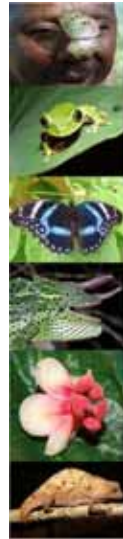




Eastern Arc Mountains - the *hottest* spot in continental Africa



Eastern Arc Mountains - the *hottest* spot in continental Africa



Eastern Arc Mountains - a *biota* always in the international lamplight...

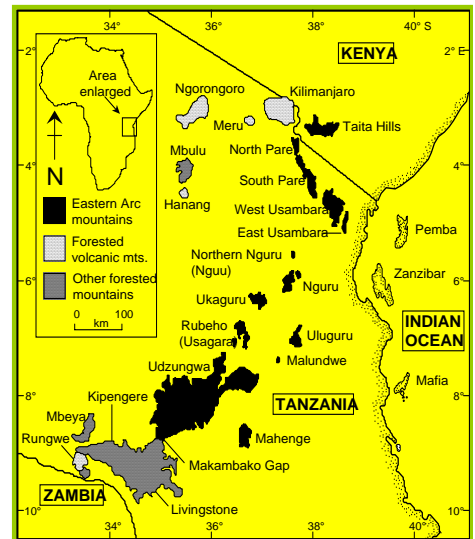
6 March 2007 (journalist: Cari Zimmer)
http://www.nytimes.com/2007/03/06/science/06wild.html?_r=1&ref=scienceforafrica&login

"The Eastern Arc Mountains of Tanzania may not be terribly tall — only half the height of their famous neighbor, Mount Kilimanjaro. But to scientists who tally the planet's biodiversity, they tower over the rest of the world. The forests that cover their flanks contain the highest density of endangered animals anywhere on earth."

The New York Times

Eastern Arc Mountains

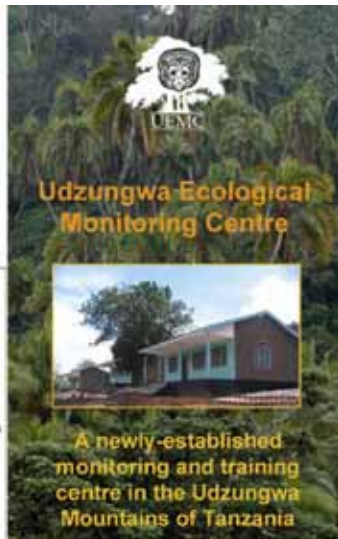
- One of top 25 biodiversity hotspots in the world.
- Continental Africa's oldest and most stable forests.
- Perhaps the highest overall endemism.
- High concentration of old and newly formed species.
- Several flagship species like Usambara violets, new birds and mammals, dwarf chameleons, etc.
- High threat from human impact, deforestation, etc.
- Three field stations with easy access from Dar es Salaam.
- Two universities (Dar es Salaam and Sokoine).
- Soon also a TanBIF.
- High socio-economic relevance.
- Many research groups in the EDIT family already do taxonomy on the biota.



Locally, facilities are in place,
for example in Udzungwa:

Up to 12 visitors at a time,
Fees for visiting researchers 5\$ per day,
Computer and printing facilities on request,
Internet connection in the office,
Seminar room (150 m²).

UEMC is a collaboration between Italy's
Trento Museum and Tanzania National Parks.



Internationally, Tanzania is the first country to benefit
from GBIF's CEPDEC programme:

1. Executive summary

The CEPDEC Pilot project for Tanzania is a GBIF-promoted project to aid Tanzania gain access to, and learn how to utilise, information about biological diversity held within the country as well as in the world's natural history collections, project databases, and literature.

CEPDEC = Capacity Enhancement Programme for Developing Countries

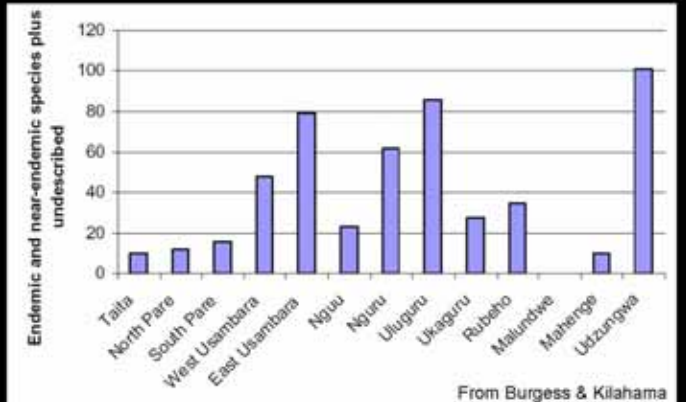
Taxonomically, many research groups within the EDIT family are already actively doing part of their research on the Eastern Arc biota:

Missouri Botanical Gardens:	Vascular plants
Natural History Museum of Hungary:	Coleoptera, Lepidoptera, Arachnida
Natural History Museum of Denmark:	Birds, Arachnida, Coleoptera, Diplopoda, Diptera, Tardigrada
Royal Museum for Central Africa:	Arachnida, Diptera, Hymenoptera
Royal Belgian Institute of Natural Sciences:	Lichens, Mammals

... and so are European researchers from several non-EDIT institutions:

Finnish Museum of Natural History:	Coleoptera, Diptera
Museum Koenig, Bonn:	Diplopoda, Orthoptera, Arachnida
National Museum of Wales, Cardiff:	Mollusca
Swedish Museum of Natural History:	Trichoptera
Trento Museum of Natural Sciences:	Amphibia, Reptilia

RANKED BIOLOGICAL IMPORTANCE OF DIFFERENT EASTERN ARC MOUNTAIN BLOCKS (ACTUAL VALUES)



Socio-economic aspects of biodiversity:

- Eastern Arc forests mean water for farmlands and cities



Eastern Arc forests are important water catchment areas



POLICY RELEVANCE

- The EAM are the source of water for more than 5 million urban Tanzanians including most of those living in Dar es Salaam – the largest city.
- On average the generation of hydropower contributed about 82 percent of total electricity in the country for the period between 1993 and 2005.
- About 66 percent of the power generation is from power plants located in Rufiji basin namely Kidatu, Mtera and Kihansi, which receive water originating from the Udzungwa Mountain forests – the largest of the Eastern Arc Mountain blocks.

Socio-economic aspects of biodiversity:

- Biodiversity means income for the Amani butterfly farmers



What is the market for farmed butterflies?

Twice a week, representatives from the Amani Butterfly Project collect butterfly pupae from member farmers. At the end of the day, project staff sort and pack the collected pupae neatly into cardboard boxes lined with styrofoam and cotton. The following day, the pupae begin a 3 to 4 day journey via DHL to one of several live butterfly exhibits that purchase pupae from the project. After arriving at a butterfly house in Europe or the US, the butterfly pupae are hung for a short period of time before they emerge. Once they emerge, the butterflies are released into large gardens enclosed in glass where tourists pay to walk amongst our butterflies and others. Due to the short life span of most tropical butterflies, exhibits typically order new pupae every two to three weeks. The Amani Butterfly Project also sells dried butterflies to dealers and collectors, but our primary customers are live butterfly exhibits.



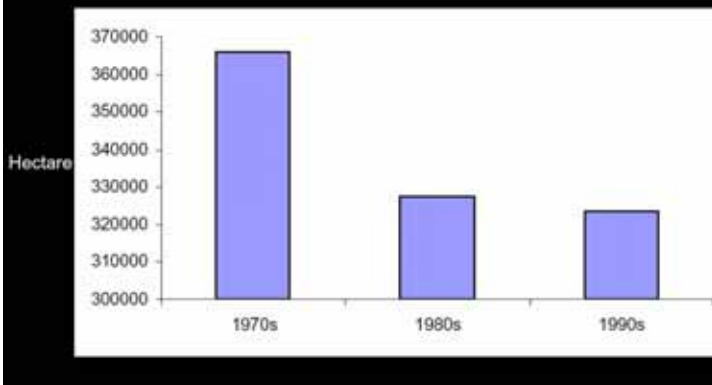
ECOTOURISM AND OTHER MINOR ECOLOGICAL SERVICES



POLICY RELEVANCE

- Provides a basis for global interest and investment into the area (millions of USD)
- Provides a basis for the ecotourism industry in the Eastern Arc region
- Provides supporting political justification to upgrade some areas to higher levels of conservation as nature reserves, expanded national parks, or as a World Heritage Site

Changes in Forest Area – Across the entire Eastern Arc



Eastern Arc Mountains
- perhaps the last chance for an inventory?