor between the Namaqualand National Park and the Central Namaqualand coast priority area (see 4 below). Agriculture, mainly grain production, has already transformed all areas of level terrain and overgrazing by livestock, especially on communal lands, is a significant land-use pressure on this area.

4. Central Namaqualand coast

The Central Namaqualand coast incorporates a crucial tract of relatively pristine Namaqualand coastline. As a result of diamond mining and tourism development, much of this coastline has been transformed. However, again as the result of strict access

control, this approximately 30-kilometer-wide stretch of coastline is relatively pristine. The 34,600-hectare area includes 432 plant species, 85 of which are Succulent Karoo endemics and 44 of which are Red List species. Flagship species include locally dominant succulent endemics such as *Wooleya farinosa*, Grant's golden mole (*Eremitalpa granti)* and Gronovi's dwarf burrowing skink (*Scelotes gronovii*). One IBA, SA099 Olifants River Estuary, is located in this priority geographic area. Although the IBA is primarily aimed at protecting a wetland habitat it also contains significant amounts of Succulent Karoo habitat.

5. Knersvlakte

The Knersvlate is defined as the extensive dry plain located in the center of the Succulent Karoo hotspot bounded on the east by the Bokkeveld Mountains. The area is typified by gently rolling hills covered by "fields" of white quartz pebbles and saline soils. The 48,500-hectare area is extremely rich in plant species, with a total of 1,324 species, 266 of which are Succulent Karoo endemics. Within the hotspot, this priority area has the greatest percentage of threatened endemics with 128 species being listed on the Red List. Small-scale mining for gypsum, diamonds and limestone/marble, overgrazing and the illegal harvesting of rare and spectacular species for national and foreign plant collections are the greatest pressures in this area. One IBA, SA 104 Lower Berg River Wetlands, is located in this priority geographic area. Although the IBA is primarily aimed at protecting a wetland habitat it contains sufficient amounts of Succulent Karoo habitat to warrant attention.

6. Hantam-Roggeveld

The Hantam-Roggeveld area is centered on the town of Calvinia and encompasses both the Bokkeveld and Roggeveld escarpments. These rugged slopes and cool highlands include a wide range of species types characteristic of transition zones between the renosterveld-Succulent Karoo interface. As with the Namaqualand Uplands, conserving these cooler areas is an essential strategy for maintaining the unique diversity of the hotspot in the face of global warming. Additionally, due to relatively low levels of transformation in this priority area, there are excellent opportunities to include upland-lowland seasonal migration routes for fauna (especially springbok) as well as viable populations of black rhinoceros. The total plant species in this 86,600-hectare area is 1,767, of which 357 are Succulent Karoo endemics and 173 are Red List species. One IBA, SA 101 Cedarberg-Koue Bokkeveld Complex, is located in this area and contains components of both the Cape Floristic Region and Succulent Karoo hotspots.

7. Central Little Karoo

The Central Little Karoo area of the Succulent Karoo hotspot lies in the intermontane valley between the Langeberg and Swartberg mountain ranges at the southern extension of the hotspot. The area consists of a wide range of microhabitats across extensive plains arid foothills and rugged rocky ridges and experiences extreme seasonal and diurnal temperature fluctuations (up to 28 degrees Celsius difference between day and night). In total, there are 1,325 species in this 51,000-hectare area, including 182 Succulent Karoo endemics and 92 Red List species. Although unique and rare species are found throughout the Central Little Karoo landscape, many of the endemics are concentrated

along veins of weathered quartz, which creates patches of white pebbles that provide camouflage and moderate the temperature for the "stone plants." Much of the vegetation in the important river corridors has already been transformed for agriculture, principally lucerne but also vines and deciduous fruit. However, it is ostrich ranching that, as a result of ostriches' amazing ability to live off even the driest veld, is the greatest pressure on biodiversity in this priority area. Two IBAs—SA 106 Swartberg Mountains and SA 108 Anysberg Nature Reserve—are located in this priority area. The former contains components of both the Cape Floristic Region and Succulent Karoo hotspots.

CEPF INVESTMENT STRATEGY AND PROGRAM FOCUS

SKEP identified a comprehensive conservation program and action plan to achieve its vision and strategic objectives. Clearly, not all of these strategic objectives and their associated funding directions are appropriate for CEPF support. The CEPF funding niche for the hotspot is characterized by strategic funding opportunities that cannot readily be filled by other funding agencies and which will be incremental steps towards achieving the larger SKEP 20-year vision.

The specific niche for CEPF in the Succulent Karoo hotspot is to catalyze key activities in under-funded geographic priority areas using innovative mechanisms to achieve biodiversity conservation by involving specific land users such as the agricultural sector, mining companies and communal authorities.

The following table summarizes the strategic funding directions for CEPF.

Strategic Funding Directions	**Investment Priorities**
1. Expand protected area corridors through public-private-communal partnerships in the priority areas of Bushmanland Inselbergs, Central Namaqualand Coast, Namaqualand Uplands, Knersvlakte, Hantam-Roggeveld, Central Little Karoo and Sperrgebiet	1.1 Establish catalyst teams responsible for mobilizing local stakeholder participation; securing necessary political support; consolidating baseline information on biodiversity for long-term monitoring; developing management plans that formalize roles of each partner; and creating strategies for long-term financial sustainability
2. Engage key industrial sectors in meeting conservation objectives identified by SKEP	2.1 Promote best practices in the ostrich industry through pilot projects, policy recommendations and marketing options 2.2 Support mining forums of corporate and small-scale mining enterprises to discuss and develop mechanisms for addressing biodiversity concerns 2.3 Direct corporate investment into conservation projects that contribute to conservation targets and regional development objectives

	2.4 Assist landowners in the development of ecotourism and natural resource-based enterprises that protect biodiversity
3. Retain and restore critical biodiversity in areas under greatest land-use pressure	3.1 Conduct a rapid assessment to map grazing impacts in all geographic priority areas 3.2 Develop fine-scale conservation and monitoring plans for priority areas under greatest land use pressure where the impact of biodiversity conservation will be the most significant 3.3 Refine the conservation targets and establish a monitoring system for the targets and outcomes. 3.4 Investigate mechanisms, such as direct payment and others, that will enable the creation of small conservation areas in priority areas under high land use pressures 3.5 Synthesize research on best grazing practices and implement outreach programs based on findings
4. Mainstream conservation priorities into land-use planning and policy-making	4.1 Interpret conservation plans and design suitable products for municipal planners and other land-use decision making agencies 4.2 Increase the capacity of agencies to use these products to integrate biodiversity concerns into their operations and policies
5. Increase awareness of the Succulent Karoo hotspot	5.1 Increase awareness of the Succulent hotspot and its unique biodiversity among local, subregional and national constituencies through a binational awareness campaign 5.2 Support efforts to publicize the biological importance of the Succulent Karoo hotspot 5.3 Support projects that educate stakeholders about threatened and unique species in the hotspot
6. Create the capacity to catalyze the SKEP program	6.1 Support a small network of locally based champions that will represent biodiversity concerns at a subregional level and assist with the identification, monitoring and mentoring of small-scale conservation projects 6.2 Establish a small grants program aimed at promoting small-scale development of

	biodiversity-based livelihood projects 6.3 Establish a coordination unit to lead implementation of the SKEP program, including providing technical assistance to launch components of the strategy, rapidly reviewing potential CEPF projects and leveraging additional resources to ensure long-term financial sustainability

Expand protected area corridors through public-private-communal partnerships in specific geographic priorities

This funding direction is aimed at undertaking specific catalytic activities that will assist in the expansion of the Succulent Karoo hotspot's protected area system through the establishment of five large conservation corridors (or megareserves). When implemented, these corridors should be sufficiently large to achieve conservation targets for numerous Red List species and many vegetation types. In addition, they should be able to accommodate a wide range of processes, including large mammal migration routes, riverine corridors and climatic gradients. The incorporation of the last-mentioned feature should provide resilience to climate change.

A major obstacle to implementing projects of this scale is a lack of capacity among conservation agencies. Consequently, CEPF's niche within the larger objective is to establish project management teams which can catalyze planning and specific implementation of key activities that will build the momentum required to eventually establish five large conservation corridors. These teams, appointed under the auspices of an appropriate nongovernmental organization, should work in close partnership with the appropriate conservation agency and provide mentorship for officials of the agency that will ultimately inherit the project. These teams that will include individuals with project management, community extension, and conservation planning expertise will develop strategies for creating new protected areas that enjoy support and generate benefits for a broad range of stakeholders. These teams, will be responsible for securing local stakeholder participation, necessary political buy-in, consolidating baseline information on biodiversity for long-term monitoring, developing management plans that formalize roles of each partner, and creating strategies for long-term financial sustainability. Such a model is being piloted for the Baviaanskloof megareserve in the Cape Floristic Region, where the provincial conservation agency has provided substantive co-funding.

Wherever possible, these projects should build on and be integrated with existing projects in and around the respective priority areas. For example, the potential synergies between the Cederberg and Gouritz megareserves (being implemented as part of the Cape Action Plan for the Environment) and the Hantam-Roggeveld and Central Little Karoo megareserves, respectively, should be expanded.

Engage key industrial sectors in meeting conservation objectives identified by SKEP

Many potential partnerships exist between the conservation community and key industrial sectors in the Succulent Karoo hotspot that could lead to positive conservation outcomes. This funding direction will target these sectors by building relationships with key stakeholders and exposing them to opportunities for enhancing their business interests while simultaneously meeting conservation objectives. These include industries based on resources that constitute high opportunity costs for conservation (e.g. mining, ostrich ranching) as well as those whose objectives are potentially aligned with conservation (e.g. ecotourism, wildlife ranching).

Retain and restore critical biodiversity in areas under greatest land use pressure

The achievement of conservation targets in landscapes subject to severe land use pressures, where extant habitat is often fragmented, is a huge challenge for conservation. This funding direction will address this challenge through the identification of spatial priorities at the fine-scale (1:10,000 – 1:50,000) and the investigation of mechanisms to create small reserves and reduce pressures on the unreserved remnants.

Mainstream conservation planning outcomes in land-use planning and decision-making

In both Namibia and South Africa, decisions regarding land use have been devolved to local or district municipalities. These municipalities are legally bound to prepare spatial plans and associated development priorities for investment every five years. Local government legislation requires these plans to incorporate biodiversity concerns. This legislation provides an excellent opportunity to mainstream biodiversity concerns into land use planning and practice. Unfortunately, most local government agencies in the Succulent Karoo hotspot do not have the capacity to produce the appropriate information on biodiversity as well as the ability to use such information, even if it were provided. This strategic funding direction is aimed at providing the appropriate biodiversity products for municipal-level planning and increasing the capacity of officials to use these products. The associated projects should draw on the experience gained from similar exercises in the Cape Floristic Region and the Subtropical Ecosystem Planning Project planning domain. The intention should be to build core capacity for generating and updating products, and for providing training within the provincial conservation agency of the Northern Cape as well as within the Conservation Planning Unit of the Western Cape Nature Conservation Board.

Increase awareness of the Succulent Karoo hotspot

Unlike the adjacent Cape Floristic Region hotspot, where the "fynbos" and "Cape Floral Kingdom" names are widely known, awareness of the Succulent Karoo's unique biodiversity status is relatively poorly developed at the local, regional and national levels. This funding direction will meet the urgent need to promote awareness of the hotspot from local to national scales, through support to projects such as a well-coordinated binational awareness campaign. Within this strategic direction, CEPF will

also support efforts to publicize the biological importance of the Succulent Karoo hotspot and educate stakeholders about threatened and unique species from the Succulent Karoo as flagship species.

Create capacity to catalyze the SKEP program

Effective identification and implementation of projects consistent with CEPF investment priorities and the larger 20-year SKEP vision will require a proactive approach to catalyzing targeted activities that will build the momentum required to conserve the Succulent Karoo hotspot. These include the establishment of a small grants fund and a network of champions to identify, mentor and monitor small-scale projects, which can be undertaken at a local scale and involve largely, but not exclusively, disadvantaged communities. Champion teams may also become involved in larger projects occurring within their subregions and will hopefully participate in or influence local government deliberations that deal with biodiversity concerns.

This funding direction will also establish a coordination unit for implementing SKEP, including the CEPF investment priorities identified above. As per agreed policy, this unit will be incorporated into the Bioregional Planning Unit of South Africa's National Botanical Institute (soon to become the National Biodiversity Institute).

CONCLUSION

The Succulent Karoo is one of the biological wonders of the world, with unrivaled levels of diversity and endemism for an arid area. The increasing threats to this unique region have compelled significant global, national and local commitment to a comprehensive plan for its conservation: the Succulent Karoo Ecosystem Plan. CEPF provides a source of funding in the Succulent Karoo designed to reach NGOs in a way that complements funding for government agencies and other stakeholders; supports the framework established by SKEP; ensures that civil society has an opportunity to contribute to conservation; and provides a flexible, responsive funding mechanism for innovative conservation activities. By aligning its focus with the conservation and sustainable development goals of SKEP, CEPF will augment efforts to address immediate threats and contribute to long-term conservation in the hotspot, developing a model of sustainable regional conservation efforts that could be replicated in other arid regions facing similar pressures and in other biodiversity hotspots around the world.

The momentum generated by the stakeholder process for developing this profile and existing capacity in the region provides an exciting opportunity for CEPF to support priority actions within the SKEP framework that will secure areas for conservation, build the capacity for a programmatic approach and conserve the Succulent Karoo's biodiversity in perpetuity.

APPENDIXES

Appendix 1. **Vegetation types in the Succulent Karoo hotspot, with targets**

Appendix 1 shows the overall area targets and how they relate to the amount of each vegetation type that is already transformed. This table shows which vegetation types are represented in the nine SKEP geographic priorities. It also shows those vegetation types still not represented in any of the priority areas as the column "Geographic Priority" is blank (e.g. Hottentots Bay Rock Outcrops) and which are being represented in several (e.g. Namaqualand Klipkoppe Flats, which is found in both the Greater Richtersveld and the Namaqualand Uplands Priority Areas). Appendix 2 then provides much more detailed analysis of how much of each of the vegetation targets represented are met by an individual priority region (e.g. by conserving the Namaqualand Uplands Priority region you will be protecting 46 percent of the area target still required, not already under protection. Alternatively, if you secure the entire Greater Richtersveld priority area, 102,500 hectares of the Namaqualand Klipkoppe Flats will be conserved and your conservation target will be achieved. Overlaps in representation by the various priority regions were included to provide buffers by large scale changes anticipated from climate change. This detailed information provides a baseline for measuring conservation success and can be modified as transformation or new locations of important species are identified. The complete database will be evaluated and updated as part of the larger SKEP monitoring and evaluation program.

Vegetation Group	Vegetation types within the Succulent Karoo Biome	Total area (ha)	Target*		Transformed**		Conserved in cat 1 reserves		Target met in cat 1 reserves	Required to meet target		Geographic priority area(s)
			ha	%	Ha	%	ha	%	%	ha	% of avail	
Lowland Succulent Karoo	Central Knersvlakte Lowland Succulent Karoo	16 753	5 864	35	115	1	0	0	0	5864	35	Knersvlakte
	Central Little Karoo	68 846	24 096	35	7173	10	0	0	0	24096	39	Central Little Karoo
	Eastern Little Karoo	24 500	8 575	35	2305	9	36	0	0	8539	38	Central Little Karoo
	Grillenthal Coastal Inselbergs & Gravel Plains	103 421	36 197	35	0	0	5513	5	15	30685	30	Sperrgebiet
	Hottentots Bay Rock Outcrops & Gravel Plains	12 467	4 363	35	0	0	0	0	0	4363	35	
	Knersvlakte Dolorites	2 639	1 055	40	82	3	0	0	0	1055	41	Knersvlakte
	Knersvlakte Shales	83 414	29 195	35	574	1	0	0	0	29195	35	Bokkeveld-H-R; Knersvlakte
	Luderitz-Pomona Rock Outcrops & Gravel Pl.	179 443	62 805	35	279	0	41	0	0	62764	35	Sperrgebiet
	Namaqualand Klipkoppe Flats	302 920	106 022	35	19133	6	3522	1	3	102500	36	Greater R'veld; Namaq Uplands

Vegetation Group	Vegetation types within the Succulent Karoo Biome	Total area (ha)	Target*		Transformed**		Conserved in cat 1 reserves		Target met in cat 1 reserves	Required to meet target		Geographic priority area(s)
			ha	%	Ha	%	ha	%	%	ha	% of avail	
	Namaqualand Lowland Succulent Karoo	226 120	79 142	35	13969	6	20392	9	26	58750	28	Central Namaq Coast; Greater R'veld; Namaq Uplands
	Northern Knersvlakte Lowland Succ. Karoo	143 953	50 384	35	73	0	0	0	0	50384	35	Knersvlakte
	Northern Richtersveld Lowland Succ. Karoo	23 955	8 384	35	0	0	0	0	0	8384	35	Greater R'veld
	Prince Albert Succulent Karoo	223 061	44 612	20	2142	1	319	0	1	44293	20	
	Robertson Karoo	61 257	24 503	40	20727	34	152	0	1	24351	60	Central BR Valley
	Southeastern Richtersveld Desert	62 527	21 884	35	11	0	0	0	0	21884	35	Greater R'veld
	Southeastern Richtersveld Succulent Karoo	52 147	18 251	35	16	0	0	0	0	18251	35	Greater R'veld
	Southern Knersvlakte Lowland Succ. Karoo	98 952	34 633	35	16910	17	0	0	0	34633	42	Knersvlakte
	Southern Richtersveld Lowland Succ. Karoo	72 296	25 303	35	0	0	0	0	0	25303	35	Greater R'veld
	Southern Tanqua Karoo	125 141	43 799	35	434	0	0	0	0	43799	35	Bokkeveld-H-R
	Springbokvlakte East Gariep Desert Plains	9 677	3 387	35	2020	21	0	0	0	3387	44	Greater R'veld
	Steytlerville Karoo	16 167	3 233	20	9	0	0	0	0	3233	20	
	Stinkfonteinberge Lowland Succulent Karoo	4 552	1 593	35	4	0	0	0	0	1593	35	Greater R'veld
	Tanqua Karoo	595 871	208 555	35	5786	1	45224	8	22	163331	28	Bokkeveld-H-R
	Tanqua Sheet Wash Plains	162 805	56 982	35	6169	4	18597	11	33	38385	25	Bokkeveld-H-R
	Upper Annisvlakte Succulent Karoo	19 180	6 713	35	265	1	0	0	0	6713	35	Greater R'veld
	Vanwyksdorp Gwarrieveld	73 353	25 674	35	1164	2	9	0	0	25665	36	Central Little Karoo
	West Gariep Lowlands	46 028	16 110	35	2912	6	0	0	0	16110	37	Greater R'veld
	Western Little Karoo	335 057	117 270	35	31330	9	19126	6	16	98144	32	Central Little Karoo
Mountain Succulent Karoo	Agter-Sederberg Succulent Karoo	221 903	77 666	35	4305	2	1752	1	2	75914	35	Bokkeveld-H-R; Knersvlakte
	Aughrabies Mountain Succulent Karoo	7 968	2 789	35	0	0	0	0	0	2789	35	Greater R'veld
	Aurusberg Succulent Karoo	15 925	5 574	35	0	0	0	0	0	5574	35	Sperrgebiet
	Boegoeberg Succulent Karoo	37 069	12 974	35	954	3	0	0	0	12974	36	Sperrgebiet
	Central Richtersveld Succulent Karoo	100 381	40 153	40	82	0	0	0	0	40153	40	Greater R'veld
	Die Plate Succulent Karoo	12 756	4 465	35	0	0	0	0	0	4465	35	Greater R'veld
	Doring River Succulent Karoo	21 889	7 661	35	5109	23	0	0	0	7661	46	Knersvlakte

Vegetation Group	Vegetation types within the Succulent Karoo Biome	Total area (ha)	Target*		Transformed**		Conserved in cat 1 reserves		Target met in cat 1 reserves	Required to meet target		Geographic priority area(s)
			ha	%	Ha	%	ha	%	%	ha	% of avail	
	Eenriet Quartzite Succulent Karoo	11 132	3 896	35	0	0	0	0	0	3896	35	Greater R'veld
	Fish River Mountain Succulent Karoo	5 621	1 967	35	0	0	5544	99	282	0	0	Greater R'veld
	Goariep Mountain Succulent Karoo	17 077	5 977	35	0	0	0	0	0	5977	35	Greater R'veld
	Harras Quartzite Succulent Karoo	17 810	6 233	35	0	0	0	0	0	6233	35	Greater R'veld
	Klinghardberg Succulent Karoo	23 464	8 213	35	0	0	0	0	0	8213	35	Sperrgebiet
	Koingnaas Quartzite Succulent Karoo	22 440	7 854	35	271	1	0	0	0	7854	35	Greater R'veld
	Nababiepsberge Desert	137 903	48 266	35	3228	2	706	1	1	47560	35	Greater R'veld
	Namaqualand Klipkoppe	797 444	398 722	50	42993	5	23489	3	6	375233	50	Central Namaq Coast; Greater R'veld; Knersvlakte; Namaq Uplands
	Namus Mountain Succulent Karoo	47 622	16 668	35	0	0	16540	35	99	128	0	Greater R'veld
	Naroegas Quartzite Succulent Karoo	26 694	9 343	35	0	0	0	0	0	9343	35	Greater R'veld
	Noams Mountain Desert	171 470	60 014	35	7427	4	116992	68	195	0	0	Greater R'veld
	Nuwerus Quartzite Succulent Karoo	63 877	22 357	35	1024	2	0	0	0	22357	36	Central Namaq Coast; Knersvlakte
	Richtersberg Mountain Desert	51 912	18 169	35	1331	3	182	0	1	17987	36	Greater R'veld
	Richtersveld S-Western Foothills Succ. Karoo	33 109	11 588	35	5569	17	0	0	0	11588	42	Greater R'veld
	Richtersveld Western Foothills Succ. Karoo	11 129	3 895	35	0	0	0	0	0	3895	35	Greater R'veld
	Rooiberg Quartzite Succulent Karoo	16 585	5 805	35	124	1	1200	7	21	4605	28	Knersvlakte
	Rosh Pinah Mountain Succulent Karoo	91 442	32 005	35	2097	2	26376	29	82	5629	6	Greater R'veld; Sperrgebiet
	Rosyntjieberge Succulent Karoo	5 995	2 098	35	0	0	0	0	0	2098	35	Greater R'veld
	Southeastern Richtersveld Quartzites	60 050	21 017	35	170	0	0	0	0	21017	35	Greater R'veld
	Southern Richtersveld Inselbergs	12 867	4 503	35	59	0	0	0	0	4503	35	Greater R'veld
	Southern Tanqua Mountain Succulent Karoo	205 015	82 006	40	141	0	0	0	0	82006	40	Bokkeveld-H-R
	S-Western Richtersveld Mountain Succ. Karoo	15 810	5 534	35	0	0	0	0	0	5534	35	Greater R'veld
	Springbok Quartzite Succulent Karoo	22 253	7 789	35	8	0	0	0	0	7789	35	Greater R'veld
	Swartruggens Sandstone Karoo	60 032	21 011	35	950	2	2984	5	14	18027	31	
	Umdaus Quartzite Succulent Karoo	40 166	14 058	35	0	0	0	0	0	14058	35	Greater R'veld

Vegetation Group	Vegetation types within the Succulent Karoo Biome	Total area (ha)	Target*		Transformed**		Conserved in cat 1 reserves		Target met in cat 1 reserves	Required to meet target		Geographic priority area(s)
			ha	%	Ha	%	ha	%	%	ha	% of avail	
	West Gariep Desert	142 850	49 997	35	26701	19	12737	9	25	37260	32	Greater R'veld; Sperrgebiet
Quartz & Gravel Patch Succulent Karoo	Alexander Bay Gravel Patches	26 341	9 219	35	11652	44	0	0	0	9219	63	Greater R'veld
	Anysberg Quartz Patches	26 526	9 284	35	181	1	15636	59	168	0	0	Central Little Karoo
	Buffels River Quartz & Gravel Patches	15 686	5 490	35	1196	8	0	0	0	5490	38	Greater R'veld
	Calitzdorp Quartz Patches	10 390	3 636	35	936	9	1596	15	44	2041	22	Central Little Karoo
	Concordia Quartz Patches	832	291	35	0	0	0	0	0	291	35	Greater R'veld
	Eastern Bushmanland Quartz & Gravel Patches	165 586	57 955	35	13592	8	0	0	0	57955	38	Bushmanland Inselbergs
	Eastern Richtersveld Quartz Patches	24	8	35	0	0	0	0	0	8	35	Greater R'veld
	Gamoep Quartz & Gravel Patches	55 217	19 326	35	0	0	0	0	0	19326	35	
	Kamma River Quartz Patches	8 610	3 013	35	0	0	0	0	0	3013	35	Greater R'veld
	Kliprand Gravel Patches	117 533	41 136	35	0	0	0	0	0	41136	35	
	Knersvlakte Quartzfields	122 376	48 950	40	1198	1	5104	4	10	43846	36	Knersvlakte
	Koekenaap Quartz Patches	1 597	639	40	51	3	0	0	0	639	41	Knersvlakte
	Komkans Quartz Patches	27 295	9 553	35	65	0	0	0	0	9553	35	
	Kotzerus Quartz Patches	4 303	1 506	35	0	0	0	0	0	1506	35	Central Namaq Coast
	Langeberg Quartz Patches	23 799	8 330	35	1275	5	0	0	0	8330	37	Central Little Karoo
	Lekkersing Quartz Patches	53 675	18 786	35	273	1	0	0	0	18786	35	Greater R'veld
	Loeriesfontein Gravel Patches	56 944	19 931	35	0	0	0	0	0	19931	35	
	Moreskadu Quartz Patches	8 372	2 930	35	0	0	0	0	0	2930	35	
	Oernoep River Quartz Patches	22 643	9 057	40	0	0	0	0	0	9057	40	Greater R'veld
	Olifants River Quartz Patches	21 546	8 618	40	11335	53	0	0	0	8618	84	Knersvlakte
	Oudtshoorn Quartz Patches	10 972	3 840	35	628	6	0	0	0	3840	37	Central Little Karoo
	Platbakkies Quartz & Gravel Patches	38 441	13 454	35	117	0	0	0	0	13454	35	Namaq Uplands
	Remhoogte Quartz Patches	3 336	1 168	35	201	6	0	0	0	1168	37	Knersvlakte
	Riethuis Quartzfields	23 257	9 303	40	0	0	8116	35	87	1187	5	Central Namaq Coast
	Steytlerville River Terraces	32 383	11 334	35	154	0	0	0	0	11334	35	
	Troe-Troe River Quartz Patches	5 018	1 756	35	3	0	0	0	0	1756	35	Knersvlakte

Vegetation Group	Vegetation types within the Succulent Karoo Biome	Total area (ha)	Target*		Transformed**		Conserved in cat 1 reserves		Target met in cat 1 reserves	Required to meet target		Geographic priority area(s)
			ha	%	Ha	%	ha	%	%	ha	% of avail	
	Vanwyksdorp Quartz Patches	20 919	7 322	35	1039	5	0	0	0	7322	37	Central Little Karoo
	Warmwaterberg Quartz Patches	39 956	13 984	35	2484	6	0	0	0	13984	37	Central Little Karoo
	West Gariep Gravel Plains	3 909	1 368	35	0	0	0	0	0	1368	35	Greater R'veld
	Western Bushmanland Quartz & Gravel Patches	25 632	8 971	35	0	0	0	0	0	8971	35	
Sandveld	Namaqualand Red Sand Plains	351 439	123 003	35	31964	9	246	0	0	122757	38	Central Namaq Coast; Greater R'veld; Knersvlakte
	Namaqualand Sandveld Dunes	34 706	12 147	35	137	0	0	0	0	12147	35	Central Namaq Coast
	Namib Coastal Red Dunes	171 363	59 977	35	6	0	10186	6	17	49791	29	Greater R'veld; Sperrgebiet
	Namib Northern Sandy Plains	228 869	80 104	35	0	0	0	0	0	80104	35	Sperrgebiet
	Namib Red Sandy Plains	190 622	66 718	35	2	0	0	0	0	66718	35	Greater R'veld; Sperrgebiet
	Namib Southern Sandy Plains	85 608	29 963	35	3405	4	2454	3	8	27508	33	Greater R'veld; Sperrgebiet
	Northern Richtersveld Yellow Dunes	54 675	19 136	35	7757	14	0	0	0	19136	41	Greater R'veld
	Richtersveld Red Dunes	30 805	10 782	35	0	0	0	0	0	10782	35	Greater R'veld
	Southern Richtersveld Red Dunes	22 483	7 869	35	89	0	0	0	0	7869	35	Greater R'veld
	Southern Richtersveld Yellow Dunes	33 343	11 670	35	13303	40	0	0	0	11670	58	Greater R'veld
	Southern Richtersveld Yellow-Loam Dunes	27 958	9 785	35	3127	11	0	0	0	9785	39	Greater R'veld
Strandveld	Lamberts Bay Strandveld	38 063	13 322	35	8107	21	0	0	0	13322	44	Knersvlakte
	Namaqualand Coastal Dunes	82 130	28 745	35	38579	47	0	0	0	28745	66	Central Namaq Coast; Greater R'veld
	Namaqualand Northern Strandveld	176	61	35	115	65	0	0	0	61	100	Greater R'veld
	Namaqualand Pans	7 068	2 121	30	0	0	0	0	0	2121	30	Central Namaq Coast
	Namaqualand Southern Strandveld	10 292	3 602	35	984	10	0	0	0	3602	39	Central Namaq Coast; Greater R'veld; Knersvlakte
	Namaqualand White Sand Plains	47 875	16 756	35	19021	40	0	0	0	16756	58	Central Namaq Coast; Greater R'veld

Vegetation Group	Vegetation types within the Succulent Karoo Biome	Total area (ha)	Target*		Transformed**		Conserved in cat 1 reserves		Target met in cat 1 reserves	Required to meet target		Geographic priority area(s)
			ha	%	Ha	%	ha	%	%	ha	% of avail	
	Namib Coastal Hummock Dunes	6 848	685	10	5388	79	0	0	0	685	47	Greater R'veld
	Namib Coastal Mobile Dune Strandveld	120 309	42 108	35	3163	3	0	0	0	42108	36	Greater R'veld; Sperrgebiet
	Namib Coastal Strandveld	292 134	102 247	35	11274	4	1521	1	1	100725	36	Greater R'veld; Sperrgebiet
	Namib Inland Mobile Dune Strandveld	60 368	21 129	35	0	0	0	0	0	21129	35	Sperrgebiet
	Namib Inland Strandveld	101 498	35 524	35	0	0	2027	2	6	33497	33	Greater R'veld; Sperrgebiet
	Richtersveld White Dunes	10 938	2 880	35	8052	74	0	0	0	2880	100	Greater R'veld
Upland Succulent Karoo	Hantam Karoo	718 883	251 609	35	25927	4	0	0	0	251609	36	Bokkeveld-H-R
	Laingsburg-Touws Succulent Karoo	254 745	89 161	35	1457	1	789	0	1	88372	35	Bokkeveld-H-R
	Roggeveld Karoo	593 609	207 763	35	10750	2	0	0	0	207763	36	Bokkeveld-H-R
	Ruschia Spinosa Plains	19 109	6 688	35	0	0	0	0	0	6688	35	Greater R'veld
Azonal	Arid Coastal Salt Marshes	3 738	1 308	35	810	22	0	0	0	1308	45	Central Namaq Coast; Greater R'veld; Knersvlakte
	Muscadel Alluvia	36 723	12 853	35	20666	56	0	0	0	12853	80	Central Little Karoo
	Namaqualand Alluvia	56 868	19 904	35	11459	20	0	0	0	19904	44	Bokkeveld-H-R; Knersvlakte
Desert Grass-land	Augrabies Sandveld Grassland	12 330	4 316	35	0	0	0	0	0	4316	35	Greater R'veld
	Namaqualand Arid Grasslands	65 482	22 919	35	2761	4	12184	19	53	10735	17	Central Namaq Coast; Knersvlakte
	Namaqualand Spinescent Grasslands	49 462	17 312	35	1820	4	587	1	3	16725	35	Knersvlakte
Fynbos	Kamiesberg Mountain Fynbos	3 692	1 846	50	94	3	0	0	0	1846	51	Namaq Uplands
	Namaqualand Sand Fynbos	93 696	32 794	35	1973	2	781	1	2	32012	35	Central Namaq Coast; Greater R'veld; Knersvlakte
Renosterveld	Anenous Plateau Renosterveld	17 816	6 236	35	0	0	0	0	0	6236	35	Greater R'veld

Vegetation Group	Vegetation types within the Succulent Karoo Biome	Total area (ha)	Target*		Transformed**		Conserved in cat 1 reserves		Target met in cat 1 reserves	Required to meet target		Geographic priority area(s)
			ha	%	Ha	%	ha	%	%	ha	% of avail	
	Central Mountain Renosterveld	132 678	46 437	35	1516	1	0	0	0	46437	35	Bokkeveld-H-R
	Hantam Plateau Renosterveld	74 958	29 983	40	88	0	0	0	0	29983	40	Bokkeveld-H-R
	Namaqualand Renosterveld	71 447	35 723	50	3830	5	0	0	0	35723	53	Namaq Uplands
	Richtersveld Renosterveld	7 679	2 688	35	1	0	0	0	0	2688	35	Greater R'veld
	Roggeveld Renosterveld	274 116	109 646	40	1820	1	0	0	0	109646	40	Bokkeveld-H-R
	Steinkopf Plateau Renosterveld	13 695	4 793	35	14	0	0	0	0	4793	35	Greater R'veld
Thicket	Kamiesberg Mountain Brokenveld	212 396	106 198	50	9147	4	2894	1	3	103304	51	Namaq Uplands

Appendix 2. Contribution of priority conservation areas to vegetation targets and expert-identified geographic priorities

Geographic priority area	Vegetation types	% outstanding veg type target achieved[1]	Number of expert hotspots in this geographic priority area*, plus selected species-related notes from expert mappers	
1. Sperrgebiet	Rosh Pinah Mountain Succulent Karoo	100	Invertebrates	9
	Klinghardberg Succulent Karoo	100	Reptiles	3
	Aurusberg Succulent Karoo	100	• Many experts noted that this is a poorly surveyed and understudied area, because it has been largely off-limits for the last century • The only place in Namibia where grey rhebuck occurs: an isolated population, implying other isolated, unique or endemic taxa	
	Namib Coastal Red Dunes	100		
	Namib Southern Sandy Plains	100		
	Namib Red Sandy Plains	100		
	Grillenthal Coastal Inselbergs and Gravel Plains	100		
	Namib Inland Strandveld	100		
	Namib Inland Mobile Dune Strandveld	94		
	Luderitz-Pomona Rock Outcrops & Gravel Plains	89		
	Namib Coastal Strandveld	60		
	West Gariep Desert	54		
	Boegoeberg Succulent Karoo	48		
	Namib Coastal Mobile Dune Strandveld	26		
	Namib Northern Sandy Plains	26		
2. Greater Richtersveld	Namus Mountain Succulent Karoo	100	Plants	32
	Rosh Pinah Mountain Succulent Karoo	100	Amphibians	2
	Anenous Plateau Renosterveld	100	Birds	4
	Aughrabies Mountain Succulent Karoo	100	Fish	2
	Augrabies Sandveld Grassland	100	Invertebrates	17
	Concordia Quartz Patches	100	Mammals	1
	Die Plate Succulent Karoo	100	Reptiles	5
	Eastern Richtersveld Quartz Patches	100	• Global distribution of an endemic mole rat • Saltpan breeding site for endangered damara terns • Contact zone for Barlow's/karso lark, also for Cape long-billed lark and Karoo long-billed lark • Contains a number of important breeding sites (natural springs and pools) for endemic amphibians • Recreational development for Oranjemund has already destroyed the type locality and only known place where the Tenebrionid beetle *Calaharena irishi Penrith* occurred	
	Eenriet Quartzite Succulent Karoo	100		
	Goariep Mountain Succulent Karoo	100		
	Harras Quartzite Succulent Karoo	100		
	Kamma River Quartz Patches	100		
	Naroegas Quartzite Succulent Karoo	100		
	Northern Richtersveld Lowland Succulent Karoo	100		

Geographic priority area	Vegetation types	% outstanding veg type target achieved[1]	Number of expert hotspots in this geographic priority area*, plus selected species-related notes from expert mappers
	Richtersveld Red Dunes	100	(now presumed extinct)
	Richtersveld Renosterveld	100	• The southern distribution point of a subset of Namibia psammophilous invertebrates
	Richtersveld Western Foothills Succulent Karoo	100	
	Rosyntjieberge Succulent Karoo	100	
	Southeastern Richtersveld Succulent Karoo	100	
	Southern Richtersveld Lowland Succulent Karoo	100	
	Southwestern Richtersveld Mountain Succulent Karoo	100	
	Springbok Quartzite Succulent Karoo	100	
	Umdaus Quartzite Succulent Karoo	100	
	West Gariep Gravel Plains	100	
	Southeastern Richtersveld Quartzites	100	
	Southern Richtersveld Red Dunes	100	
	Steinkopf Plateau Renosterveld	100	
	Stinkfonteinberge Lowland Succulent Karoo	100	
	Lekkersing Quartz Patches	100	
	Southern Richtersveld Inselbergs	100	
	Upper Annisvlakte Succulent Karoo	100	
	Richtersberg Mountain Desert	100	
	Ruschia Spinosa Plains	100	
	Koingnaas Quartzite Succulent Karoo	100	
	Buffels River Quartz And Gravel Patches	100	
	Southern Richtersveld Yellow-Loam Dunes	100	
	Central Richtersveld Succulent Karoo	100	
	Northern Richtersveld Yellow Dunes	100	
	Richtersveld Southwestern Foothills Succulent Karo	100	
	Southeastern Richtersveld Desert	100	
	Springbokvlakte East Gariep Desert Plains	100	
	West Gariep Lowlands	100	
	Oernoep River Quartz Patches	100	
	Southern Richtersveld Yellow Dunes	100	
	West Gariep Desert	100	

Geographic priority area	Vegetation types	% outstanding veg type target achieved[1]	Number of expert hotspots in this geographic priority area*, plus selected species-related notes from expert mappers	
	Alexander Bay Gravel Patches	100		
	Namaqualand Klipkoppe Flats	100		
	Namaqualand Northern Strandveld	100		
	Richtersveld White Dunes	100		
	Namaqualand Southern Strandveld	84		
	Namib Southern Sandy Plains	83		
	Nababiepsberge Desert	80		
	Namaqualand Lowland Succulent Karoo	66		
	Namaqualand Red Sand Plains	51		
	Namaqualand Klipkoppe	50		
	Namaqualand Coastal Dunes	45		
	Namib Coastal Mobile Dune Strandveld	31		
	Namib Coastal Hummock Dunes	18		
	Namib Coastal Red Dunes	9		
	Namib Coastal Strandveld	8		
	Namaqualand Renosterveld	6		
	Namaqualand Sand Fynbos	5		
	Namib Red Sandy Plains	5		
	Arid Coastal Salt Marshes	0		
	Namaqualand White Sand Plains	0		
	Namib Inland Strandveld	0		
	Fish River Mountain Succulent Karoo	target already met		
	Noams Mountain Desert	target already met		
3. Bushmanland Inselbergs	Eastern Bushmanland Quartz And Gravel Patches	100	Plants	1
			Amphibians	1
			Invertebrates	2
			• Isolated patch of winter rainfall vegetation and associated invertebrates	
4. Namaqualand Uplands	Kamiesberg Mountain Fynbos	100	Plants	2
	Platbakkies Quartz and Gravel Patches	100	Amphibians	1
	Namaqualand Renosterveld	100	Invertebrates	1
	Kamiesberg Mountain Brokenveld	100	• Most important for strongylopus springbokensis, and supports a good diversity of Namaqualand frogs. Permanent water an important feature	
	Namaqualand Klipkoppe Flats	46		
	Namaqualand Klipkoppe	19		
	Namaqualand Lowland Succulent Karoo	0		

Geographic priority area	Vegetation types	% outstanding veg type target achieved[1]	Number of expert hotspots in this geographic priority area*, plus selected species-related notes from expert mappers	
5. Central Namaqualand Coast	Riethuis Quartzfields	100	Plants	3
	Kotzerus Quartz Patches	100	Birds	1
	Namaqualand Sandveld Dunes	100	Invertebrates	3
	Namaqualand Pans	100	Reptiles	1
	Namaqualand White Sand Plains	100	• Paleo-relic plants populations refuge • Riperian corridor • Typical west coast endemics	
	Namaqualand Coastal Dunes	100		
	Namaqualand Red Sand Plains	100		
	Namaqualand Southern Strandveld	99		
	Namaqualand Sand Fynbos	96		
	Namaqualand Lowland Succulent Karoo	68		
	Namaqualand Arid Grasslands	31		
	Arid Coastal Salt Marshes	23		
	Namaqualand Klipkoppe	1		
	Nuwerus Quartzite Succulent Karoo	1		
6. Knersvlakte	Rooiberg Quartzite Succulent Karoo	100	Plants	10
	Namaqualand Spinescent Grasslands	100	Invertebrates	2
	Remhoogte Quartz Patches	100	• The southern-most point where any Namib psammophilous invertebrates occur. Numerous endemic invertebrates known from the area	
	Troe-Troe River Quartz Patches	100		
	Knersvlakte Dolorites	100		
	Central Knersvlakte Lowland Succulent Karoo	100		
	Olifants River Quartz Patches	100		
	Koekenaap Quartz Patches	100		
	Knersvlakte Quartzfields	100		
	Arid Coastal Salt Marshes	100		
	Southern Knersvlakte Lowland Succulent Karoo	100		
	Lamberts Bay Strandveld	100		
	Nuwerus Quartzite Succulent Karoo	100		
	Doring River Succulent Karoo	85		
	Knersvlakte Shales	39		
	Northern Knersvlakte Lowland Succulent Karoo	26		
	Namaqualand Alluvia	25		
	Namaqualand Red Sand Plains	23		
	Namaqualand Sand Fynbos	18		
	Namaqualand Southern Strandveld	11		
	Namaqualand Klipkoppe	10		

Geographic priority area	Vegetation types	% outstanding veg type target achieved[1]	Number of expert hotspots in this geographic priority area*, plus selected species-related notes from expert mappers	
	Namaqualand Arid Grasslands	7		
	Agter-Sederberg Succulent Karoo	1		
7. Bokkeveld-Hantam-Roggeveld	Hantam Plateau Renosterveld	100	Plants	14
	Agter-Sederberg Succulent Karoo	100	Birds	1
	Roggeveld Renosterveld	100	Fish	2
	Hantam Karoo	98	Invertebrates	2
	Roggeveld Karoo	93	• Several endemics occur here • Includes the "trepad". Good colonies of endemic plants • Lower kokee infested with alien fish. Upper river of vital importance to future survival of *L. seeberi*, a critically endangered species • At least one endemic Lepismatid known only from this area	
	Tanqua Sheet Wash Plains	71		
	Central Mountain Renosterveld	69		
	Namaqualand Alluvia	20		
	Tanqua Karoo	13		
	Southern Tanqua Karoo	9		
	Southern Tanqua Mountain Succulent Karoo	7		
	Knersvlakte Shales	0		
	Laingsburg-Touws Succulent Karoo	0		
8. Central Breede River Valley	Robertson Karoo	100	Plants	1
			Amphibians	1
			Birds	2
			Fish	6
			Reptiles	1
			• Important corridor area for Karoo birds • One of few localities for *C. karoicum*	
9. Central Little Karoo	Calitzdorp Quartz Patches	100	Plants	4
	Vanwyksdorp Quartz Patches	100	Fish	2
	Oudtshoorn Quartz Patches	100	Mammals	1
	Langeberg Quartz Patches	100		
	Muscadel Alluvia	100		
	Central Little Karoo	100		
	Vanwyksdorp Gwarrieveld	100		
	Western Little Karoo	100		
	Warmwaterberg Quartz Patches	100		
	Eastern Little Karoo	10		
	Anysberg Quartz Patches	target already met		

CRITICAL ECOSYSTEM PARTNERSHIP FUND

An Overview of CEPF's Portfolio in the Succulent Karoo Hotspot

The Succulent Karoo Hotspot extends from the southwest through the northwestern areas of South Africa and into southern Namibia. The hallmark of the Succulent Karoo is its exceptionally diverse and endemic-rich flora, especially succulents and bulbs. The hotspot is home to 6,356 plant species. New data released in 2005 following a global hotspots reanalysis indicate that 40 percent of the species are endemic. More than 900 are also classified as globally threatened by IUCN-The World Conservation Union. The 102,691-square-kilometer hotspot supports the richest succulent flora on Earth, with succulents comprising 29 percent of all plant species. The world's highest local diversity of succulents was recorded in the mountainous desert of the Gariep area where annual rainfall is a scant 70 millimeters, with more than 330 species in an area of just 1.3 square kilometers. The Succulent Karoo is also notable for its high diversity of bulbs, which make up 18 percent of its plant species.

The spectacular environment of the Succulent Karoo is also a center of diversity for reptiles and various invertebrate groups, and supports a variety of mammals and many of South Africa's endemic birds. The reptiles of the Succulent Karoo are particularly diverse, with more than 90 species. Most of the endemic reptiles are lizard species; of 72 lizard species, 30 are endemic.

In spite of the incredible natural diversity, local and global awareness of the significance and value of the Succulent Karoo is low. Only 3.5 percent of the hotspot is formally protected in conservation areas. The hotspot's biodiversity is under pressure from a range of human impacts, especially mining, crop agriculture, ostrich farming, overgrazing, illegal collection of fauna and flora, and anthropogenic climate change. Most of the region, an estimated 100,000 kilometers, is used for communal or commercial grazing. Although this land-use can be compatible with the maintenance of biodiversity, overgrazing has severely degraded as much as two-thirds of this area.

CEPF began awarding grants in the Succulent Karoo in early 2003 following approval of the ecosystem profile by the CEPF Donor Council and an allocation of $8 million to be spent over five years. The CEPF strategy for this hotspot is based on the results of the CEPF-supported Succulent Karoo Ecosystem Planning (SKEP) process, a comprehensive and participatory process that commenced in September 2001 and was completed one year later. The project team, facilitated by Conservation International's Southern Africa Hotspots Program as part of CEPF preparations to invest in the hotspot, included special advisors, four coordinating institutions, and 10 conservation champions. SKEP, which means "to serve" or "to create" in Afrikaans, involved more than 60 scientific experts and over 400 local stakeholders representing government, academia, NGOs, private sector interests and local communities. SKEP developed an overarching framework for biodiversity conservation and sustainable development in the hotspot from which the best niche for CEPF investment could be determined. The ecosystem profile

for this hotspot is one of the many SKEP products resulting from this comprehensive process.

CEPF funding in the Succulent Karoo supports the SKEP 20-year strategy. This strategy is derived directly from the people living in the hotspot, confirmed and augmented by the scientific community and national and regional stakeholders. The 20-year strategy seeks to develop conservation as, and not instead of, a land use.

SKEP recommends giving priority to conserving habitats within nine geographic priorities, where few options for achieving conservation targets are, and are most vulnerable to future land-use pressures. For each of the priority regions, representatives from conservation, farming, mining, tourism, local government, education and law enforcement also developed region-specific strategies.

The strategic focal areas for the 20-year strategy are:

- Expanding protected areas and improving conservation management, particularly through the expansion of public-private-communal-corporate partnerships.
- Increasing local, national, and international awareness of the unique biodiversity of the Succulent Karoo.
- Supporting the creation of a matrix of harmonious land uses.
- Improving institutional coordination to generate momentum and focus on priorities, maximize opportunities for partnerships and ensure sustainability.

The SKEP vision states that: *The people of the Succulent Karoo take ownership of and enjoy their unique living landscape in a way that maintains biodiversity and improves livelihoods now and into perpetuity.*

In order to ensure that the Succulent Karoo is conserved and that the SKEP 20-year vision and targets are achieved, CEPF has focused investment on areas and actions that will catalyze the greatest impact now and in the long term. The specific niche for CEPF in the hotspot is to catalyze key activities in under-funded geographic priority areas using innovative mechanisms to achieve biodiversity conservation by involving specific land users such as the agriculture sector, mining companies, and communal authorities.

CEPF's five-year conservation strategy is described in the ecosystem profile, and includes the following six strategic directions that guide CEPF's investment in the region:

1. *Expand protected area corridors through public-private-communal partnerships in the priority areas of Bushmanland Inselbergs, Central Namaqualand Coast, Namaqualand Uplands, Knersvlakte, Hantam-Roggeveld, Central Little Karoo and Sperrgebiet.*
   This strategic direction is aimed at establishing five large conservation corridors (mega-reserves) in order to expand significantly the existing network of protected areas, and also to secure areas sufficiently large to achieve conservation targets pertaining to species and vegetation types. While this strategic direction presents an enormous challenge, efforts to date are promising and progress is well underway towards mega-reserve establishment.

2. *Engage key industrial sectors in meeting conservation objectives identified by SKEP.*
   Engagement with key elements of the private sector is essential for achieving conservation in the Succulent Karoo. This strategic direction encompasses the wide range of industrial sectors that need to be brought into the conservation dialogue, including the mining, agriculture, wine and ostrich industries. Given the immense influence and impact that these industries have as landowners or concession-holders, this strategic direction is extremely important.

3. *Retain and restore critical biodiversity in areas under greatest land-use pressure.*
   Although much work was done during the SKEP process to identify species and sites requiring conservation attention, information at a finer scale would be helpful in a landscape dominated by severe land use pressure and in some areas, extreme fragmentation. This strategic direction is designed to assist with further prioritization in order to ensure conservation of key areas of small size or fragmented nature.

4. *Mainstream conservation priorities into land-use planning and policy-making.*
   Ensuring that local government agencies have the most appropriate biodiversity products possible for their municipal planning requirements, as well as the capacity to understand and use these products, is the essence of this strategic direction. There is a great opportunity to incorporate biodiversity priorities into local level planning, and this strategic direction is designed to meet this need.

5. *Increase awareness of the Succulent Karoo hotspot.*
   Awareness about the biodiversity value of the Succulent Karoo is extremely low. This strategic direction was a top priority at the start of CEPF investment, and has increased in importance as it has become more evident that the need is even greater than originally thought.

6. *Create the capacity to catalyze the SKEP program.*
   Effective and efficient coordination of CEPF investment is essential, and this strategic direction covers this element of the strategy. It also encompasses other activities that will ensure that the CEPF approach is proactive, and catalyzes targeted actions that will build on the momentum required to achieve conservation targets now and in the long-term.

In addition to the identification of the strategic directions outlined above, each strategic direction has further refined investment guidance provided through investment priorities, which are more specific and concrete. The investment priorities provide more specific targets for CEPF funding in the region and are used to inform grant-making decisions. They are included as part of the full investment priority table in the ecosystem profile and/or on the CEPF Web site (www.cepf.net).

To date, CEPF has awarded 40 grants valued at $3.1 million (see Chart 1 included at the end of the overview). These grants range in size from $2,260 to $850,700, with the average grant size being $77,658. The full status of the portfolio to date and the timeline of grants awarded are illustrated in Charts 2 and 3.

Geographic Priorities in the Succulent Karoo

While CEPF has allocated funds along the thematic lines described above, investment has also been determined on the basis of geographic priorities. As part of the SKEP process to define where overall conservation activities should be focused, a conservation planning exercise identified nine conservation priority areas (See map of SKEP priority areas following the overview).

Seven of these priority areas are the focus of CEPF's investment. The two areas not included as CEPF priorities are the Greater Richtersveld Priority Area and the Central Breede River Valley Priority Area, both of which are receiving substantial GEF funding. In the two areas not funded by CEPF, efforts are nonetheless underway to ensure that the SKEP vision and strategy are supported at all levels through support from other donor resources. Each SKEP priority area has a vision and a set of objectives. Activities have been identified that need to be achieved in order to reach the objectives, and an anchor project has been identified for each priority area. Anchor projects implement the key conservation activity for each specific priority area identified in each priority area strategy. The role of the agencies implementing the anchor projects is not only to implement the anchor project but also to be the eyes and ears for new conservation opportunities in the area, and to be a local conduit for SKEP awareness information and CEPF application information.

Given that the program is only in its second year of implementation and due to institutional and political constraints, not all the priority area anchor projects have been established.

Coordinating CEPF Grantmaking on the Ground

Program coordination takes a highly participative and decentralized approach. At the local level there are five Coordinators, each with an assistant, that are responsible for creating awareness amongst stakeholders about SKEP, supporting local civil society individuals and organizations to design projects that support biodiversity conservation, to provide ongoing mentorship and skills training to enable these entities to apply for funds from the CEPF, and to facilitate the local advisory structure. Local advisory committees have been set up to provide input into the roll out of the SKEP strategy, and contribute toward the review of project applications. The committees are made up of all the relevant land-use sectors in the biome, namely mining, agriculture and tourism, as well as local municipalities and grantees. Conservation International hosts a central coordination office in Cape Town from where it supervises the local structures. The Cape Town office has a SKEP Program Manager, a Program Assistant and is supported by the Director of CI-Southern African Hotspots Program. In addition, there is a SKEP Technical Working Group (TWG) where higher-level institutional and technical advice is provided to the coordination unit.

Through the sub-regional offices the SKEP program has:

- Generated support from,
    - Local government
    - Conservation authorities
    - Department of Education
    - Mining companies
    - Justice Department
    - Department of Agriculture

- Demonstrated buy-in to the SKEP priorities from different sectors in each of the sub-regions.
- Developed a local presence and activities to ensure that coordinators are in touch with the real needs in sub-regions, for example, fences, alien species removal, and drought relief for farmers.
- Established personal contact and trust with individuals in the sub-region.

During the initial phase of implementation, the coordination unit placed considerable emphasis on strengthening local capacity to implement the SKEP strategy, refining the priority area strategies and finding suitable organizations to implement those strategies.

The program is currently undergoing a transition in that the coordination function will be moved out of CI and into Namibian and South African government departments - the Namibian Nature Foundation in collaboration with the Ministry of Environment and Tourism (MET) in Namibia, and the South African National Biodiversity Institute (SANBI) under the Department of Environmental Affairs and Tourism (DEAT), respectively. The coordination structures will transcend to the anchor project level, tightening the function of coordination to focus within each priority area and broadening the potential for new projects and success of these anchor projects.

Priority Area, Community-based Approach to Grantmaking

Sperrgebiet Priority Area

This is the single priority area for Namibia. Given that the Sperrgebiet, a highly secure mining area, was off limits to the public for many years, it has remained relatively pristine. However, very few scientific surveys have been conducted there. The strategy for this region therefore aims to rectify this situation by identifying and prioritizing conservation needs in the Sperrgebiet.

Highlights to date

- The transition of a SKEP local coordination function from CI to a local entity first took place in Namibia. The SKEP Program in Namibia is now under the leadership of the Namibian Nature Foundation (NNF), a Namibian NGO, with support from the Ministry of Environment and Tourism.

- The Sperrgebiet has been declared a national park, thereby providing numerous opportunities for SKEP to support the implementation of conservation activities and efforts to bolster the economies of nearby towns through increased ecotourism in the area.

Bushmanland Inselberg Priority Area

The Bushmanland Inselberg area falls south of the Orange River and the border between Namibia and South Africa. The anchor project for the region is the Bushmanland Conservation Initiative (BCI), which comprises a range of activities that focus on the establishment of a new multi-owned protected area, and boosting local conservation capacity and alternative livelihood opportunities. This project is furthest in its implementation, having been operational for a year already.

The BCI aims to ensure that:

- An initial core of 20 000 hectares of the area defined in SKEP as irreplaceable within the geographic priority area of Bushmanland has secure protected area status by the end of the first phase of the project.
- A 50 percent increase in permanent jobs in the Bushmanland area directly associated with conservation by the end of this first phase project.
- Conservation skills and capacity are increased through a joint initiative/program conducted by the BCI and government/NGO/Farmers association.
- The objectives and spatial extent of the proposed BCI protected area are in line with (later to be incorporated into) the statutorily approved Integrated Development Plan and Spatial Development Framework of the Khai-Ma municipality.
- Establishment of conservancies in buffer zones in liaison with mining and agriculture sectors.

Highlights to date

- A memorandum of agreement has been signed between the Department of Environment & Tourism in the Northern Cape Province and the implementing agent of the priority area, the Botanical Society of South Africa (BotSoc). This means that BotSoc will work with the department to declare a multiple-use protected area in the Bushmanland priority area.

- Negotiations are underway between BCI and Anglo Base Metals, a subsidiary of Anglo American, to establish a protected area to establish a protected area on a section of the company's property and link it to a provincial reserve. BCI and Anglo American are in the process of developing the management plan for the conservation area.

- The BCI project was presented to South Africa's national Department of Environmental Affairs and Tourism (DEAT) where it was well received and will be presented to the minister of DEAT. Policy issues will be discussed that will affect the way the management agreement is developed.

- The project also received attention as a case study by IUCN South Africa in its partnership development with the mining industry at a recent mining and biodiversity forum hosted by IUCN, Chamber of Mines of South Africa and the International Council of Mines and Metals.

Central Namaqualand Coast and Namaqualand Uplands Priority Areas

The Central Namaqualand Coast and Namaqualand Uplands priority areas were initially developed as two separate regions. However, given the recent developments in the area, with Conservation International's Global Conservation Fund (GCF) investment in South African National Parks Board (SANParks) to purchase land linking the existing Namaqua National Park and the proposed coastal park, an opportunity arose to link the two areas into one larger corridor initiative known as the Namaqua Wilderness Corridor (NWC) and enlarge the conservation capacity in that area.

Although diamond mining and tourism development have transformed much of the Namaqualand coastline, the Central Namaqualand region incorporates a crucial 30-kilometer-wide stretch of relatively pristine coastline, where access to diamond mining areas was controlled.

The Namaqualand Uplands encompass the highlands of central Namaqualand in the Northern Cape Province. The area is known for its spectacular displays of spring flowers and high diversity and endemism of bulbous flowers. A key opportunity in the region lies in cultural resources of the area. The vision of Namaqualand Uplands is the creation of a network of communal and private reserves.

Highlights to date

- The development of a fine-scale conservation plan has just been approved by CEPF for this area.
- Several other community-led projects are currently under review by CEPF.

Knersvlakte Priority Area

The Knersvlakte is defined as the extensive dry plain located in the center of the Succulent Karoo hotspot bounded on the east by the Bokkeveld Mountains. The area is typified by gently rolling hills covered by "fields" of white quartz pebbles and saline soils. In a recent national conservation assessment, the quartz patches were recognized as one of South Africa's top 10 biodiversity features. Land-use pressures in this area are increasing significantly. These include prospecting and mining by small and medium scale firms, expansion of vineyards in the riverine areas, and farming practices that impact negatively on biodiversity.

A project management unit will be established to work with stakeholder groups to develop and implement an effective and sustainable vision and management plan for the proposed Knersvlakte protected area. This vision and plan will build on existing local government and provincial conservation agency initiatives and will include:

- Expanding the protected areas.
- Sustainable use of natural resources that benefits local communities and biodiversity.
- Enhancing cooperative governance by promoting community participation and to support institutional capacity for management via a small grants program.

Highlights to date

- A management plan has been completed to expand the protected area in the Knersvlakte.
- An awareness-raising project has begun, which will be implemented by a local community center.

Hantam-Roggeveld Priority Area

The Hantam-Roggeveld region encompasses both the Bokkeveld and Roggeveld escarpments. Some 2,500 species of plants occur in the Hantam-Roggeveld, of which about 10 percent are endemic. As about 80 percent of the land is currently under private commercial ownership, the engagement of private landowners in this region is crucial for achieving conservation success. The anchor project for this region is the establishment of a Project Management Unit to facilitate the creation of a conservation corridor linking key areas for conservation in the four ecozones. A stewardship approach will largely be applied to achieve the conservation outputs, and this approach will be treated as a pilot for the Northern Cape Province. Emerging and communal farmers will be the initial

focus. Work will also be carried out at the policy level to ensure that government can support conservation commitments made by farmers.

The role of this unit is to facilitate the:

- Development of an institutional framework for stewardship in the Northern Cape Province.
- Management of staff that would play an extension function for the roll out of stewardship in this region.
- Project development and implementation support for projects where conservation is contributing to local economic development by individuals or groups that do not have this capacity.

Highlights to date

- The anchor project will be hosted by the Botanical Society of South Africa (an NGO) while the Calvinia Agricultural Union, a local organization with limited organizational capacity, will play the key role in implementation. The two organizations will work together to implement the project, thereby building the capacity of the Union to implement similar projects in future.

- Part of this priority area falls within the Suid Bokkeveld and forms a strong link with another broad conservation initiative, the Greater Cederberg Biodiversity Corridor (GCBC).

Central Little Karoo Priority Area

The Central Little Karoo lies in the valley between the Langeberg and Swartberg mountain ranges in the south of the Succulent Karoo hotspot. The SKEP coordination function of this priority area has been integrated into the Gouritz Initiative (GI), the anchor project for this area, implemented by CapeNature (formerly Western Cape Nature Conservation Board). The GI domain encompasses the biodiversity of three bioregional programs: Cape Action for People and the Environment (CAPE), Sub-tropical Thicket (STEP) Biome, and SKEP. The GI aims to promote sustainable land-use and conserve the unique biological diversity of the Little Karoo and Central Cape Floristic Region and uses the frameworks of SKEP, CAPE and STEP to guide its activities. The initiative is being implemented by

The aims of this project are:

- A fully coordinated and funded GI, through strengthening partnerships.
- Securing key biodiversity in the 4 identified conservation corridors by securing management agreements.
- Civil society undertakes priority actions in the key corridors in a way that results in improved land management practices.
- Long term and complementary funding for the sustainability of GI activities is secured.

Highlights to date

- Coordination between the three bioregional programs working together to conserve a priority area for three hotspots has been a significant milestone for the GI.
- A scientific study was conducted to establish what aspects of the region's biodiversity should be prioritized for conservation. This was coupled with a broad stakeholder approach, which identified the actions needed to achieve the GI's goals. A project management unit has been established to continue building and coordinating the network of GI stakeholders to take the plan forward.
- A vegetation map of the Little Karoo was produced on a 1:50 000 scale, to be used as a land-use planning tool.
- Educational materials have been developed that will assist teachers to integrate local biodiversity into their school curriculums.
- To support increased awareness of the unique plants and processes on their doorsteps, an environmental awareness program for farmers by a local community member and farmer.

Supporting SKEP through a Small Grants Fund

A small grants facility is being set up in a partnership between CEPF and the Development Bank of Southern Africa (DBSA). A number of small grant opportunities were identified during the first phase of SKEP Coordination to build capacity and catalyze projects in the Succulent Karoo. The fund will support projects that have a measurable conservation outcome through the integration of conservation principles into development projects in the rural areas of the Succulent Karoo Hotspot in the Northern and Western Cape provinces of South Africa. The small grants facility will support small and/or grassroots conservation and development activities that contribute to the vision of the SKEP 20-year strategy and encourage and leverage other funding sources. The fund will be a vehicle for funding appropriate sustainable development projects, particularly those listed in the Municipal Integrated Development Plans.

Complementary Investments

SKEP implementing organizations have provided complementary in-kind resources such as office space, staff, and co-funding. As a result of the SKEP Program, other sources of funding have also been leveraged for conservation activities, such as the Global Conservation Fund's investment in land purchase in the Uplands and Coast priority areas. The Namibia Nature Foundation has received NORAD funding for community-based natural resource management. GEF funding is available for the Sperrgebiet. The University of Cape Town, through research programs, is investing in the region, especially in Namaqualand. The University of Western Cape's Department of Biodiversity and Conservation Biology is also conducting research programs in the SKEP region through its BIOTA Program. These are a handful of the initiatives that are contributing towards conservation of the Succulent Karoo, a region where conservation needs were largely ignored prior to the initiation of SKEP. In addition to conservation investments aligned with SKEP, there are a number of other important new investments in the region that will ultimately complement SKEP's conservation goals by targeting other needs in the Succulent Karoo for investment. Examples include the investment by

the Department of Environmental Affairs and Tourism in South Africa in poverty alleviation projects throughout the Northern Cape Province, among others.

The SKEP coordination team is aware of ongoing funding opportunities and programs, and will continue to ensure that project proposals that are submitted to CEPF are indeed appropriate to CEPF investment priorities, and that other proposals are directed to the most appropriate alternative donor. This is an issue that requires continual attention, due to the fact that planning workshops in each of the geographic priority regions identified a range of needed actions that go beyond what CEPF can support, and also due to the real need for development support to this previously neglected region.

Conclusion

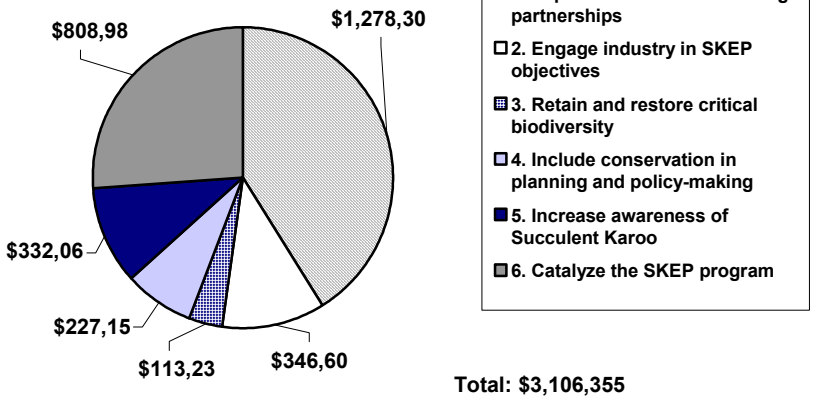
Although CEPF has only been operational in the Succulent Karoo for two years, already significant accomplishments are evident. Conservation has been mobilized from the ground up in all seven geographic priority areas selected for CEPF attention, and the momentum is building day by day. This portfolio is an exciting example of scientifically based priorities being addressed at the grassroots level by the people who live in this incredible region.

-March 2005

* Prepared for: Improving Linkages Between CEPF and World Bank Operations, Africa Forum, Cape Town, South Africa, April 25-26, 2005.

March 2005 Charts: Succulent Karoo Hotspot

Chart 1. Approved Grants by Strategic Direction



Total: $3,106,355

Chart 2. Portfolio Status by Strategic Direction

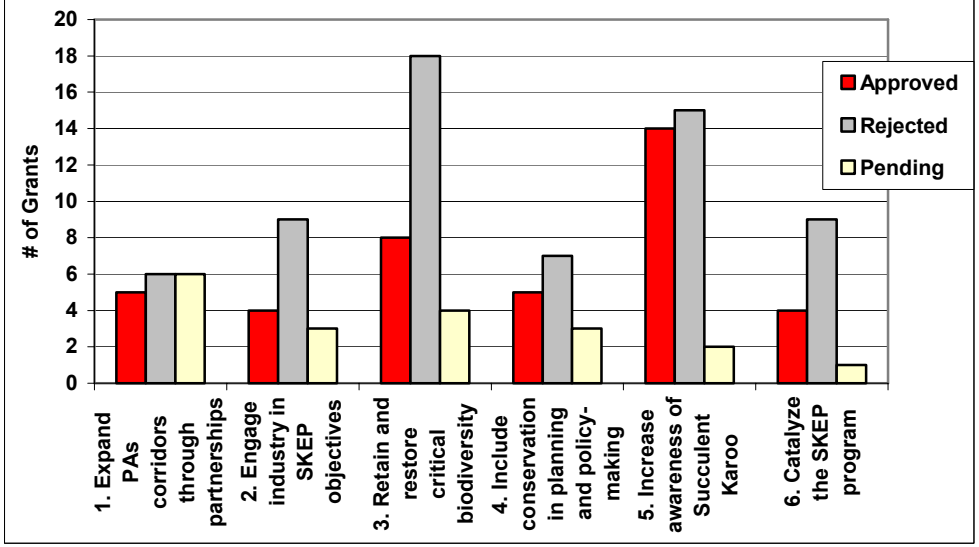
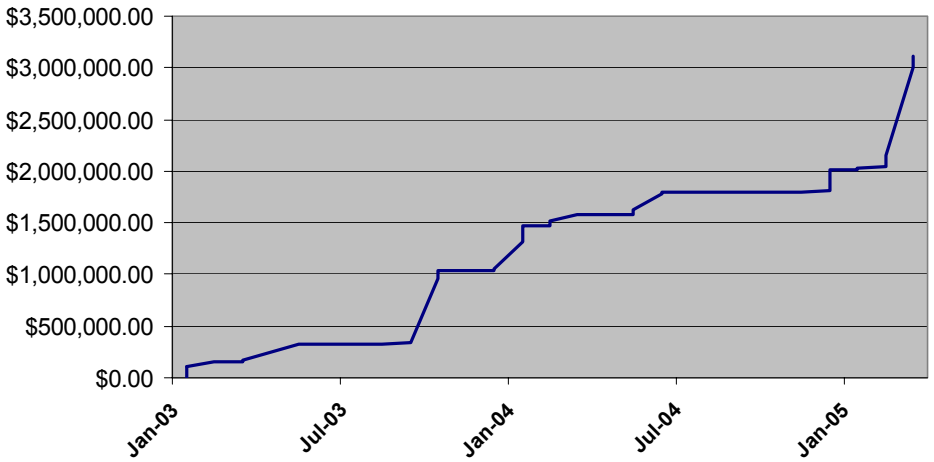
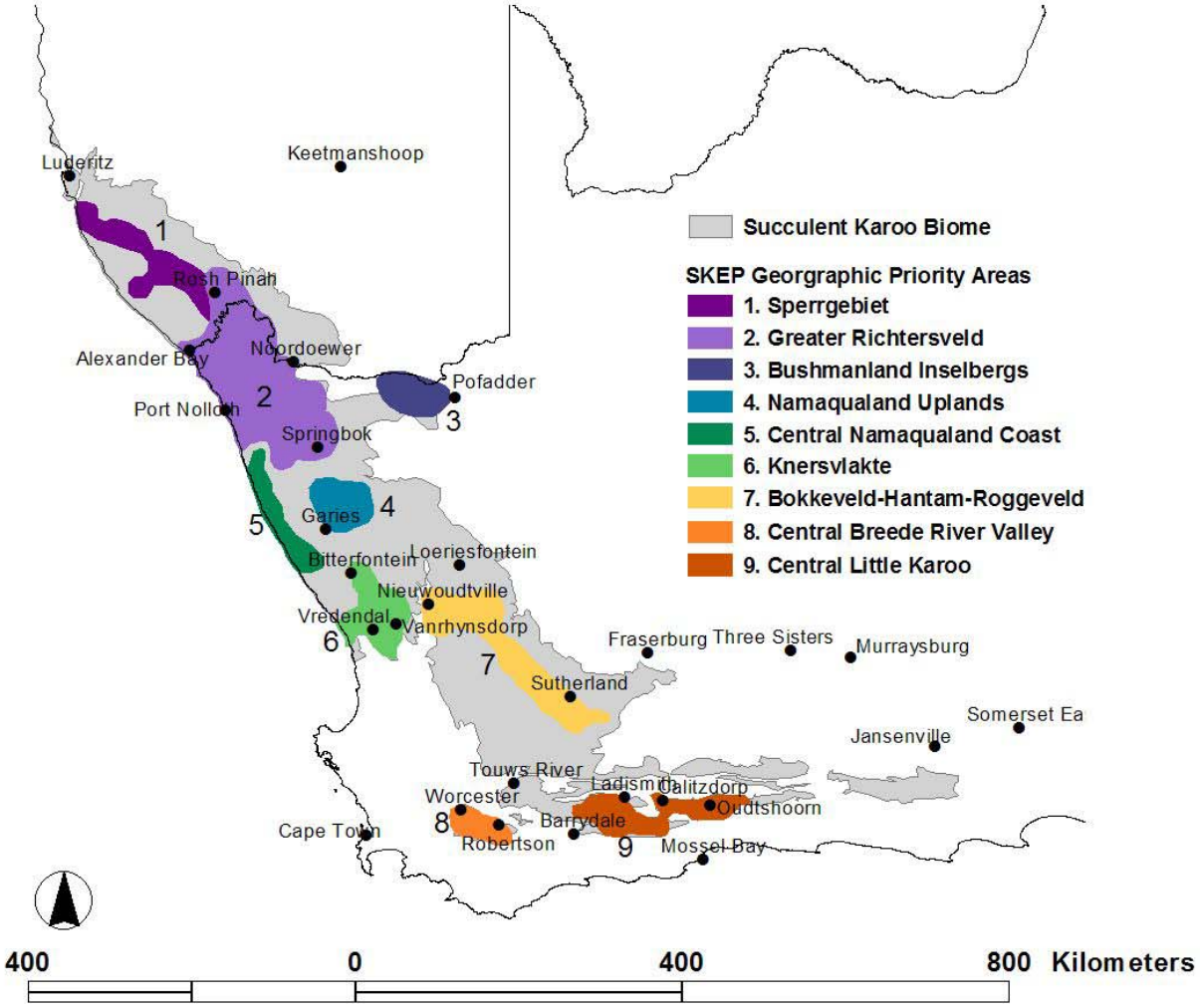


Chart 3. Combined Value of Grants Awarded



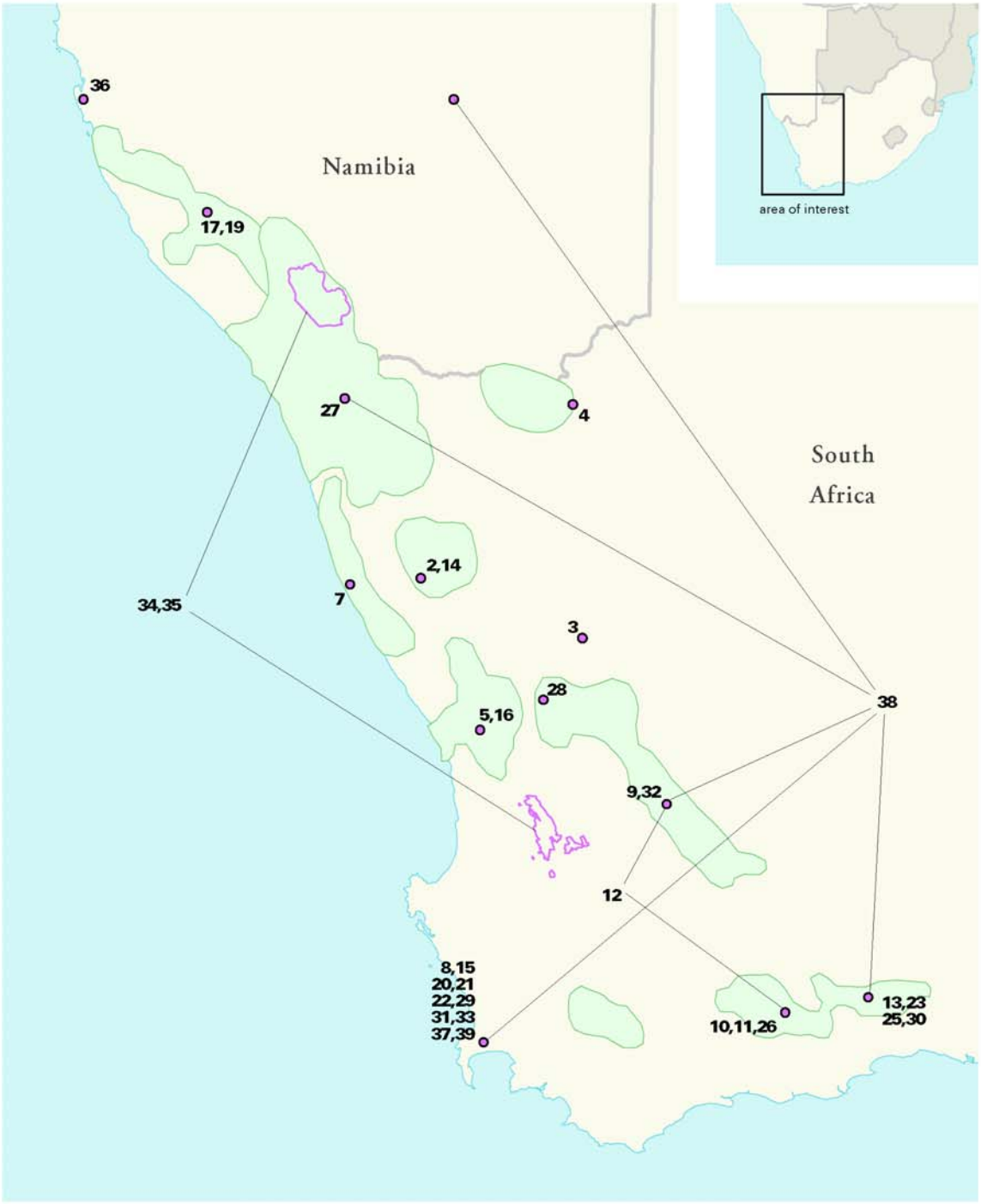
SKEP Priority Areas:



Succulent Karoo Portfolio Project Map Key

Mapped #	Organization Name	Project Title
Strategic Direction 1		
1	Namibia Nature Foundation	Promoting and Supporting Conservation Action in the Sperrgebiet Priority Area and Namibia?s Succulent Karoo Ecosystem
2	Western Cape Nature Conservation Board	A Feasibility Study for the Establishment of a Succulent Karoo Biodiversity Resource and Conservation Center with Satellite Information Centers
3	University of Pretoria	Building a National Constituency for Bird and Biodiversity Conservation in Madagascar
4	Botanical Society of South Africa	Bushmanland Conservation Initiative (BCI) Preparation Phase
5	Western Cape Nature Conservation Board	Planning the Knersvlakte Biodiversity Corridor
Strategic Direction 2		
6	Namibia Nature Foundation	Aus Tourist Information Centre
7	The Leslie Hill Institute for Plant Conservation, University of Cape Town	Namaqualand Restoration Initiative: Bringing Mining, Biodiversity and Local Communities Together
8	University of Stellenbosch	Karoo Veld: Ecology & Management.
9	Garden Route Enviro Services	Development of the Sutherland Succulent Karoo Route: Catalyzing Conservation Through Ecotourism and Environmental Awareness
Strategic Direction 3		
10	Percy FitzPatrick Institute of African Ornithology, University of Cape Town	Impacts of Herbivores on the Succulent Karoo Vegetation of Anysberg Nature Reserve
11	Sanbona Game Reserve Pty Ltd	Vegetation Classification, Mapping, Condition Assessment and Monitoring of Sanbona Wildlife Reserve with Specific Emphasis on the Impact of the Mega Herbivores
12	Geo Terra Image (Pty) Ltd	A Transformation Map for the Little Karoo
13	Regalis Environmental Services CC	A Vegetation Map for the Little Karoo
14	South African National Parks	Alternative Small Predator Management Techniques in the Succulent Karoo : Options to Conserve Biodiversity
15	University of Stellenbosch	Ecological Interactions and Impact of the Tent Tortoise (Psammobates tentorius) on the Succulent Karoo Biome
16	NALCO	Alienate the Aliens: Phase One
17	EnviroScience	Southern Namib Restoration Ecology Information Package
Strategic Direction 4		
18	Philip Desmet	Developing a Fine-Scale Conservation Plan for the Kamiesberg Uplands
19	Brown Hyena Research Project	Inventory, Mapping and Increased Awareness of the Brown Hyena and Other Large Predators in the Sperrgebiet and Surrounding Areas, Namibia
20	Conservation International	Mainstreaming Biodiversity Conservation in the Succulent Karoo Hotspot: Strengthening and Ensuring Sustainability of the Institutional Environment for Conservation Action Through SKEP
21	National Botanical Institute and Conservation International	Investing in Technology to Build Communication and Financial Management Capacity for Civil Society Biodiversity Conservation NGOs in African Hotspots
Strategic Direction 5		
23	Dr. Shirley Pierce Crowling	Co-authorship of a book entitled: East of the Cape--Conserving Eden
24	Masibambane Multi-Purpose Community Centre	Knersvlakte Biodiversity Awareness Raising Project
25	L.H. Jordaan	Klein Karoo Awareness Project
26	Garden Route Botanical Garden Trust	Piloting a Resource for Environmental Education in the Little Karoo
27	Namprocon CC	A Conservation Awareness Raising Plan for the Bushmanland Inselberg Geographic Priority Area
28	Indigo Development and Change	Nieuwoudtville Biodiversity Facilitators Project
29	Fopseen Live Art	Sanna's Garden: Animated Animals Teach Kids about Conservation
30	Western Cape International Youth Festival	Biodiversity Awareness Raising: Exhibitions and Biodiversity Fieldtrips During the Western Cape International Youth Festival
31	Equals Three Communications	Market Research Support to the Africa Environmental News Service
32	Conservation International	Formal Launching of CEPF-Funded SKEP Programme in Knersvlakte
33	Conservation International	Taking SKEP to a Finer Scale: Catalyzing Conservation Action in Geographic Priority Areas in the Succulent Karoo
35	Rare and Conservation International	Building a Global Constituency for Biodiversity Conservation
Strategic Direction 6		
36	Namib Desert Environmental Education Trust	Environmental Education Program for The Succulent Karoo Hotspot in Namibia: Phase 1 - Program Development
37	Botanical Society of South Africa	Facilitating the Transition from Conservation Planning to Action: Providing Biodiversity Specialist Support to the SKEP Coordination Team
38	Conservation International	Raising Awareness and Building Local Capacity for Project Design and Implementation Linked to SKEP Conservation Targets
37	Conservation International	Facilitating the Transition from Conservation Planning to Action: Establishing SKEP Sub-regional Coordination Nodes

Succulent Karoo Portfolio - Critical Ecosystem Partnership Fund



date: April 2005
scale: 1 / 5,000,000
projection: Lambert Azimuthal Equal Area

50 0 50 100 150 200
Kilometers

CEPF grant
(extent, geographic extent unavailable)

Geographic Priority

Approved Grants
Succulent Karoo
(Through March 2005)

Strategic Direction 1: Expand protected area corridors through public-private-communal partnerships in the priority areas of Bushmanland Inselbergs, Central Namaqualand Coast, Namaqualand Uplands, Knersvlakte, Hantam-Roggeveld, Central Little Karoo and Sperrgebiet

Promoting and Supporting Conservation Action in the Sperrgebiet Priority Area and Namibia's Succulent Karoo Ecosystem
The NNF will become the institutional home of the SKEP program in Namibia. In this project a functional project management mechanism will be established, an implementation program will be developed and implemented, and the Ministry of Environment and Tourism will be supported to plan and implement activities in the new Sperrgebiet National Park and the immediate buffer zones. Civil society will be supported to implement priority conservation actions via a small grants facility, and best practice guidelines will be developed and promoted in the Namibian portion of the Succulent Karoo, and shared more widely throughout the entire hotspot.
Funding: $850,700
Grant Term: 2/05-12/07
Grantee: Namibia Nature Foundation

A Feasibility Study for the Establishment of a Succulent Karoo Biodiversity Resource and Conservation Center with Satellite Information Centers
Investigate the feasibility of establishing a biodiversity resource center for the Succulent Karoo Hotspot that would contain pertinent literature, data and other resources for use by stakeholders such as conservation organizations, local government, and landowners, as well as the general public.
Funding: $5,500
Grant Term: 11/04-2/05
Grantee: Western Cape Nature Conservation Board

The Botanical Importance of the Roggeveld: Tankwa Region
Collect and analyze baseline botanical data for the Hantam/Tankwa/ Roggeveld region to identify priority areas and centers of endemism. Prepare a detailed vegetation map and a field guide of the Roggeveld and Tankwa regions.
Funding: $151,869
Grant Term: 7/04-6/08
Grantee: University of Pretoria

Bushmanland Conservation Initiative (BCI) Preparation Phase
Establish a multi-owned protected area through a variety of innovative interventions and mechanisms that draw in local landowners. The protected area will achieve the SKEP conservation targets for this geographic priority area (60,000 ha), and will be nested within a multi-use landscape. This project will develop local conservation management capacity through training of local community members as conservators within the project management team.
Funding: $260,240
Grant Term: 4/04-9/05
Grantee: Botanical Society of South Africa

Planning the Knersvlakte Biodiversity Corridor
Conduct a stakeholder consultation workshop that will develop a a Management and Business Plan for the Knersvlakte Biodiversity Corridor, that will support future implementation of activities over the next three years.
Funding: $10,000
Grant Term: 4/04-3/05
Grantee: Western Cape Nature Conservation Board
*The original grant term has been increased by five months.

Strategic Direction 2: Engage key industrial sectors in meeting conservation objectives identified by SKEP

Aus Tourist Information Centre

This project aims to develop a high class tourist information centre and tour guide service at Aus, a settlement situated 120km east of Luderitz, in southern Namibia. The area is located in the northernmost extension of the Succulent Karoo Biome of Southern Africa, an area characterized by winter rainfall, the prevalence of succulent plants, and high botanical diversity and ecological endemism. The information center and guide service will attract tourists to Aus, raise awareness among visitors (both international and local) of the unique Succulent Karoo, the Namib Desert's wild horses, as well as Aus' fascinating culture and history, create employment opportunities for Aus' young people, and generate income for the Trust which can in turn be used for local conservation initiatives and community development.

Funding: $97,350
Grant Term: 2/05-12/06
Grantee: Namibia Nature Foundation

Namaqualand Restoration Initiative: Bringing Mining, Biodiversity and Local Communities Together

Establish a restoration benchmark and develop new and effective regional protocols based on sound ecological dynamics to achieve near-natural biodiversity restoration resulting from mining operations, while giving a cross-section of the regional community a greater role in restoration in the Central Namaqualand Coast and the Knersvlakte priority regions. This includes engaging mining operators and other land users to fundamentally change the way they perceive their roles and responsibilities with regard to biodiversity conservation and restoration.

Funding: $200,000
Grant Term: 1/05-12/07
Grantee: The Leslie Hill Institute for Plant Conservation, University of Cape Town

Karoo Veld: Ecology & Management.

Republish an expanded version of a practical book, Karoo Veld: Ecology & Management, Revised Edition, which focuses on the Karoo ecosystem, management systems and tools, economics, veld assessment and monitoring. The geographic focus of the book is the Succulent and Nama Karoo biomes; it will be published in both English and Afrikaans. An awareness-raising program about the book will also be conducted.

Funding: $39,405
Grant Term: 1/04-7/06
Grantee: University of Stellenbosch

Development of the Sutherland Succulent Karoo Route: Catalyzing Conservation Through Ecotourism and Environmental Awareness

Establish an ecotourism route in the Hantam/Roggeveld geographic priority area of the Succulent Karoo, specifically in the area in and around Sutherland. The project will involve extensive community participation in the initiative, and will design the route, identify sites of special interest, prepare a business plan, prepare awareness materials and raise awareness of the biodiversity and ecotourism potential of this unique area.

Funding: $9,850
Grant Term: 10/03-6/04
Grantee: Garden Route Enviro Services

Strategic Direction 3: Retain and restore critical biodiversity in areas under greatest land-use pressure

Impacts of Herbivores on the Succulent Karoo Vegetation of Anysberg Nature Reserve

Conduct a rapid assessment to map grazing impacts in all geographic priority areas within the Anysberg Nature Reserve, so that fine-scale conservation and monitoring plans and interventions can be developed for priority areas most heavily used by game.

Funding: $3,100
Grant Term: 1/05-6/05
Grantee: Percy FitzPatrick Institute of African Ornithology, University of Cape Town

Vegetation Classification, Mapping, Condition Assessment and Monitoring of Sanbona Wildlife Reserve with Specific Emphasis on the Impact of the Mega Herbivores

Conduct vegetation monitoring on the 54,000-hectare Sanbona Wildlife Reserve in the Central Little Karoo, to monitor the impact of reintroduced mega-herbivores.

Funding: $11,539
Grant Term: 1/05-12/07
Grantee: Sanbona Game Reserve Pty Ltd

A Transformation Map for the Little Karoo

Develop a classification system for illustrating the current degradation status of the different vegetation types in the Little Karoo. Use the classification system to generate a map of Little Karoo vegetation degradation status, in terms of grazing impacts and current land use, using a combination of multi-resolution and multi-temporal satellite imagery. Produce a transformation map of the Little Karoo, suitable for 1:50,000 scale mapping and modeling applications, which describes the spatial extent of transformation within each vegetation unit.

Funding: $9,800
Grant Term: 7/04-2/05
Grantee: Geo Terra Image (Pty) Ltd

A Vegetation Map for the Little Karoo

Prepare a vegetation map at a scale of 1:50,000 and accompanying document that will i) identify Little Karoo vegetation units at four levels; ii) include diagnostic descriptions and photographic examples of the units; iii) identify key indicator species and structural characteristics of the units; and iv) provide comments on ecological significance.

Funding: $51,645
Grant Term: 4/04-2/05
Grantee: Regalis Environmental Services CC

Alternative Small Predator Management Techniques in the Succulent Karoo : Options to Conserve

Explore an innovative alternative small predator management technique on private lands surrounding Namaqua National Park, South Africa. Seven Anotalolian shepherd dogs will be supplied to landowners in an effort to limit stock losses and reduce the use of harmful small mammal traps on farms.

Funding: $9,243
Grant Term: 2/04-3/05
Grantee: South African National Parks

Ecological Interactions and Impact of the Tent Tortoise (Psammobates tentorius) on the Succulent Karoo

Conduct baseline studies on the ecology and distribution of the tent tortoise in the Succulent Karoo, identify priority sites for conservation and produce sustainable management guidelines for land users within the Succulent Karoo. The project will generate public awareness of the tent tortoise as a flagship species meriting conservation attention.

Funding: $10,000
Grant Term: 1/04-12/05
Grantee: University of Stellenbosch

Alienate the Aliens: Phase One

Conduct Phase 1 of a project aimed at eradicating alien trees and shrubs. Phase 1 would entail identifying and contacting landowners, and holding workshops for consultation and generation of MOUs with the landowners for cooperation and contributions.

Funding: $7,905
Grant Term: 9/03-11/03
Grantee: NACLO

Southern Namib Restoration Ecology Information Package
Produce two popular publications (a pamphlet and a small handbook on plant relocation) on the topic of restoration following mining operations.
Funding: $10,000
Grant Term: 9/03-8/05
Grantee: EnviroScience

Strategic Direction 4: Mainstream conservation priorities into land-use planning and policy-making

Developing a Fine-Scale Conservation Plan for the Kamiesberg Uplands
Develop and deliver a fine-scale conservation plan for the Kamiesberg Uplands and surrounding for integration into the Kamiesberg Municipality's Spatial Development Initiative. This project forms one component of this initiative, and specifically will contribute by (1) gathering available relevant biodiversity and land-use data; (2) performing the conservation planning analyses; and, (3) communicating results to the Succulent Karoo Ecosystem Program team and project participants.
Funding: $19,870
Grant Term: 2/05-1/06
Grantee: Philip Desmet

Inventory, Mapping and Increased Awareness of the Brown Hyena and Other Large Predators in the Sperrgebiet and Surrounding Areas, Namibia
Conduct research on large carnivores, specifically the brown hyena, in the Sperrgebiet geographic priority area of the Succulent Karoo. Carry out a large predator awareness program in local communities, schools, farms and tourist camps. Interested parties will be engaged to complete a questionnaire developed during the project to collect information on large predator sightings, population estimates, local attitudes and problems, conservation measures and threats to large predators. Project deliverables include maps of sensitive areas, an inventory of large predators and population density estimates.
Funding: $10,000
Grant Term: 2/04-3/05
Grantee: Brown Hyena Research Project

Mainstreaming Biodiversity Conservation in the Succulent Karoo Hotspot: Strengthening and Ensuring Sustainability of the Institutional Environment for Conservation Action Through SKEP
Catalyze activities to contribute to the long-term security of conservation in the Succulent Karoo by laying the foundation for successful mainstreaming and institutionalizing of biodiversity conservation in South Africa and Namibia. Activities include integrating the Succulent Karoo Ecosystem Program (SKEP) conservation targets and strategy into institutional policymaking and land-use planning, monitoring activities at the SKEP project and program levels, and facilitating the evolution of the SKEP Coordination Unit into an independent grant-making trust.
Funding: $137,073
Grant Term: 11/03-12/05
Grantee: Conservation International

Investing in Technology to Build Communication and Financial Management Capacity for Civil Society Biodiversity Conservation NGOs in African Hotspots
Upgrade the Internet and video-conferencing facilities at the Kirstenbosch Research Centre (KRC), National Botanical Institute. Through this strategic investment, the KRC will improve its financial management ability in the Cape Floristic Region and the Succulent Karoo hotspots and catalyze a larger Internet technology development strategy to develop the KRC into a Center for Biodiversity Conservation that can serve as a communication hub for nongovernmental organizations (NGOs) working on biodiversity conservation issues in African hotspots with a particular focus on the Southern African hotspots in the initial phase.
Funding: $60,214
Grant Term: 10/03-10/04
Grantee: National Botanical Institute ($27,020.00) and Conservation International ($33,194.00)

*This is a multiregional project covering two hotspots; the total grant amount is $120,428 (National Botanical Institute $54,040 and Conservation International $66,388).

Strategic Direction 5: Increase awareness of the Succulent Karoo hotspot

Co-authorship of a book entitled: East of the Cape – Conserving Eden
Co-author a visually-driven book that aims to increase awareness and appreciation of the value and uniqueness of the biodiversity of an area covering the eastern part of the Cape Floristic Region, part of the Little Karoo subregion of the Succulent Karoo, and most of the domain of the Subtropical Thicket Ecosystem Planning Project (STEP) which forms the south-western part of the Maputoland Pondoland Albany region. The book will expose readers to land uses that promote sustainability of ecosystems and socio-economic systems, will discuss the conservation of biodiversity as well as the bioregional approach to conservation planning, and will provide detailed reader-friendly information on the natural history of selected species and ecosystems in area of focus.

Funding: $3,300
Grant Term: 1/05-12/05
Grantee: Dr Shirley Pierce Cowling

Knersvlakte Biodiversity Awareness Raising Project
Identify and train five people from the Knersvlakte geographic priority area of the Succulent Karoo Hotspot as a team to raise awareness and educate people in the area about the biodiversity of the Knersvlakte, the importance of protecting it, and how to use it responsibly. The team will be based at the Masibambane Community Centre in Vanrhynsdorp, South Africa and will have a mobile exhibition center to reach all of the outlying areas.

Funding: $111,844
Grant Term: 1/05-12/06
Grantee: Masibambane Multi-Purpose Community Centre

Klein Karoo Awareness Project
Create awareness and stimulate interest in the Succulent Karoo by conducting courses on plants and conservation issues at Minwater in the southern Karoo. Approximately 10 courses will be held for landowners in the region. Project staff will visit farmers who are unable to attend the courses. Through this project landowners will gain an understanding of the importance of conserving their properties and will be introduced to farming practices to help reduce the loss of

Funding: $5,308
Grant Term: 4/04-3/05
Grantee: L. H. Jordaan

Piloting a Resource for Environmental Education in the Little Karoo
Test and develop environmental education materials for teachers and students in the Little Karoo. Materials include two booklets, the first about plants in the Succulent Karoo and the second comparing the lifestyle survival strategies of the original San people with survival strategies adapted by plants and animals in the Little Karoo.

Funding: $6,000
Grant Term: 4/04-9/04
Grantee: Garden Route Botanical Garden Trust
*The original grant term has been increased by one month.

A Conservation Awareness Raising Plan for the Bushmanland Inselberg Geographic Priority Area
Refine the awareness raising action plan drawn up at the Bushmanland Inselberg Action Planning Workshop held at Swartkoppies, 3-4 April 2003, and produce a document suitable for implementation by stakeholders in the region.

Funding: $9,027
Grant Term: 2/04-5/04
Grantee: Namprocon CC

Nieuwoudtville Biodiversity Facilitators Project
Create a coordinating structure to raise awareness of biodiversity in the Nieuwoudtville area through facilitation of exchange between local communities and researchers and interactive learning events for school children.

Funding: $10,000
Grant Term: 2/04-2/05
Grantee: Indigo Development and Change

Sanna's Garden: Animated Animals Teach Kids about Conservation
Create an entertaining, gentle and educational children's series using the medium of stop-frame puppet animation. The series will introduce children to a cast of animal characters indigenous to the Succulent Karoo, and will be focused around a garden they build to protect the endangered plants of the region. The aim is to change perceptions of the Karoo as a dry barren area often perceived as empty and of lesser worth. This project aims to prepare the pilot episode in a series that will be marketed to local broadcasters and distributed free of charge to schools.
Funding: $7,000
Grant Term: 2/04-6/04
Grantee: Fopspeen Live Art

Biodiversity Awareness Raising: Exhibitions and Biodiversity Fieldtrips During the Western Cape International Youth Festival
Raise awareness about the biodiversity of the Succulent Karoo through an exhibit and activities at the Western Cape International Youth Festival held in Oudtshoorn, South Africa in July 2003. Approximately 25,000 youth attend the festival.
Funding: $2,287
Grant Term: 7/03-8/03
Grantee: Western Cape International Youth Festival

Market Research Support to the Africa Environmental News Service
Support the Africa Environmental News Service by advising on planning of market research and development of marketing research tools, conducting the market research exercise and assisting with the development of a business plan.
Funding: $3,333
Grant Term: 5/03-10/04
Grantee: Equals Three Communications
This is a multiregional project covering three hotspots; the total grant amount is $10,000.
The original grant term has been increased by one year and one month.

Formal Launching of CEPF-Funded SKEP Programme in Knersvlakte
Officially launch CEPF investment in the Succulent Karoo hotspot through a special event to build awareness of CEPF's and the Succulent Karoo Ecosystem Program's commitment to conserving the hotspot and to help publicize the new availability of grants for civil society.
Funding: $2,260
Grant Term: 3/03-4/03
Grantee: Conservation International

Taking SKEP to a Finer Scale: Catalyzing Conservation Action in Geographic Priority Areas in the
Conduct seven fine-scale Action Planning Workshops for the CEPF geographic priority areas in order to provide an open forum for generating a common vision for the Succulent Karoo Ecosystem Program (SKEP) and five-year plan of priority actions for conservation and sustainable development in each area.
Funding: $18,332
Grant Term: 3/03-7/03
Grantee: Conservation International
*The original grant term has been increased by one month and the original funding amount has been increased by $2,060.

Building a Global Constituency for Biodiversity Conservation
Implement a series of targeted public awareness and education campaigns in nine hotspots in Africa, Asia and Latin America. Campaign leaders participate in an intensive training course at the UK's Kent University or Mexico's Guadalajara University, prepare detailed plans to implement campaigns, link with a local organization in their region and commit to a minimum two years with that organization.

Funding: $153,373
Grant Term: 12/02-6/06
Grantee: Rare ($104,925.38) and Conservation International ($48,448.08)

*This is a multiregional project covering nine hotspots; the total grant amount is $1,993,854.98 (Rare $1,364,030 and Conservation International $629,825).
The original total funding to Rare has been reduced by $205,000 and to CI, increased by $205,000.

Strategic Direction 6: Create the capacity to catalyze the SKEP program

Environmental Education Program for The Succulent Karoo Hotspot in Namibia: Phase 1 - Program
Develop an innovative environmental education program in the Luderitz area of Namibia that aims to raise awareness and stimulate protection of the Succulent Karoo Hotspot within a sustainable living framework. The target group for this program will be the communities who live in the buffer areas surrounding the Sperrgebiet, a new protected area in Namibia. Specific aims of the project are to develop the guidelines and strategy for implementation of the environmental awareness program.

Funding: $9,730
Grant Term: 1/05-4/05
Grantee: Namib Desert Environmental Education Trust

Facilitating the Transition from Conservation Planning to Action: Providing Biodiversity Specialist Support to the SKEP Coordination Team
Build the capacity of the SKEP Coordination Unit to play an effective role, by providing relevant biodiversity training and access to specialist knowledge. Provide an advisory and review role in the SKEP Technical Working Group.

Funding: $34,770
Grant Term: 4/04-12/04
Grantee: Botanical Society of South Africa

Raising Awareness and Building Local Capacity for Project Design and Implementation Linked to SKEP Conservation Targets
Incubate the SKEP Coordination Unit in a flexible and learning-focused environment to identify the best long-term structures and processes for supporting the implementation of the SKEP 20-year strategy. An emphasis will be placed on capacity-building of the local SKEP coordinators employed at the sub-regional level and of local stakeholders in the context of rolling out CEPF investment in the Succulent Karoo hotspot. The core function of the Coordination Unit will be to ensure that the design, implementation and evaluation of CEPF-funded projects are feasible and contribute to overall biodiversity conservation targets.

Funding: $616,588
Grant Term: 7/03-1/05
Grantee: Conservation International

*The original funding amount has been increased by $785.

Facilitating the Transition from Conservation Planning to Action: Establishing SKEP Sub-regional
Create a capacitated Succulent Karoo Ecosystem Program (SKEP) project management unit and team of champions that will build awareness and facilitate communication between enabling agencies and implementers, and will catalyze action in CEPF priority corridors as part of the development of a long-term SKEP Program for Conservation and Sustainable Development of the Succulent Karoo hotspot.

Funding: $147,900
Grant Term: 4/03-9/03
Grantee: Conservation International

*The original funding has been increased by $10,282 and the grant term by three months.

Conservation Highlights

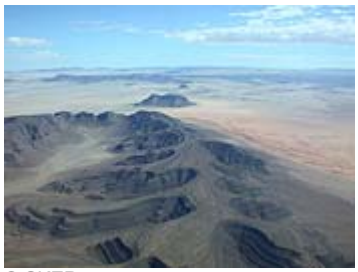
E-News

- Namibian Nature Foundation to Coordinate Succulent Karoo Investments – March 2005
- Marketing Social Change – November 2004
- Namibia Declares Sperrgebiet As National Park – June 2004
- Mining Company Commitment Helps Bushmanland Initiative – May 2004
- Connecting Conservationists in Africa – January 2004
- Students Get Off to Strong Start for Conservation Education – August 2003
- Stakeholders Forge Common Ground in Succulent Karoo – April 2003
- Team Pioneers Coalition – Led Approach to Conservation – October 2002

Other Highlights

- Web Site: Succulent Karoo Ecosystem Programme
- SKEP Transition Document: SKEP Moves into a New Phase
- SKEP Transition Conference
- News Article: Succulent Karoo to Flourish with Grant
- News Article: Succulent Karoo gets R64 million
- News Article: Conservation dollars for the Karoo
- Newsletter: SKEP Bushmanland Conservation Initiative
- Endorsement Letter: Anglo American Support for the Bushmanland Conservation Initiative
- Management Plan: Gouritz Initiative Strategic Management and Business Plan

Namibian Nature Foundation to Coordinate Succulent Karoo Investments



© SKEP
The Sperrgebiet includes large tracts of unspoiled dunes and mountain landscapes.

The Namibian Nature Foundation will soon take charge of coordinating the Succulent Karoo Ecosystem Program (SKEP) in the Namibian portion of the Succulent Karoo Hotspot.

The new development is designed to significantly increase and benefit local groups and communities working to conserve the Succulent Karoo. The hotspot covers more than 100,000 square kilometers of Namibian and South African desert and boasts the richest succulent flora on Earth.

"We asked the Foundation to host the SKEP Namibia Coordination Unit because its conservation and sustainable development mission and objectives are closely aligned with ours," said Sarah Frazee, director of Conservation International's Southern Africa Hotspots Program based in Cape Town, where the SKEP Namibia team had been located to date.

"They're a very strong organization in Namibia, so they're in the best position to channel support to help local organizations develop on the ground," she said.

SKEP is a joint Namibian and South African initiative that brings together diverse stakeholders in a unique approach to conserve this extraordinary region and improve the livelihoods of its people. The program is supported by the Critical Ecosystem Partnership Fund (CEPF) and acts as its locally based coordination team in the Succulent Karoo Hotspot.

The Foundation, which will receive a CEPF grant to support its new role, has extensive grant-making experience. It offers small grants through its own program and administers or supports the UNDP/Global Environment Facility's Small Grants Program, Swedish local environment funds for Namibia, Danida's Namibia Environment Fund, and other grant-making programs.

It will also manage a CEPF small grants program specifically aimed at providing support to local groups to engage in conservation of the areas surrounding the Sperrgebiet in southern Namibia.

The Sperrgebiet, which means "Forbidden Area" in German, covers 26,000 square kilometers of dunes and mountain. Off-limits to scientists and the public for the last 100 years because of its status as a diamond mining concession, the area is also rich in fauna and flora with a high degree of endemism: Of the 776 plant species discovered in the region to date, 234 are unique to the Sperrgebiet.

SKEP Namibia staff recently moved offices to join the Foundation in Windhoek, the Namibian capital. The two organizations are now working together to develop an implementation program that will support the Ministry of Environment and Tourism (MET) in its preparation work for the Sperrgebiet National Park expected to be gazetted later this year. (See related story: Namibia Declares Sperrgebiet as National Park.)

"The new grant will assist the MET in planning and establishing the new Sperrgebiet National Park," said Midori Paxton, project coordinator for the preparatory phase of the UNDP/GEF-supported Strengthening the Protected Areas Network (SPAN) Project-MET. "It will also create a solid foundation for its effective management."

The six-year implementation phase of the SPAN project will start in 2006. Two protected areas in

the Succulent Karoo, the Ai-Ais Hotspring Park and the new Sperrgebiet National Park, will be among the project's four four field demonstration sites.

Representatives from both MET and the Foundation will meet with stakeholders 7-8 March at a consultation meeting in Namibia to discuss the SPAN project's planned activities for these two parks and introduce the new SKEP activities, including the CEPF small grants facility.

For more information, visit www.nnf.org.na or contact Kauna Schroder, assistant coordinator at SKEP Namibia.

ABOUT CEPF
OUR STRATEGY
CEPF NEWS
Press Releases
E-News Top Stories
In Focus Features
WHERE WE WORK
RECENT GRANTS
APPLY FOR GRANTS
Print this page

Marketing Social Change

In Focus, November 2004

Zhang Zhe is a 27-year-old environmental engineer by training. She is accomplished and intelligent. But she has an alter ego—a large golden pheasant (a friend in a big bird costume, actually) that accompanies her as she spreads her conservation messages to hundreds of school children in China's Sichuan Province every month.

And she's not the only one.

With funding from the Critical Ecosystem Partnership Fund (CEPF), Zhang Zhe is one of 13 individuals being trained in social marketing and the art of convincing local communities and governments that conservation is key.

The project brings promising individuals and local groups together with the support of Rare and Conservation International's global communications team to build a global constituency for biodiversity conservation through Rare's replicable Pride program.

It's an entertaining, creative approach to the complex issue of biodiversity conservation, while building and bettering lives of local people.

"In the village that I am working in, most families have small home-based businesses, and tourism-related businesses," explained Zhang Zhe about one of the villages around Baishuihe National Nature Reserve where she is working in the Mountains of Southwest China biodiversity hotspot.

"It's mostly families, and though they're not lacking food or sanitation, they are still very concerned about generating incomes for the family. So we are trying to find a way, working with government and nongovernmental organizations, to combine economic development and conservation in this area."

Zhang Zhe's work is part of a project implemented by the Jane Goodall Institute Roots and Shoots China office, which is one of the organizations participating in the program.

With a marketing zeal not too unlike that which a marketeer for Coke or Pepsi would approach their audiences, the new Pride campaign leaders are generating huge interest and participation in their efforts to promote conservation of

© Rare
Zhang Zhe poses al golden pheasant tha her during her camp the villages around B National Nature Res Southwest China.

© Marldes Van Delft
The Katala Foundati led by Indira Lacerna recently convinced t Puerto Princesa to p hectares of crucial fe and roosting ground cockatoo.

DID YOU KN
Overviews for n campaigns supp CEPF are availa here.

important ecosystems and the globally threatened species they shelter.

Enabling Expansion

A CEPF grant awarded last year is supporting an expansion of the Pride program with the 13 new campaigns in the Atlantic Forest, Cape Floristic Region, Chocó-Darién-Western Ecuador, Guinean Forests of West Africa, Mesoamerica, Mountains of Southwest China, the Philippines, Succulent Karoo and Sundaland hotspots.

In addition to the CEPF-supported campaigns and others already underway, Rare has also launched 12 new campaigns in additional areas with support from others such as the David and Lucile Packard Foundation and The Nature Conservancy.

Each campaign aims to save a Critically Endangered species, solidify or create new protected areas, or conserve healthy biodiversity conservation corridors.

Rare's experience in conservation education stems from its work in the 1980s developing a very structured social marketing tool, known then as the Promoting Protection Through Pride program. The recipe is simple and effective: turn a charismatic flagship species into a symbol of local pride, as a lever for improving public understanding of biodiversity's value and the need to take action to preserve it.

Both grassroots and mass-marketing techniques are used to create broad-based support—on a local or national level—for ecosystem protection.

Promising individuals are chosen to become campaign leaders, linked with a local organization and supported throughout the process, which officially begins with a 10-week training course at the University of Kent at Canterbury in the United Kingdom or the University of Guadalajara in Mexico. (See related story: Students Get Off to Strong Start for Conservation Education.)

For each campaign, the objectives, flagship species, and target audience are selected to address a specific, realistic, and measurable threat identified together with stakeholders. Threats targeted by the CEPF-supported campaigns range from illegal logging and mining to unsustainable wildlife trade to an advancing agricultural frontier.

In the Field

For people like 31-year-old South African Jakob Hanekom, the project is crucial. Using the Clanwilliam cedar tree as his flagship species, and promoting the campaign slogan of "Be a Friend to the Cederberg!" he aims to conserve the plants and animals of the Cederberg Wilderness Area where the Cape Floristic Region and Succulent Karoo hotspots converge in South Africa.

As part of his campaign, this married father of two is doing a weekly 10-minute live radio spot talking about conservation challenges, and spreading key campaign messages. He has

also prepared a package of materials to use during his visits to local schools, including rulers with messages that serve as “prompts” to remind children (and their families) even months later about the conservation messages they heard in school.

“It’s really rewarding to work in my home town and bring information about nature and ecosystems to the people here,” Hanekom said. “For many it’s the first time ever they’ve been exposed to this type of program.”

Hanekom, who is linked with Cape Nature, has also designed and printed an education booklet and fact sheet to spread information on conservation and development issues important to the wilderness area; recorded and sung a school song to more than 4,700 children; and developed a bilingual puppet show to use during his school visits.

Through the project’s online club, campaign managers can also share information with their fellow managers in other hotspots, who are using similar social marketing techniques but specially adapted to the local situation.

In the Chocó-Darián-Western Ecuador Hotspot, Luis Arroyo Carvache is leading a campaign to preserve critical forests of San Lorenzo del Pailon in northwestern Ecuador. The campaign aims to help stop conversion of the forests and mangroves to agricultural land, particularly palm oil plantations, in the Chocá-Manabi conservation corridor.

Among his activities, Carvache has produced a costume of the red-lored parrot (*Amazona autumnalis*)—his campaign’s flagship species—and a variety of materials for his work in 22 schools. He is also hosting a local radio show, producing a variety of radio spots to help people understand the benefits they receive from the forests.

Replicating Success the Pride Way

For the Pride program, success breeding success is part of the strategy.

For example, the campaign leaders conduct pre- and post-campaign surveys of 1-3 percent of their target population to learn about relevant knowledge, attitudes, and practices. The survey data is used to develop objectives, design messages, and ultimately to measure the change achieved during the campaign.

Rare has also developed a “Learning Framework for Pride,” a set of 66 different data points that it is collecting throughout all the current campaigns. At the end, it will use this data to develop a predictive model of success for a campaign to determine, with statistically valid data, “what characteristics are most important for success,” said Megan Hill, senior director for Pride at Rare’s U.S. headquarters.

“All of that said, one of the most important points I use to define success is seeing Pride campaigns implemented long after Rare’s direct involvement is over,” Hill said. “It is a replicable model, and our ultimate goal is to train people to keep running outreach campaigns long into the future."

It's this forward thinking that often proves pivotal to conservation success, and the new campaign leaders are already demonstrating their capacity as catalysts.

In the Philippines, the Katala Foundation's campaign led by Indira Lacerna-Widmann recently convinced the Municipality of Puerto Princesa to protect 60 hectares of crucial feeding, nesting and roosting ground for the Critically Endangered Philippine cockatoo (*Cacatua haematuropygia*).

The Philippine cockatoo, the flagship species for Lacerna-Widmann's campaign, was once considered common but now numbers no more than 4,000. The new protected area on the island of Dumaran off the coast of Palawan is also important for local communities.

"The protected area will protect and ensure the water supply not only for this community but also for other barangays (villages) dependent on this sub-watershed," Lacerna-Widdman said.

Planning for the Future

Forward thinking is also pivotal in fast-developing economies like China.

In addition to her school and farm work, Zhang Zhe is completing a documentary about Baishuihe National Nature Reserve.

After a pre-campaign survey she conducted showed that 70 percent of her target audience gets its information from TV, she set out to produce this film to reach people living near the Reserve, as well as tourists. She hopes to have it broadcast on local and national TV stations, and to produce DVDs for use in schools.

"With the economic development and improving environmental awareness, China's environmental protection work will be so different 10 years later from today," Zhang Zhe said. "This film may well be used as study material by that time."

Indeed time is of the essence and Rare appears to be ready to launch more programs keeping in step with the growing global economy.

"Pride is really ramping up," said Brett Jenks, Rare's president and CEO. "In the first 15 years of the Pride program, Rare supported 30 campaigns worldwide. In 2004 alone, we have 29 operating campaigns, and 2005 will see a total of 49. So CEPF's return on investment will be greater than the sum of each campaign."

View more In Focus features

E-mail this page

ABOUT CEPF
OUR STRATEGY
CEPF NEWS
Press Releases
E-News Top Stories
In Focus Features
WHERE WE WORK
RECENT GRANTS
APPLY FOR GRANTS
Print this page

Namibia Declares Sperrgebiet As National Park

June 2004

Known worldwide as the source of exclusive diamonds, the Sperrgebiet is set to become the gem of Namibia's protected areas as the result of a recent decision by the country's cabinet to proclaim the region as a national park.

Following a 1990s deal brokered with diamond giant DeBeers Centenary that placed control of the area under the joint governing body of Namdeb Diamond Corporation, the Sperrgebiet now falls completely under the government's control. The corporation is owned in equal shares by the Namibian government and De Beers Centenary AG.

A growing tourism industry in the Sperrgebiet is expected to bolster the economy of southern Namibia, particularly in the towns of Rosh Pinah and Lüderitz.

As a mining concession the Sperrgebiet has been off-limits to the public and scientists for most of the last century. Though the trespassing restrictions of mining have helped to keep much of the Sperrgebiet pristine until now, exploration for new mineral riches and "emergency grazing" on its eastern grasslands are just two of the land-use pressures facing this fragile area.

The Sperrgebiet, which means "Forbidden Area" in German, covers some 26,000 square kilometers of dunes and mountains that seem stark but shelter numerous biodiversity gems. The few scientific assessments carried out to date discovered 776 plant species, including 234 unique to the area.

The area boasts the highest levels of biodiversity in Namibia, including a high concentration of unique plants, amphibians and reptiles as well as wild populations of gemsbok, springbok and carnivores such as brown hyena. As such, the area has been identified as a priority area for conservation in the Succulent Karoo Ecosystem Plan (SKEP), a 20-year strategy that now guides conservation action in this hotspot.

The strategy was developed and is being implemented with support from the Critical Ecosystem Partnership Fund (CEPF). The SKEP process included development of a fine-scale plan that identifies important management zones

© K Maze/NBI
The stark landscape Sperrgebiet shelter r biodiversity gems.

DID YOU KN

CEPF focuses c the geographic identified as pri conservation in process: Bushm Inselbergs, Cen Namaqualand C Namaqualand U Knersvlakte, Ha Roggeveld, Cer Karoo and Sper

More news and this hotspot.

within the Sperrgebiet. The plan was developed together with multiple stakeholders at the invitation of the Ministry of Environment and Tourism and with support from Conservation International's Global Conservation Fund.

The SKEP process, together with other efforts, considerably strengthened efforts by the Namibian Ministry of Environment and Tourism and its partners to secure the national park proclamation.

Subscribe to the Newsletter or View more E-News top stories

E-mail this page

ABOUT CEPF
OUR STRATEGY
CEPF NEWS
Press Releases
E-News Top Stories
In Focus Features
WHERE WE WORK
RECENT GRANTS
APPLY FOR GRANTS
Print this page

Mining Company Commitment Helps Bushmanland Initiative

In Focus, May 2004

by Elizabeth A. Foley

The Bushmanland Conservation Initiative is getting a head start on creating a 60,000-hectare protected area in the Succulent Karoo biodiversity hotspot following a commitment in April by a local mining company for both in-kind donations and future collaboration on conservation.

A Critical Ecosystem Partnership Fund (CEPF) grant awarded to the Botanical Society of South Africa (BOTSOC) earlier this year for an 18-month feasibility phase of the project helped leverage the new commitment by Anglo Base Metals, a subsidiary of Anglo American. BOTSOC heads the initiative.

Anglo Base Metals' commitment is an important precedent and an encouraging first step in this corner of the Succulent Karoo hotspot where engaging extractive industries such as mining is a major part of CEPF's strategy to expand protected area corridors through public-private-communal partnerships in the area.

The Bushmanland Inselbergs area—located on the northeast margin of the Succulent Karoo hotspot, just south of the Orange River and the border between Namibia and South Africa—is also the only priority conservation area identified in the CEPF-supported Succulent Karoo Ecosystem Plan that has no land currently under formal conservation status.

"When we launched in February, the miners were there on the ground with us, and were willing to broaden their perspective of what a protected area is," says Mark Botha, director of conservation partnerships for BOTSOC.

The initiative's focus is to conserve Bushmanland as a globally unique arid land biodiversity area in a multi-owned protected area. The project will focus on new ways to ensure local landowners become stewards of the land and place important areas aside for conservation, while incorporating areas under high protection, managed grazing and more intensive uses such as mining.

© BOTSOC
The Gamsberg area region of Bushmanla originally proposed a mine.

DID YOU KN

You can learn n the CEPF inves strategy in the S Karoo hotspot.

The ancient rocky outcrops known as inselbergs that dominate Bushmanland are home to a rich and unique variety of succulent and geophyte plants. In just the 31,400-hectare area that spans the Koa River valley, there are 420 plant species, of which 67 are found only in this area and 87 are threatened species.

"We're just getting the basics sorted out, but Anglo has come in for R150,000 rand (approximately $25,000) a year in in-kind assistance ranging from office space and accommodation to use of their facilities," Botha says.

"It's a show of faith that we hope will encourage them to contract 20,000 hectares of priority land into this conservation area after the initial phase is over," he says. "It's really encouraging because the alternative scenario was an open-pit mine almost the size of Table Mountain, with no potential for a surrounding protected area."

The move to protect Bushmanland began in 2000 when Anglo proposed digging the zinc mine on Gamesberg mountain in a remote region of Bushmanland. However, a fall in zinc prices later led the company to put the plan on hold, providing an opportunity for the environmental sector and Anglo to work together.

Partners in the initiative include the Succulent Karoo Ecosystem Programme, the Department of Agriculture, Land Reform and Conservation, Northern Cape Province and the Khai-Ma Municipality.

Botha and his colleagues will also be working closely with the Surplus People Project, a land rights organization in the region that aims to develop sustainable grazing practices within the communal lands area.

Other important partners include Conservation International's Center for Environmental Leadership in Business and the WWF-South Africa Leslie Hill Succulent Karoo Trust and Harding Bequest.

Anglo Base Metals owns two mines in the region that will eventually become a Bushmanland protected area. Key to the success of the Bushmanland Conservation Initiative's work with Anglo is not only helping to downscale any environmental impacts of mining operations, but to bolster biodiversity conservation on site.

"We want to look beyond just the sometimes trivial aesthetic concerns around the mines and aspire to create working conservation models," Botha says. "Even if a mine goes forward, we want the biodiversity area adjacent to be protected in perpetuity."

The initiative's partnership with Anglo builds on publicly declared commitments by Anglo Base Metals' parent company, Anglo American, to ensure local habitats are taken into account and restored where necessary. According to Anglo American, their mining and quarrying operations have formal, costed closure and rehabilitation plans in place.

Also in South Africa, Anglo's forestry division is setting aside

suitable areas as national heritage sites that are registered with the Department of Environmental Affairs and Tourism and form an important part of the national biodiversity program. More than 100 threatened species are formally protected in these natural heritage sites. The division has also committed to the rehabilitation of all wetlands on properties owned or managed by the company.

View more In Focus features

E-mail this page

ABOUT CEPF
OUR STRATEGY
CEPF NEWS
Press Releases
E-News Top Stories
In Focus Features
WHERE WE WORK
RECENT GRANTS
APPLY FOR GRANTS
Print this page

Connecting Conservationists In Africa

© Donovan Kirkwoo
The Succulent Karo
hotspot in southern
world's richest variet
plants such as those
with thick, fleshy tiss
store water—as well
and invertebrate dive

DID YOU KN

AENS is invitin
its pilot Web sit
www.aens.org a
project's market
phase. Take a l
and share your
completing the
short survey qu
highlighted on t
page. Your feed
the team create
beneficial servic

In Focus, January 2004

Information is key to effective conservation: collecting it, making sense of it and doing something with it. Two former Reuters news service correspondents, a chartered accountant and others have teamed together to develop a news service about Africa that will work in all three of these areas in the first dedicated service of its kind.

"Africa's environment—one of the last great natural wonders of the world—is under threat on virtually every front, yet its future health has immense implications not only for ordinary Africans but for the entire world," says Jonathan Clayton, co-developer of the Africa Environmental News Service (AENS) project and former Reuters regional bureau chief in the Maghreb and Eastern Africa.

"Despite this there is not one information service focusing on its plight," Clayton says. "AENS will do this, helped by people all over Africa and new technology to bring reports from some of the most remote parts of the planet."

The developers believe that if development processes are to take place in an environmentally friendly way it is critical and urgent, both for Africa and the international community, that all those who participate in these processes are given access to relevant information about the environment. The service is ultimately expected to be of use to a variety of audiences ranging from national governments, researchers, the private sector and even tourists.

The service, now in its design and market research phase with support from the Critical Ecosystem Partnership Fund, is the first dedicated to environmental information about Africa and is expected to provide a resource that draws attention to the linkages between Africa's environmental health and its potential for sustainable development and alleviation of poverty.

You can help with the team's market research. Visit the sample AENS Web site today at www.aens.org, and share your opinion about it by completing the simple and short survey questionnaire highlighted on the home page. Your time will be well spent in helping the developers create the most beneficial service possible.

The prototype site has been designed to stimulate ideas and provoke feedback as part of the market research exercise. It is not intended to simulate or prejudge the look of the final product. We recommend you explore the site to see how it works before answering the survey questionnaire.

Historically, information on environmental and conservation issues in Africa has relied on land-based communication and therefore timely news and data has been limited to the major cities. The emergence of new communications technologies such as satellite and mobile telephone networks offer up a new opportunity to make up-to-the-minute information available to the widest possible audience.

Currently, fragmented coverage of African environmental news and information is available from a number of sources but they tend to be patchy and have little in the way of original information, according to AENS co-developer Aidan Hartley who met Clayton while the two were working for Reuters in Nairobi.

"It struck both of us that there was an enormous gap in coverage of environmental issues across the continent by the established media," Hartley says. "We saw that even conventional news stories, such as humanitarian crises, had environmental elements that were being ignored. That was the seed for the project."

The News Service

AENS will operate through a network of regional correspondents supported by analysts, creating an independent information and news service that will provide original, comprehensive and timely coverage of environmental issues across Africa.

The service will address mainstream environmental topics as well as casting a lateral net to ensure capture and coverage of issues that are not conventionally reported from an environmental angle. These will include:

- Mismanagement and exploitation of natural resources
- Industrialization and development
- Urbanization
- Poverty
- Humanitarian crises and conflicts
- Globalization
- Political process and policy
- Degradation of wildlife habitats
- Loss of wildlife resources
- Desertification
- Pollution

An independent market research company has joined the team to help identify potential audiences and make sure their needs are met and ultimately incorporated into AENS' final business plan.

"More and more people in the independent sector now accept that the development and use of a research-based business plan greatly improves the likelihood of the project's success by anticipating market opportunities and pitfalls," says Purnima Chawla of Equals Three Communications, the market research company. "It is also increasingly being recognized as a hallmark of a high quality project and the professionalism of its executors."

AENS is developing three principal service streams:

- Original news and information sourced through a network of country-based correspondents and delivered on a daily basis both through the AENS Web site and in tailor-made form via e-mail to individual consumers
- An information exchange forum for the African environment hosting a variety of interactive information exchange forums for individuals and organizations working with, or interested in, African environmental issues
- A definitive knowledge bank for the African environment. As AENS' information and image database grows it is envisioned to become the primary source of environmental data for Africa—potentially its most valuable contribution and asset.

The online service is expected to include different levels of entry. The first level, for example, could be viewed by anyone visiting the site and will provide information about the AENS service and summarized headlines of the principal breaking stories of the day. Other levels would include a password-controlled system for paying subscribers.

All subscribers would get a daily package of news and information in brief via e-mail that could be tailored to the subscriber's preferences. There will also be a weekly package with features and analysis, interviews and topical editorial pieces.

The Web site will also contain information on events, contacts, projects and employment opportunities, along with live video footage, links to other sites and an online discussion forum for members.

"Using emerging technologies, we plan to source and package original news and information as it breaks direct from the most remote parts of the African front line, and distribute it worldwide in real time," Hartley says. "In addition, we plan to host various issue-based interactive exchange forums and to create a Web-accessible archive of information and reports from various sources.

"We hope this archive will be a valuable resource to a wide variety of researchers, practitioners and other interested parties in this area."

Initially, the provision of environmental information and news will be the primary face of AENS. Over time however, the

depth and breadth of archival information within its database could develop a critical mass of considerable importance.

View more In Focus features

E-mail this page

ABOUT CEPF

OUR STRATEGY

CEPF NEWS

Press Releases

E-News Top Stories

In Focus Features

WHERE WE WORK

RECENT GRANTS

APPLY FOR GRANTS

Print this page

Students Get Off to Strong Start for Conservation Education

© Photo courtesy of Indira Lacerna from (above) and Edward Sierra Leone (below students taking part Rare diploma course University.

© Photo courtesy of

In Focus, August 2003

by Corrina Hackney

Amid the diverse student population of Kent University in England, a multinational team is nearing the end of an intensive 10 weeks of specialized training to become community educators with a single mission: to promote local pride in the environment in some of the planet's most threatened ecosystems.

The university course—offered in the United Kingdom and Mexico—is the first step in a 2.5-year program based on Rare's Pride Campaigns.

The Critical Ecosystem Partnership Fund (CEPF) is supporting a major expansion to biodiversity hotspots of these highly successful campaigns by a new partnership between Rare and Conservation International's (CI) International Communications Department (see press release: New Alliance).

In this initial university phase—run by Rare staff in conjunction with the University of Kent in the UK—students receive intensive training in all the skills needed to produce and carry out comprehensive conservation education campaigns.

"The university component of the course covers an incredible range of activities—from conservation law and biodiversity management to social marketing techniques and practicalities such as puppet-making," says Rosemary Godfrey, Rare's course manager at Kent University.

Pride Campaigns are run by local organizations and aim to appeal to the public on an emotional level. The campaigns focus activity on a single species, aiming to capture a sense of public pride and ultimately to change behavior and better protect the local species. The CEPF-supported campaigns will take place in 13 sites in China, Indonesia, the Philippines, Southern and West Africa and Central and South America.

Unique

DID YOU KN

Admission to th Conservation E Program and Di at Kent Univers to eight student to ensure a high interaction betw and instructors.

Pride Campaign designed to targ segments of the from children to local leaders an

While there are a number of conservation education courses offered in other institutions, the Rare course is unmatched in the kind of support structures it gives to students. The program is also unique in combining academic and technical training with hands-on campaign activity and implementation in the field.

The students start with the 10-week university component, followed by a 10-week preparation phase during which they each develop a comprehensive campaign plan using stakeholder meetings and attitudinal surveys. Each student will identify a key theme tailored to their local communities, core objectives and a species to be the focus. They then implement the campaign, returning to the UK after the first year to report back and share experiences.

Throughout the program, each student receives one-to-one support from course lecturers and RARE and CI staff to translate theory into practice during their campaigns.

"They are supported through weekly telephone calls (now free through MSN), online discussions with staff and fellow students and two on-site visits," says Godfrey, who developed an online discussion club now used by past and present participants to share best practices and address common challenges.

Commitment to Conservation Education

The students, who range in age from 22-45, have been carefully selected based on a demonstrated need for conservation awareness as a key conservation strategy in their home region.

Their existing involvement in conservation work, a supportive local employer and their individual dedication and commitment were also strong elements in the selection process. Personalities are strong and cheerful—two essential qualities if they are to succeed as the "voice" for the threatened species in their respective regions.

"There are not a lot of opportunities for conservation education," says Daniela Lerda, manager of CI's Community Education Program. "It is a very limited field in terms of training so there is a huge sense of privilege among the students, especially because the course has a hands-on component that will allow them to design locally appropriate programs for their communities."

None of the students knew each other prior to arriving in the UK but immediately established themselves as a cohesive group. The strength of this group will pay dividends when they return home and look to each other for additional support, via the Internet, while carrying out their campaigns.

The close, supportive nature of the group is characteristic of the program. Although the students will be leading their own campaigns back home, they will have the ongoing support of RARE and CI staff, fellow students and also past and future students through a Rare Club online community.

Course leader Godfrey and the other Rare staff are constantly looking for ways to make the program as well

Campaigns lea
more than 30 s
marketing techr
as:
- billboards at m
junctions
- posters displa
businesses, sch
government offi
- music videos b
local TV
- popular songs
local radio
- activities and c
schools
- badges and co
for children
- placement of t
images on telep
stamps and t-sh
- outreach throu
contacts and m

networked and supported as possible. The online community was developed to allow students past and present to talk to each other about challenges they face and solutions they are considering or have tried and tested.

One student, 34-year-old Clyde Scott, from the Cape Floristic Region hotspot in South Africa, said his preliminary campaign plan includes working the full network of 70 schools in Port Elizabeth, South Africa, to create a new generation of conservation-aware youngsters. He says the added layer of support from the online RARE staff and fellow students will be "a godsend."

"We can find out about what the other students have done, how they're getting on and we can learn from their experiences," Scott says.

Students for the current course at Kent University have come from South Africa, Sierra Leone, the Philippines, China and Indonesia. They have a variety of backgrounds reflecting the program's selection criteria. Some students already hold conservation-related qualifications; others have basic school qualifications. Conservation experience and enthusiasm are more important, however, than academic qualifications.

Indira Lacerna (see photo right), a 31-year-old student from the Philippines hotspot, holds conservation-related qualifications already but had been looking for a program like this for years. Morne Farmer, 22, from South Africa, has his high school certificate and oceans of passion and enthusiasm.

The students' participation is fully funded throughout the campaign, including salary and a budget for campaign activity, meaning that no potential candidate or threatened region need be excluded for lack of financial resources.

Lacerna says she is planning major radio campaigns alongside building core youth groups. She intends to set up regular biodiversity field trips so that local young people can see first-hand what it's all about. This won't be easy. Transport in the Philippines presents logistical difficulties while rebel activity can make visits to communities a risky element of the job.

Edward Sesay (see photo right), a 45-year-old student from Sierra Leone in the Guinean Forests of West Africa hotspot, believes that adapting what they are currently learning to their own political and social environment will be one of the greatest challenges they face. While many countries have communications and logistical problems, Sierra Leone remains an unstable region and this will present an additional challenge.

Zhang Zhe, 25, is one of two students who will pioneer the campaign program in the Mountains of Southwest China hotspot. She acknowledges that the culturally controlled flow of information in China may present challenges but she is optimistic for her ambitions to engage the enthusiasm of China's young people. Zhang Zhe is assessing the possibilities of working in a community near Tibet. Here, one of the practical elements of the Kent course could be put into play: puppet shows that can cross language barriers

and could also be used as an income generator in tourist areas.

Using the success stories of Rare's Pride campaigns in choosing a flagship species to focus understanding, Zhang Zhe has already identified the white-eared pheasant as a candidate. This bird has religious links amongst local people but is threatened by tourism, illegal hunting, logging and rapid economic development together with low environmental awareness about its status.

"My intention is to engage as many groups as possible to take ownership of the problem," Zhang Zhe says. "I am there to act as a facilitator so that the work will continue long after this particular diploma campaign ends."

In these next few weeks, the students are learning how to analyze problems and devise solutions that will benefit the people and wildlife of their region. When the students return to Kent University and the Rare course next year to report and review, they will hope to receive their Diploma in Conservation Education. The unique approach of the Rare course results not just in academic recognition but also practical achievement in conservation education thanks to the hands-on nature of this remarkable program.

Learn more:

- Visit www.rareconservation.org for more on RARE and Pride Campaigns, including success stories.
- Visit www.rareconservation.org.uk to learn more about the Kent University course and the students.

View more In Focus features

E-mail this page

ABOUT CEPF
OUR STRATEGY
CEPF NEWS
Press Releases
E-News Top Stories
In Focus Features
WHERE WE WORK
RECENT GRANTS
APPLY FOR GRANTS
Print this page

Stakeholders Forge Common Ground in Succulent Karoo

© Donovan Kirkwoo
Conophytum succule
meyerii above, are n
just one pair of leave
together to form a cc
body.

DID YOU KN

Six strategic dir
guide CEPF inv
the Succulent K

You can find lot
information abo
Succulent Karo
hotspots on
biodiversityhots

April 2003

More than 130 people attended a special event on 7 April in the heart of the Succulent Karoo biodiversity hotspot to mark the official launch of the Critical Ecosystem Partnership Fund (CEPF) $8 million investment strategy for the region. The Succulent Karoo, which stretches across southwestern South Africa into southern Namibia, is home to more than 6,300 plant species, 40 percent of which are unique to the hotspot.

Rather than the number of people in attendance, what stood out at this gathering in the small town of Vanrhynsdorp in Southern Namaqualand, South Africa was the diversity of participants from South Africa and Namibia, from community leaders, local landowners and nongovernmental nature and tourism groups to representatives of governmental institutions and multi-national mining companies.

"People have said that nature knows no boundaries but this is definitely one of those programs that can contribute to development of a regional plan and even to peace in the region," Pam Yako, deputy director general of the South African Department of Environmental Affairs, said in an opening address.

One of the most urgent conservation priorities, the Succulent Karoo boasts the world's richest variety of succulents—plants with thick, fleshy tissues that can store water—as well as high reptile and invertebrate diversity. The Succulent Karoo is the only entirely arid ecosystem classified as a biodiversity hotspot.

The Knersvlakte priority area of the hotspot, where the event took place and the vegetation of the Succulent Karoo and Cape Floristic hotspots converge, is a vast plain of gently rolling hills with fields of white quartz pebbles supporting unique dwarf succulent plants. Walking through some of the areas requires a watchful eye and careful step as minute succulents dot the land.

Yet the Knersvlakte is also home to the hotspot's greatest percentage of threatened endemic plants, with 128 threatened species. Threats include small-scale mining for gypsum, diamonds and limestone; overgrazing; and unsustainable harvesting of wild plants. Agricultural

expansion poses a threat as well: the riverbed of the once mighty Olifants or Elephants River is planted with vineyards as far as the eye can see.

The CEPF strategy for this region includes awarding grants to nongovernmental and community groups to expand protected areas and engage specific land users such as the agricultural sector, mining companies and communal authorities to help meet conservation objectives identified by the Succulent Karoo Ecosystem Planning (SKEP) process.

Conservation International's Southern Africa Hotspots Program facilitated the yearlong participative process as part of CEPF preparations to expand to the hotspot. SKEP involved more than 60 scientific experts and 400 local stakeholders representing government, academia, nongovernmental organizations, private sector interests and local communities.

"We have fought and we have argued but we have all sat around the same table," Russell Smart of Namaqualand National Park said. "It could have fallen apart at any moment but amazingly, it didn't."

The result is a common vision to maintain biodiversity while improving livelihoods and a 20-year strategy for conservation of the Succulent Karoo, which aims to effectively conserve 75 percent of the species in the hotspot. The CEPF approach in the hotspot will be to catalyze SKEP, now known as the Succulent Karoo Ecosystem Program.

Not everyone at the launch was equally enthusiastic. One farmer sat frowning. He said he planned to "wait and see" what the results would really be. "A lot of people attend these types of things just to be there," he said. But for the SKEP team, his attendance at the launch and possibly that of others still not quite sold on the overall idea marked a first important step.

Learn more:

- Visit the Succulent Karoo section of this site.
- View the full press release for the launch.
- For more information about SKEP, contact Tessa Mildenhall, Conservation International Southern Africa Hotspots Program, t.mildenhall@conservation.org.

Subscribe to the Newsletter or View more E-News top stories

E-mail this page

ABOUT CEPF
OUR STRATEGY
CEPF NEWS
Press Releases
E-News Top Stories
In Focus Features
WHERE WE WORK
RECENT GRANTS
APPLY FOR GRANTS
Print this page

Team Pioneers Coalition-Led Approach to Conservation

October 2002

A pioneering team of more than 30 individuals from 15 institutions in Namibia and South Africa are working together to establish a common vision and strategy among diverse stakeholders for conservation of the Succulent Karoo biodiversity hotspot.

The project team has gathered biodiversity and land-use data for the entire region, which stretches more than 100,000 square kilometers across South Africa and Namibia. More than 60 scientific experts and 300 individuals representing communal land authorities, commercial farmers, mining companies, tourism interests, local government and conservation authorities helped map the current distribution of their land use and where they expect it would be by the year 2010—vital information that helped determine conservation priority areas.

This model of innovation incorporated awareness-raising, training and partnerships as part of the process to develop an overarching plan and ultimately contribute to its effective implementation.

The project team, facilitated by Conservation International as part of CEPF preparations to expand to the hotspot, included special advisors and four coordinating organizations: the Botanical Society of South Africa, Eco-Africa Environmental Consultants, the Institute for Plant Conservation and the National Botanical Institute. It also included 10 conservation champions, well-connected and respected individuals with biodiversity or social development expertise who raised awareness about the process and gathered vital information within their own communities.

In August, more than 70 representatives of local, provincial and national government agencies, nongovernmental organizations and academic institutions from Namibia and South Africa participated in a consensus-building process to develop a final action plan. The results of this workshop and other activities of the project team will ultimately result in a framework for conservation of the hotspot and a foundation for an ecosystem profile—a strategy document that would guide CEPF investments in the region once approved by the CEPF Donor Council.

© Institute for Plant
University of Cape T
Succulent Karoo flov

DID YOU KN

In February 200
Donor Council a
$8 million inves
strategy for the
expand to the S
Karoo hotspot.
learn more abo
strategy.

Subscribe to the Newsletter or View more E-News top stories

E-mail this page

Succulent **Karoo** Ecosystem Programme


Succulent Karoo Ecosystem Programme (SKEP) is the result of a one-year planning process which combined a rigorous scientific process with broad land- user participation to identify and generate broad consensus around an ultimate vision and set of conservation targets for the Succulent Karoo.....read more.


The Succulent Karoo covers an area of approximately 116,000km2, stretching from South Africa's Klein Karoo along the arid western side of the country into southern Namibia. It is the only arid region in the world to be declared as a biodiversity hot-spot and includes a spectacular array of 6356 succulent species, of which over 40% are found nowhere else in the world! Of these 936 species (17%) are listed as threatened on the IUCN Red Data List. The hotspot is vulnerable to many land use pressures some of which include overgrazing, mining, illegal collection and trade in plants, invasive alien species and climate change.....read more.

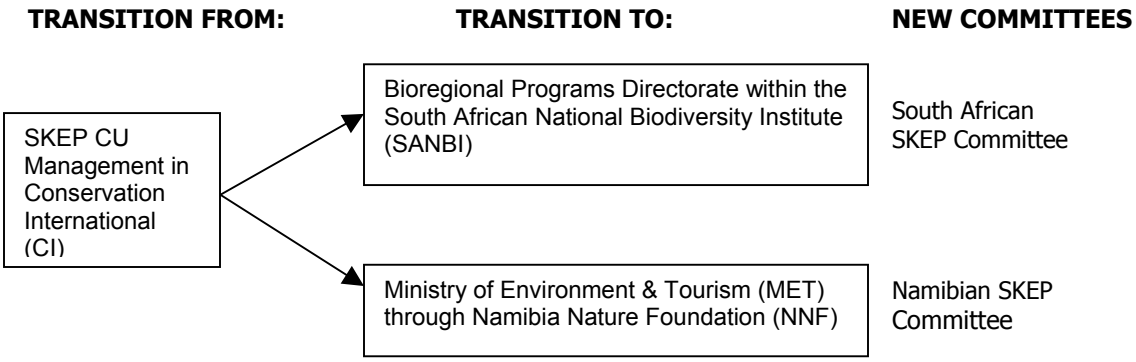
The Succulent Karoo Ecosystem Program (SKEP)

Moves into a New Phase

Change is in the air as SKEP moves towards a more mature phase. The time has come to transfer the coordination of the SKEP program from Conservation International (CI) to national structures in South Africa and Namibia. This transition will strengthen and streamline the SKEP structures, so that its impact is greater and its viability in the long term is ensured. Various changes will be taking place over the next few months to realize this transition and by 1 April 2005 the official transfer in South Africa will take place. You will be sent periodic updates to this effect.

The diagram below shows the transfers in SKEP functions, which will be further elaborated upon at the meeting on 15 March 2005.

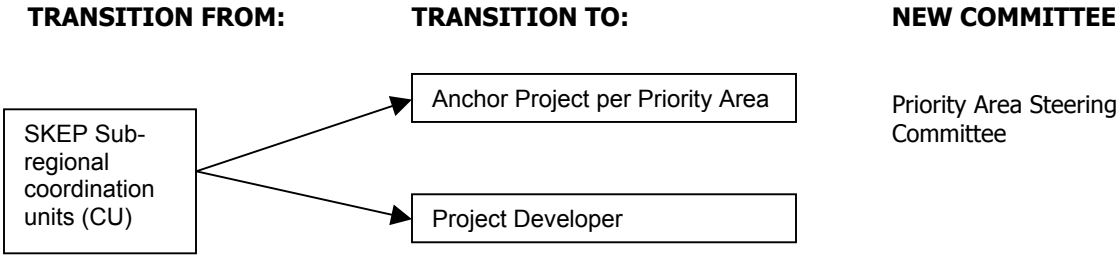
Biome-wide and National level



Roles:

- Coordinate activities and lessons learnt across the region
- Review national and priority area strategies
- Monitor progress
- Catalyze projects

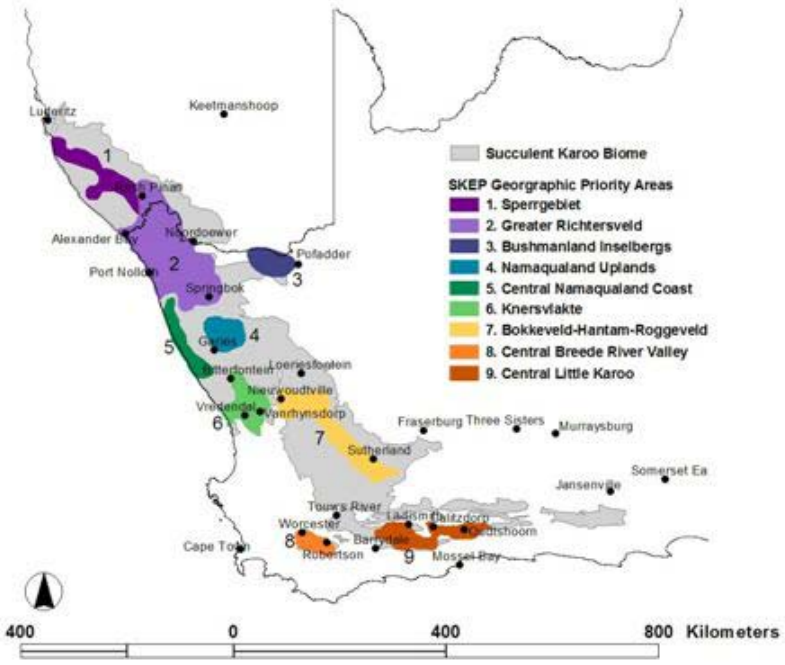
Local level



Explanation of changes at the local level:

- Anchor projects, which implement the most important conservation action in the priority area, will become the key focus of co-ordination, and sub-regional structures will be phased out. A focus on anchor projects can catalyze partnerships and participation effectively, and give implementing agencies (that are responsible for implementing anchor projects) a lead role in coordinating and driving activities within the priority area. This approach will also prevent duplication of local structures.
- The sub-regional Advisory Committees will merge with the Anchor Project Committees to form Priority Area Steering Committees. The new committee will strategically guide the anchor projects, take a lead role in achieving conservation targets in the priority area, and continue to review project applications.
- Namibia's priority area, the Sperrgebiedt, is coordinated directly from MET.
- A dedicated project developer will support the development of SKEP projects.

Below is a map to remind you of the priority areas of SKEP where the anchor projects are and will be based.



SKEP Transition Conference

Conservation International invites you to attend the Succulent Karoo Ecosystem Programme Transition Conference

A celebration & evaluation of two years of implementation and the beginning of a new, exciting phase for the SKEP Programme

Date: 14th & 15th March 2005
Venue: Masibambane Community Centre
RSVP: 7 March 2005
b.williams@conservation.org
Tel: 021-7998655
Fax: 021-762 6838

14 March 2005	
15:30 –	welcome & opening
15:50 –	objectives
16:00 –	overview SKEP projects
16:40 -	2yrs of implementation, evaluation feedback
18:30 –	announcement & formal handover dinner

15 March 2005	
08:30 –	tea
09:00 –	planning for transition
09:30 –	new structures & functions
10:30 -	projects & advisory structures, roles & responsibilities
12:00 -	closing

Please confirm attendance and any special dietary requirements

Succulent Karoo Hotspot

Business Day, 1st Edition, South Africa, 8 April 2003

Succulent Karoo to Flourish with Grant

CAPE TOWN - The succulent Karoo, the fragile source of many of the trendiest plants found in fashionable shops and restaurants, is set to benefit from a massive $8m in conservation grants from the Critical Ecosystem Partnership Fund.

The fund is a joint initiative of Conservation International, the Global Environment Facility, the John D. and Catherine T. MacArthur Foundation, the World Bank and the Japanese government.

"This is tremendous news for biodiversity conservation in Africa," said National Botanical Institute CEO Brian Huntley. "Long neglected, the succulent Karoo will now enjoy the urgent support and action that it deserves as a globally important biodiversity hotspot."

The succulent Karoo stretches across southwestern SA into southern Namibia.

It is home to an immense wealth of floral species almost one third of which are found nowhere else on earth ranging from the appetite-suppressing hoodia succulent, to the kokerboom, or quiver tree, so beloved by interior decorators.

The fund's grant is intended to combat the threats posed by livestock overgrazing, mining, agricultural expansion and the illegal trade in rare plants.

Grants will be made to community organisations, the private sector, and nongovernmental organisations to expand protected areas, and assist land users and communities meet the region's conservation priorities.

Those priorities have been mapped out in a 20 year land-use and conservation plan devised by the Succulent Karoo Ecosystem Planning programme, an initiative of Conservation International's Southern Africa's Hotspots Programme and local partners.

This process has taken a year, and drew on the expertise of over 60 scientific experts and more than 400 local stakeholders, including government officials, academics, the private sector and local communities.

The grants will focus on seven of the nine geographic priority areas identified by ecosystem planning programme. These include the Sperrgebiet, Bushmanland Inselbergs, the central Namaqualand Coast, the Namaqualand uplands, Knersvlakte, Hantam-Roggeveld and Central Little Karoo.

Die Vrydag 'loof om die kultuurliefhebbers net so te bevredig "Die Uurwerk Kantel" deur Joannie Combrink en Susanne Beyers. Die amptelike in. 'n Rolbaltoernooi word ook vir die fees beplan om die 10de verjaardag van Clanwilliam Rolbalklub te vier.

11/ Ap.'01 2003

Succulent Karoo gets R64 million

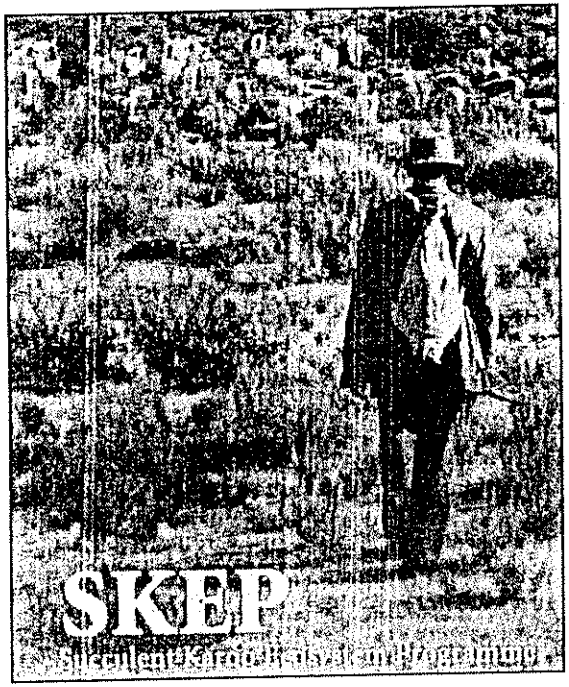
VANRHYNSDORP - Monday, 7 April local groups working to conserve the Succulent Karoo's biodiversity received much-needed assistance through R64 million in grants from the Critical Ecosystem Partnership Fund (CEPF). One of the world's most urgent conservation priorities, this desert in southern Africa boasts the richest variety of succulent plants on Earth, as well as high reptile and invertebrate diversity.

The Succulent Karoo is the only desert on Earth recognized as a biodiversity hotspot stretching across southwestern South Africa into southern Namibia. The Succulent Karoo is one of 25 highly threatened regions where 60% of terrestrail species diversity is found on only 1,4% of the Earth's surface. Besides containig an extraordinary wealth of natural resources, nearly one-third of the Succulent Karoo's floral species are found nowhere else.

According to Jorgen Thomsen, CEPF executive director and Conservation International senior vice president, it is time to act now. CEPF's investment will empower and enable local people to get involved in biodiversity conservation and ensure benefits for future generations.

CEPF aims to invest at least $150 million in Earth's biologically richest yet most threatened areas. It is a joint initiative of Conservation International, the Global Environment Facility, the John D and Catherine T MacArthur Foundation, the World Bank and the Japanese government. In the Succulent Karoo, the partnership provided the R64 million in grants to non-governmental organisations, community groups and private sector partners.

The CEPF strategy is to direct funds for projects at the local grassroots level with the aim of building alliances among different groups and interests for greater conservation impact. Long neglected, the Succulent Karoo will now enjoy the urgent support and action that it deserves as an important hotspot.



VOORBEELD

'n Persoon se huis inhoud is verseker vir 'n bedrag van R100 000. Na 'n diefstal op die terrein, lei die versekerde 'n verlies van

nie.
Maak gebruik jou makelaar om te verseke...at jou eiendom vir die korrekte vervangings-waarde verseker is.

Groete tot volgende keer...

Albuca spiralis, a common bulbous geophyte in the Succulent Karoo, brilliantly designed with spirally twisted channelled leaves to direct water into the bulb.

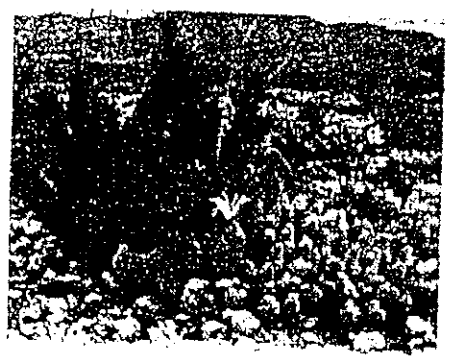
Conservation dollars for the KAROO

thrilled a landowner can become when he discovers his farm harbours a rare species and that he is the custodian of a valuable resource."

SKEP and STEP

In some cases SKEP can fit in with another conservation initiative known as STEP – the Subtropical Thicket Ecosystem Project. Some districts of the Succulent Karoo have fingers of vegetation that reach into the thicket biome, making integrated conservation planning necessary. This is a three year-exercise supported by the Global Environmental Facility through the World Bank and implemented by the Terrestrial Ecology Research Unit at the University of Port Elizabeth. The goal is to promote the conservation of biodiversity in the Eastern Cape's thicket biome, which supports thousands of people but is under severe pressure from overgrazing, bush clearing, urban development, crop production and alien invasion. FW

BELOW: Many species are habitat specialists and are restricted to particular soil types, such as quartzite patches. This clump consists of species of three different genera, *Astrolobe*, *Glottiphyllum* and *Gibbaeum*.



How can you benefit from SKEP?

According to Susan Botha, everyone who lives in the Succulent Karoo, including farmers and small-town municipalities, could gain from SKEP inputs, with tax incentives, increased tourism, and job creation.

"Farmers who want to conserve veld and use their land as a tourist attraction, such as succulent routes, can apply for funds for drawing up a management plan, setting up an information centre or simply printing information pamphlets. Eradicating invader species or rehabilitating veld are other possibilities for small projects. Conservancies can fit in beautifully here, where neighbouring farmers can get involved as a group. The Botanical Society has an incentives working group lobbying for tax benefits for farmers who put aside a section of their land for conservation and who then manage it properly. Cape Town is already implementing such a scheme. Municipalities could receive funds for conserving and managing a special hillside, for example. Scientists could be enlisted to provide planning advice for sustainable land use, and community groups could get support to develop projects around trail maintenance or educational activities."

Contact Susan Botha on 082 738 2990
skep@mweb.co.za

SKEP priorities

The Succulent Karoo biome has the richest succulent flora in the world and a diverse population of reptiles and insects. Unique and rare plant species are found throughout the biome. Many endemic species are concentrated along veins of weathered quartz, which creates patches of white pebbles that provide camouflage and moderate the temperature for the "stone plants".

While most of the CEPF's $8 million will be spent on biodiversity conservation in seven priority areas, a percentage of the funds will be available for smaller projects that lie elsewhere in the biome. One of the interesting plans is to expand protected areas via corridors by means of public-private-communal partnerships.

The main areas:

- Sperrgebied in Namibia. The only wilderness area, large tracts of unspoiled dune and mountain hide an unknown number of species. In addition to the high concentration of plants, amphibians and reptiles, populations of gemsbok, springbok and carnivores such as brown hyena live in this undisturbed environment.
- Bushmanland Inselbergs. Located just south of the Orange River this plain of desert grasslands is peppered with inselbergs, ancient rocky outcrops in irregular patterns. The inselbergs are important refuges for plants and animals and act as stepping-stones for rock-loving species migrating from east to west across Bushmanland.
- Namaqualand Uplands. The highlands of central Namaqualand are known for their spectacular spring flowers and high diversity of bulbous flowers. This area contains large zones of transitional vegetation between succulent and fynbos habitats.
- Central Namaqualand coast. A crucial tract of pristine coastline, the area's flagship species include succulent endemics such as *Wooleya farinosa*, Grant's golden mole, and Gronovi's dwarf burrowing skink.
- Knersvlakte. An extensive dry plain in the centre of the SK hotspot bounded on the east by the Bokkeveld Mountains. Its rolling hills are covered by fields of white quartz pebbles and saline soils.
- Hantam-Roggeveld. Centered on the town of Calvinia it covers both the Bokkeveld and Roggeveld escarpments. These rugged slopes and cool highlands include a wide range of species characteristic of transition zones between the renosterveld and Succulent Karoo. The total number of plant species in this area is 1 767, of which 357 are Succulent Karoo endemics and 173 are Red List species.
- Central Little Karoo. This area lies in the valley between the Langeberg and Swartberg mountains and consists of a wide range of microhabitats across extensive plains, foothills and rugged ridges. It is known for extreme fluctuations in temperature – there is an up to 28°C difference between day and night. In total, there are 1 325 species in this area, including 182 Succulent Karoo endemics and 92 Red List species.

BELOW: The Succulent Karoo is rich in highly localised species, such as *Crassula congesta*, which is restricted to the Klein Karoo.

SKEP: a new programme in the Karoo, writes Roelof Bezuidenhout. As much of the programme is to focus on farming land, farmers need to be aware of its benefits for both themselves and the environment.

A NEW INTERNATIONALLY-financed conservation scheme will attract an $8 million to the Succulent Karoo over the next five years. Known as the Succulent Karoo Ecosystem Plan (SKEP) it aims to promote sustainable development and the conservation of biodiversity in carefully selected areas of this thinly-populated and unique region. The money comes from the Critical Ecosystem Partnership Fund (CEPF), and other donors.

Succulent Karoo

The Succulent Karoo, 116 000 square kilometres extending from south of the Great Karoo, curving through Namaqualand and ending in Namibia, is recognized as one of the world's 25 biodiversity hotspots, and is the only arid one on the list. What makes this area so special is that, unlike other dry territories, it has more than 6 000 plant species, a population equivalent to that of some tropical rain forests. The area is under pressure from human activity. The veld is degraded as a result of two centuries of overgrazing, ongoing ostrich farming, and even mining. Illegal harvesting of succulents and bulbs, which supports a huge industry overseas, has been gaining ground, posing an added threat to the territory's biodiversity.

"Considering the international significance of the Succulent Karoo, it is alarming that only 3% of the biome is conserved in reserves," says Susan Botha, who helps to identify and develop suitable projects from SKEP's sub-regional office in Oudtshoorn.

"We want to fight degradation, preserve the biodiversity for future generations, train people, and create new economic opportunities for the inhabitants. We would like them to benefit from conservation efforts.

"We are concentrating on setting priorities for conservation and educating people about the threats, the biggest of which is a lack of awareness of the sensitivity and unique nature of the biome. If people do not know how special the veld is, how will they conserve it? Other priorities are collecting information about the region's biodiversity, and getting support from government, tourism, municipalities, schools, farmers and other conservation bodies."

More money

SKEP is only one of several projects. Over the next few years at least $25 million will be available for conservation in the southern parts of the country, as well as the Eastern Cape, KwaZulu-Natal and the eastern Free State. A large amount of this has been earmarked for educating and training community based organisations, including farmers' associations. Farmers and rural towns should also benefit from tourism spin-offs from World Bank funds channelled into reserves like the Addo National Elephant Park and the Wilderness Conservation Area in the Cape Fold Belt.

The Cape Action Plan for the Environment (CAPE) could attract $13 million over the next six years. This plan aims to conserve the Cape Floral Kingdom stretching from Cape Town to Port Elizabeth.

The money will ensure that biodiversity is conserved without undermining the economy, much of which is farming based.

"The idea is not to just pump money into conservation areas, or drastically change farming patterns, but to make the whole economy more pliable," says Trevor Sandwith, CAPE's coordinator. "Farmers are already diversifying and entering totally new fields. They are cooperating more, such as in ecotourism ventures. They have become more environmentally aware. It's amazing how

Bushmanland Conservation Initiative

BCI vision

A Bushmanland where the unique biodiversity is sustainably managed, by conservation aware landowners, while providing tangible benefits.

Project Update February 2005

Introduction

The BCI team has been busy as ever. We have now entered the last 12 months of the first phase of this project and the team is very excited about the activities planned for 2005. Over the last eight months, we have reached some important milestones, learnt many lessons and built good relationships. Our team, will depend on these relationships and lessons learnt to help us reach the goals set for this project.

"Biodiversity in your Backyard"

BCI Awareness Raising Program

In the absence of an awareness programme into which the BCI project could link, and in order to promote and inform the communities about biodiversity and the importance of this project for the region, the team decided to develop a program of their own. What a fun task this has been! The program aims not only to raise awareness about biodiversity but also to bring us into contact with and re-establish our relationship with our environment. The following activities are part of the program:

- A biodiversity open day with the Pella community.
- A Workshop on the New Protected Areas Act and Stewardship.
- Four field excursions, two of which will be for learners from schools in the area and the other two will be open for interested adults from the broad Bushmanland community. We will use the day trips to collect, record and discover as much as possible information about our environment and how we experience it.
- A quarterly newsletter to distribute within the communities.
- A Bushmanland Field Guide book.
- The end of the programme will be marked with a " Biodiversity in your Backyard" exhibition at the end of November 2005. The exhibition will feature stories, photographs and even drawings that was collected and recorded during the program activities.

This program promises to be interesting and informative. If there is anyone who would like to participate in this programme please do not hesitate to contact Nuchey.

Biodiversity Open Day at Pella

And so the fun begins for us with an Open day in Pella on the 12th March 2005. The day will include cultural music, stories, drawing competitions, craft and food stalls and lots more. The purpose of this day is to raise awareness about biodiversity in the Bushmanland as well as about the BCI project. This is also an opportunity for the community to meet with and socialise with the Michelle and Nuchey. Other guests invited include the Namaqua National Park and Goegap Nature Reserve. The program for the day will end with a dance in the evening with a local band providing live music.

BCI Forum

Our first BCI Forum meeting for the year will be held on the 18th of February 2005 at the Training

Centre in Aggeneys. Since our last meeting in September 2004, a lot of changes have taken place and some more changes are proposed for the future that will not only affect the BCI project, but the whole SKEP structure. These changes will be discussed at the Forum and all stakeholders will be informed thereof, once these changes are finalised.

Fine scale map and biodiversity plan

The first drafts of the fine scale map and biodiversity plan, commissioned by BC,I is due at the beginning of March. A workshop will be arranged at Black Mountain Mine for the technical working group to comment on the drafts.

BCI vision and action planning document

The stakeholders to the project, who attended the in the workshop held at Swartkoppies, Oase in die Wildernis Resort in August 2004, have endorsed the vision and action-planning document. We would like to thank the facilitators as well as the participants for making their contribution to ensure a workable document. The challenge now is for the various role players to implement their actions.

Memorandum of Agreement with DTEC

Both partners have signed the memorandum of Agreement developed with the Northern Cape Directorate of Conservation (DTEC). This is a very important milestone for the project. Now that the stage has been set, the actual work starts and we look forward to resolving some of the critical issues governing the sustainability of this initiative.

Black Mountain Mine Protected area negotiations

Negotiations around the establishment of a protected area on the Black Mountain and Gamsberg properties are now operating at two different levels.

In 2005, BCI will engage with DME and DEAT around important policy issues, which will affect the way in which the management agreement is crafted.

In December, BCI and Anglo started developing the management plan for the conservation area. This is progressing well.

Mining and Biodiversity Workshop

Michelle and Mark attended a “Mining and Biodiversity” workshop, organised by the Chamber of Mines. The aim of the workshop was to develop an action plan to ensure that biodiversity issues in the mining sector are addressed. It proved to be an interesting dialogue, which has the potential to bear fruit. The working group are pulling together the actions from the workshop and they will be distributed for comment in the near future.

Meeting with DEAT

In January, Mark and Michelle visited Pretoria to present the BCI to the Department of Environment and Tourism (DEAT). The project was well received. An exciting outcome of the meeting is that the Deputy Director of Protected Areas indicated that he would motivate for BCI to present the project to the Minister. A tentative date has been set for the 4 March in Cape Town.

We also asked DEAT to set up a meeting with DME so that we could discuss some interesting policy issues surrounding mineral rights and mining in protected areas. We are following up with this.

Thank you for your support.
Nuchey and Michelle
(BCI Project Team)
14 Februarie 2005

ANGLO BASE METALS

Kristal Maze
Director
Cape Conservation Unit
Botanical Society of South Africa
Private Bag X10, Claremont 7735

22 August 2003

Base Metals Division

Mr Simon R Thompson
Chief Executive

Direct Fax +27 (0)11 638 2369
Direct Line +27 (0)11 638 3019
Mobile 083 293 1194
e-mail:sthompson@angloamerican.co.za

Dear Kristal

Anglo American Support for the Bushmanland Conservation Initiative

The Base Metals Division of Anglo American (AngloBase) firmly supports a multi-stakeholder approach to sustainable development. The Succulent Karoo Ecosystem Project (SKEP) is an excellent example of such an approach, embracing multiple land uses while seeking to preserve the unique flora and fauna of the region. AngloBase will strive to ensure that we contribute effectively to the realisation of these concepts through the Bushmanland Conservation Initiative.

This initiative will involve the development of conservation projects in an area that includes our land holdings for the Black Mountain mine and for the Gamsberg project. In this regard, we will endeavour to minimise the impact of our current and future mining activities at Black Mountain and Gamsberg on the biodiversity of the area, and will adopt a "best practice" management policy for biodiversity for those of our land holding that are not, and will not, be affected by mining activities. We look forward to co-operating with your organisation to draw up best practice guidelines for biodiversity management in these areas.

As you are aware, we have also committed to fund a variety of *in situ* and *ex situ* conservation measures (the precise balance between the two to be decided), as and when the decision to proceed with construction of the Gamsberg open pit project is taken.

Yours sincerely

S.R. Thompson

Simon R. Thompson

GOURITZ INITIATIVE (GI)
STRATEGIC MANAGEMENT AND BUSINESS PLAN

WESTERN CAPE NATURE CONSERVATION BOARD

(Trading as CapeNature)

DATE: October 2004

TABLE OF CONTENTS

Section 1:

1. Executive Summary

Who are we?

The Gouritz Initiative (GI) originated from a global hotspots programme, where 27 biodiversity hotspots were identified. Three of these hotspots fall within the GI domain. These hotspots are the following biomes with the accompanying biodiversity initiatives:

Thicket	**STEP**	**Subtropical Thicket Ecosystem Programme**
Succulent Karoo	**SKEP**	**Succulent Karoo Ecosystem Programme**
Cape Floristic Kingdom / fynbos	**C.A.P.E.**	**Cape Action for People and the Environment**

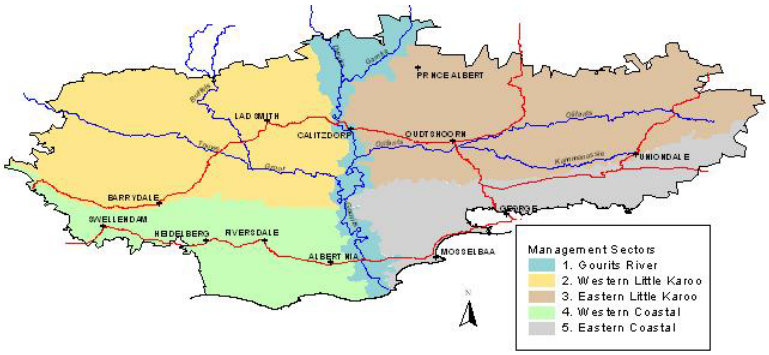
Biodiversity hotspots are important because at least 1 500 species per biome are endemic to that biome, and therefore unique to the region. In addition, 70% of the hotspot has been transformed in some way or another by human activities (i.e. urban development, agriculture, tourism etc.) The ultimate aim of the stakeholders in the GI is to conserve the remaining biodiversity hub in such a way that they take ownership of the sustainable utilization of the unique biodiversity of the area by ensuring global recognition through partnerships, continuous awareness and responsible decision making for the benefit of all people now and in the future.

The GI is thus an agreed upon entity that represents the interests of all its peoples, sectors and institutions in a concerted effort to establish a landscape wide ("mega park") biodiversity conservation corridor that provides essential ecological services, sustainable livelihoods and a healthy society. It therefore embraces combined strategies and alignment between C.A.P.E, Conservation International (CI), SKEP, and the Western Cape Nature Conservation Board (WCNCB) in order to optimise inputs in the region.

Where are we?

The approximate boundaries of the GI domain were determined via expert workshops with scientists (aquatic, terrestrial, and archeological) as well as workshops with socio-economic sectors (agriculture, tourism, local government, non governmental organizations (NGOs)). A biophysical spatial tool, a Geographical Information System (GIS) tool was developed as a result of these workshops. This tool now superimposes or highlights together all the relevant issues of the GI domain in order to help decision makers to identify focus areas, projects and priority biodiversity features.

The GI domain has roughly been divided into 5 unique management sectors (see map.) These sectors represent whole landscapes with associated structures and activities that are characteristic of the region.



What do we do with this information?

This information has already been used and can be used to identify important new projects in the region and to aid as motivation for receiving relevant funding and investment for these and other projects. This information is being used to inform the process of establishing ecological corridors and incorporating priority landholdings into the conservation estate through the Stewardship program of WCNCB. The government agencies and local authorities that evaluate development applications also use this information to make more informed decisions regarding such applications.

The strength of the GI lies in its people that participate in its projects and positively contribute to the planning and commencement of the process through their respective bodies of knowledge (science, conservation, agriculture and socio-economy). The GI strategic business plan will bring about a living landscape in which people and nature co-exist in a way that allows the unique biodiversity of the area to flourish naturally.

We will achieve this by way of establishing a region for biodiversity conservation, biodiversity friendly land use practices and the alleviation of threats as well as sustainable use of natural resources and equitable sharing of the benefits derived.

The way forward

Living in an area where there is a convergence of three internationally recognised biodiversity hotspots is a great privilege. However with the knowledge that these biomes are threatened comes the responsibility of

the inhabitants of this region to ensure that no further degradation and loss of biodiversity occurs. The GI aims to ensure the co-ordination of conservation activities that are taking place in the Gouritz river corridor and the Central Little Karoo. It is essential that landowners and land users of this area take responsibility for correct management and utilisation of valuable resources in this amazing region.

2. GI Overview

The Gouritz Initiative facilitates, promotes and capacitates partnerships that specialise in:

- The conservation of biodiversity,
- The sustainable use of its components, and
- The fair and equitable sharing of benefits arising from the use of genetic, geomorphologic, human and intellectual resources.

2.1 Background

The identification of the fynbos, succulent karoo and subtropical thicket biomes as global biodiversity hotspots has given the GI domain international focus and attention. Each of the conservation projects, (CAPE, SKEP and STEP), which have been undertaken has repeatedly highlighted the importance of the Little Karoo and adjacent areas (i.e. the GI) for conservation. In fact, the GI is a hotspot of hotspots!

The C.A.P.E. (Cape Action for People and the Environment) Project identified the establishment of the Little Karoo Mega Conservation Area (now the Gouritz Initiative) as a priority to conserve pattern and ecological and evolutionary processes (Cowling *et al.* 1999). During the SKEP (Succulent Karoo Ecosystem Plan) project, the Little Karoo was distinguished as one of the nine priority areas for conservation of the Succulent Karoo (Frazee 2003). Similarly, the STEP (Subtropical Thicket Ecosystem Planning) Project has also emphasised the need to establish a Gouritz-Little Karoo Mega Conservancy Network more or less along the Gouritz River corridor for the conservation of critical parts of the subtropical thicket biome (Cowling *et al.* 2003).

In order to adequately provide for the conservation of ecological and evolutionary patterns and processes within the Cape Floral Kingdom, the C.A.P.E. strategy calls for intervention at a landscape level. Based on a systematic conservation planning process, C.A.P.E. has mapped the CFK's (Cape Floristic Kingdom's) conservation targets and priorities. Three priority regions have been targeted for implementing landscape wide conservation initiatives. These are the Baviaanskloof in the Eastern Cape, and the Gouritz and Cedarberg in the Western Cape. C.A.P.E. proposed that 'mega-reserves' be established in these target regions.

Organization	Project Title	CEPF Grant	Co-Financing:	Project/Regional Leveraging	Total Leveraged
CEPF: Botanical Society of South Africa **Co-Financing:** Anglo American ($30,154), NBI ($13,500), CELB $35,000)	Bushmanland Conservation Initiative (BCI) Preparation Phase	$260,240	$78,654		$78,654
CEPF: Brown Hyena Research Project **Co-Financing:** Seaflower Whitefish Corporation ($340), Bay View Hotel Luderitz ($340), African Penguin Conservation Project ($50) **Project/Regional Leveraging:** Namibia Environment Fund	Inventory, Mapping and Increased Awareness of the Brown Hyena and Other Large Predators in the Sperrgebiet and Surrounding Areas, Namibia	$10,000	$730	$920	$1,650
CEPF: Conservation International-Southern Africa Hotspots Program **Co-Financing:** **Project/Regional Leveraging:** Leslie Hill Succulent Trust ($749,937), GCF ($800,000)	Raising Awareness and Building Local Capacity for Project Design and Implementation Linked to SKEP Conservation Targets	$616,588	$133,412	$1,549,937	$1,683,349
CEPF: Conservation International-Southern Africa Hotspots Program	Mainstreaming Biodiversity Conservation in the Succulent Karoo Hotspot: Strengthening and Ensuring Sustainability of the Institutional Environment for Conservation Action Through SKEP	$137,073	$0	$50,000	$50,000
CEPF: Conservation International-Southern Africa Hotspots Program	Taking SKEP to a Finer Scale: Catalyzing Conservation Action in Geographic Priority Areas in the Succulent Karoo	$18,332	$1,890		$1,890
CEPF: Indigo Development and Change	Nieuwoudtville Biodiversity Facilitators Project	$10,000		$650,000	$650,000
CEPF: The Leslie Hill Institute for Plant Conservation, University of Cape Town **Co-Financing**: Biodiversity and Monitoring Transect Analysis in Africa	Namaqualand Restoration Initiative: Bringing Mining, Biodiversity and Local Communities Together	$200,000	$15,000		$15,000
CEPF: University of Pretoria **Co-Financing:** University of Pretoria	The Botanical Importance of the Roggeveld: Tankwa Region	$151,869	$14,355		$14,355
		Total	$244,041	$2,250,857	$2,494,898