Das Arboretum-Projekt - ein Beitrag zur nachhaltigen Nutzung natürlicher Ressourcen -

ex-situ (off-site)

ex-situ conservation – supporting species survival in the wild

The Convention on Biological Diversity (CBD) provides a major oppurtunity for ex-situ facilities (article 9) to establish themselves as valued resources (BGCI 2001).

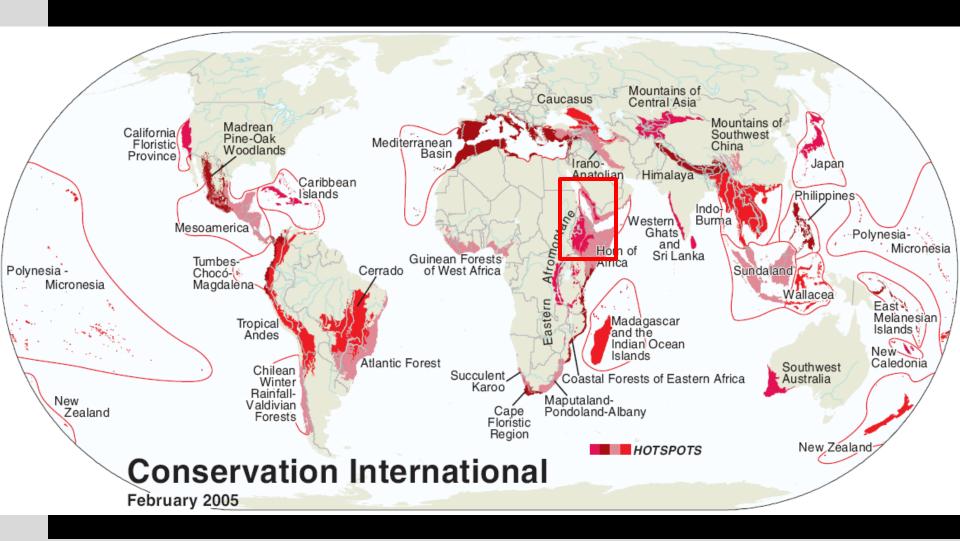
CBD – Recommendations on Species-Level Conservation (Glowka et al. 1994)

- (a) ...ex-situ conservation preferably in the country of origin
- (b) ...maintain facilities and research preferably in the country of origin
- (c) ...measures for the recovery of threatened species
- (d) ...collect but don't threat ecosystems and in-situ populations





Global Biodiversity Hotspots



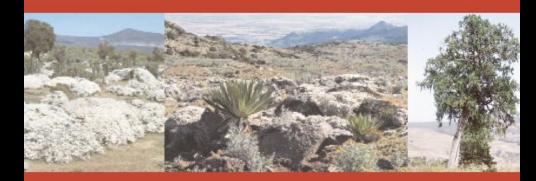


INTRODUCTION

Ethiopia & Eritrea

- low forest cover, but high diversity of shrub and tree species
- adversely affected by high human and climatic impact
- Land-use and frequently occurring droughts - reinforced by climate change - result in a constant loss of forest habitats and species
- >90% of the total energy used in Ethiopia comes from biomass (fuelwood)
- >1.000 indigenous tree species are potentially endangered
- 1997 IUCN Red List: 48 species
- 2008 IUCN/FFI: 135 species
 ex-situ collections in Botanical
 Gardens and Arboreta can be
 considered a critical tool to ensure
 the existence of these species in
 future

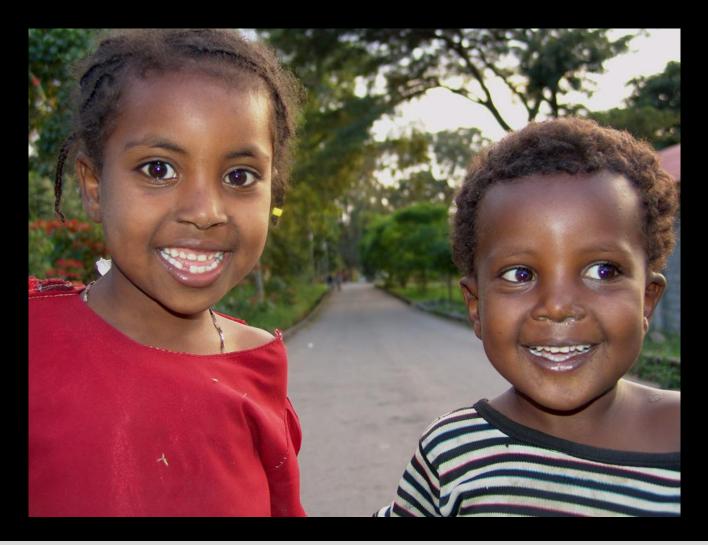
The Red List of Endemic Trees & Shrubs of Ethiopia and Eritrea



Jose Luis Vivero, Ensermu Kelbessa and Sebsebe Demissew



Junge Wegweiser...



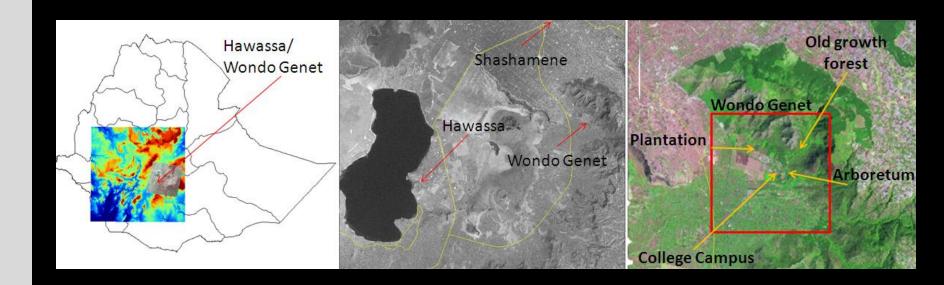
...alte Wegweiser.



The Wondo Genet College Arboretum Project

- ARBOPRO -

The Location of the Arboretum



Wondo Genet College



Wondo Genet College Arboretum

established in 1978
3 ha
Includes more than 100 species.

1.890 m a.s.l. 19° C 1.100 mm

Wondo Genet College Arboretum

...since more than10 yearsit is not maintained anymoreand out of use.

The objectives of the Arboretum

1. Reference

2. Research & Education

3. Ex-situ plant conservation

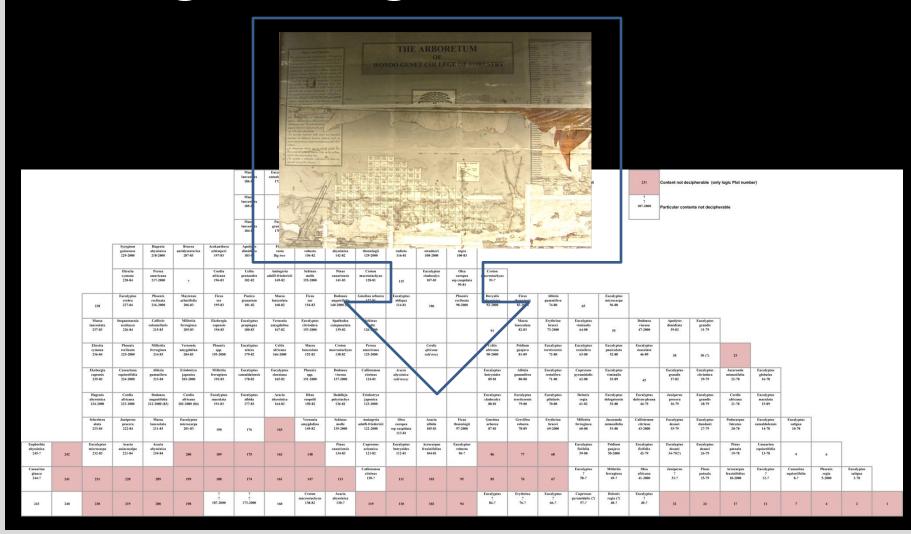
First steps

1. Database

2. Check

3. Workshops

Digitalitzing information...





Checking labels...

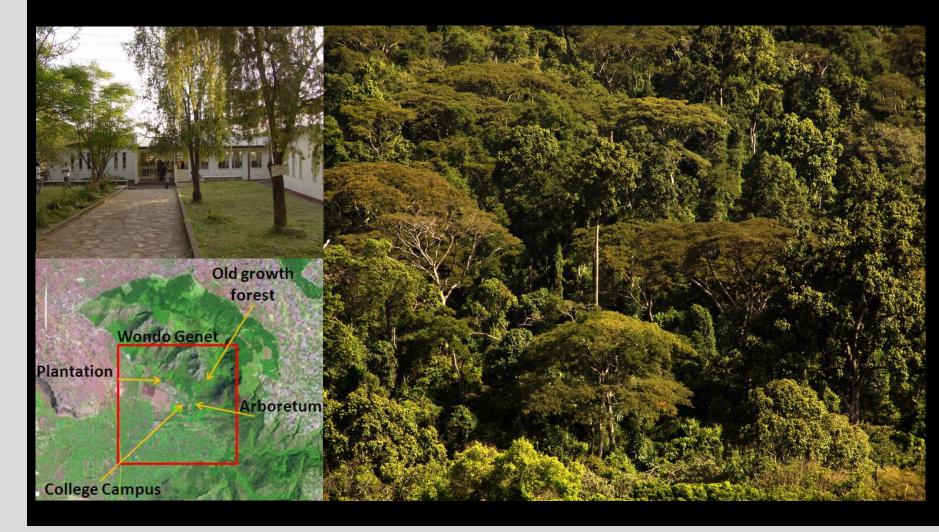


The purpose of ARBOPRO

- 1. foster the exchange between scientists on biodiversity and conservation in order to support the WGC staff to maintain and enhance the collection of the Arboretum.
- 2. establish exchange between botanical gardens and herbaria in Africa and Europe.
- 3. enable the WGC Arboretum to act as a platform for future joint research on tree species in the challenging climate of East Africa.

Our main scientific goal is the establishment of a well-maintained, scientifically effective **Arboretum** at the Wondo Genet College.

Campus, Arboretum, Forest!



Big trees for the future!



- Restoration of the Arboretum of the Wondo Genet College
- Expansion of the Arboretum
- Collaborative research in biodiversity, plant ecology and conservation of plants
- Capacity building



