Ecological monitoring of quartz fields - Bringing School Children on Board

Sponsored by SKEP

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The commonage of the Soebatsfontein community in the Lowland Namaqualand houses a number of the world-wide unique quartz fields with an extraordinary vegetation of highly succulent dwarf plants. Several of them are local endemics and listed in the red data list of South Africa. The project aims to raise awareness of the value and threats of biodiversity.

In the context of a recently initiated project, **sponsored by SKEP/Conservation International's Threatened Species Fund, members of the Soebatsfontein community and BIOTA Southern Africa** started a plant monitoring and awareness raising programme with school children of the primary school in Soebatsfontein.

Objectives

The project aims to protect the threatened species on the quartz fields by awareness raising in the community, but also by contributing to the better understanding of the specific impact that grazing of sheep and goats might have on quartz field communities as a basis for sustainable management and restoration.

General approach

- introduce children into the ecology of quartz fields
- show children how to identify and name the plant species
- monitor phenology and compare the fitness (number of flowers, fruits, seeds, seedlings) of selected quartz dwelling plants with and without grazing and trampling

Methodology:

Together with schoolchildren from standard 3 and 4 we will …

- monitor annual growth per species
- monitor timing and number of flowers, fruits and seeds species
- count seedlings per unit area per year
- determine survival rate of seedlings per year and unit area
- conduct germination trials with seeds from the relevant plants
- conduct soil analysis (soil pH, salt content) and compare different quartz field communities

Soebatsfontein community strives to better protect their quartz fields and develop them as a core attraction for community-based eco-tourism.