

UNDP-GEF grasslands project: the Southern Africa Botanical Network “SABONET”

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The Project This six-year biodiversity capacity building project closes at the end of June 2005. The principal outcomes have been greatly strengthened capacities within, and interaction between, the national herbaria of southern Africa, in order to improve plant taxonomic outputs to better serve the needs of conservation end-users. Grassland plants have in many ways been the main regional focus. The project was based in the National Botanical Institute (NBI) of Southern Africa (now the South Africa Biodiversity Institute – SANBI) and had components in Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, Swaziland, Zambia and Zimbabwe. The NBI provide regional coordination and technical support.

Major project outputs have been:

- Training: with 33 degree level (BSc, MSc) awards, and a variety of in-service training programmes.
- Greater infrastructural support for herbaria, including cupboards, computers, vehicles.
- Computerisation of the region’s plant collections into an interactive database.
- Increased collaboration between herbaria and botanical gardens in the region and globally.
- Greater collaboration between herbaria and end users of taxonomic services (conservationists, EIA expertise, genetic resource specialists and bio-prospectors medicinal plant expertise etc).
- Over 40 major publications on southern African plants with a considerable emphasis on grasses.

SABONET and grasses and grasslands The project entry point has been species based, but using plant collections to inform conservation planners at the site and ecosystem level. Major contributions have been:

- Formal published grass checklists (Poaceae) for all countries; with varying degrees of ecological and biogeographical content.
- Computerised database on all grass collections for all of southern Africa, with details on site, habit, habitat etc.
- SABONET is also in the process of producing a “Poaceae GIS” electronic information product. This GIS system contains the Poaceae datasets from all the participating herbaria, and can produce simple and composite species, genus, and family distribution maps (based on one degree squares) for the entire SABONET region (as a whole, or for countries separately). Each “dot” on the map produced by this system can be linked back to herbarium specimen(s). It can also produce species richness maps, endemism maps, collector effort and information on useful species (such as wild rice or potential fodder grasses). With other overlays, such as Protected Area systems, rainfall and topography data etc, the maps will enable many other ecological functions. This product needs no separate GIS software to function. It can also be expanded to include data from other plant families.
- Computer-based map distributions of all grass species, across southern Africa; based on one degree grid squares. This allows the mapping of endemic species, mapping of centres of diversity, mapping localities of potentially useful species such as wild rice, etc.
- Field-based exploration of critical sites, with a major expedition to the Nyika mountain plateau in Malawi, with new species and locality records, and a major publication.
- A full edition of the widely distributed SABNET Newsletter devoted to Southern Africa Grasses and Grasslands, with information on statistics, uses, economics and educational materials.
- Site-based descriptions and lists; with an emphasis on:-
 - The Nyika Montane grasslands of Malawi, a major publication.
 - Arid sites in Namibia and Botswana.
 - Montane sites in Lesotho.
- The project has provided an entry point for the new “Important Plant Area” programmes, including South Africa, Namibia and Mozambique.
- Provided detailed botanical support to the major global hotspot programmes in southern Africa.

The SABONET website is:- www.sabonet.org and publications may be ordered from <sabonetpub@sanbi.org>