

# JRS African Meeting

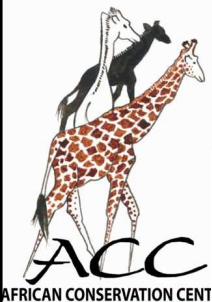
## Biodiversity Literature Digitization Workshop

### Chicago Field Museum

November 14 – 17<sup>th</sup> 2011

**AFRICAN CONSERVATION CENTRE**

**Lucy Waruingi**

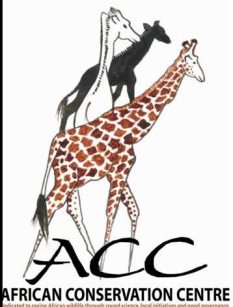


# Conservation in Kenya



Kenya's parks occupy less than 8% of the land mass

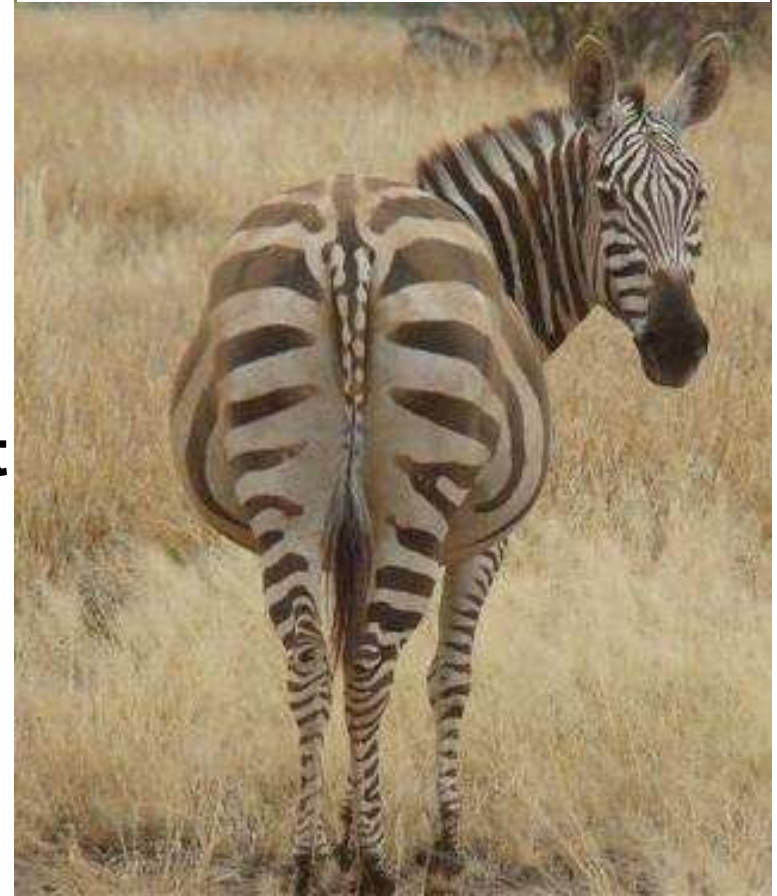
Kenya's parks account for less than 40% of our biodiversity (Flora & Fauna)



# AFRICAN CONSERVATION CENTRE

**A non-profit, Kenyan NGO**

- ✓ **Conservation Science**
- ✓ **Conservation Development**
- ✓ **Community Institutions**

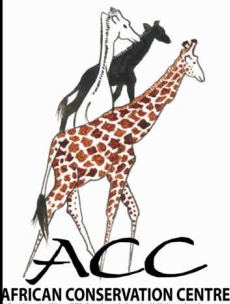


# Principle of Co-existence

**We do not inherit the land from our  
ancestors, we borrow it from our  
children**

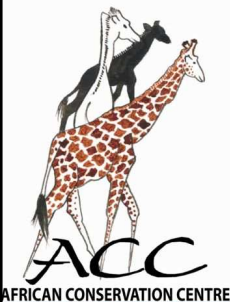
***- Maasai Proverb***





# Importance of Biodiversity Literature

- We need to **what we have ...**
- We need to know **what we don't have...**
- We need to **describe what we have...**
- We need to know **what threats and opportunities we have**



# Our Natural Capital

## **International Conference on Biodiversity, Land-use and Climate Change (Sept 2010)**

Recommendations: --

- Review status of Kenya's Biodiversity and threats it faces
- Highlight the need for a full valuation of biodiversity
- Promote expansion of wildlife policy to a comprehensive biodiversity policy and review the policy implications of the new constitution of Kenya, 2010
- Recommend steps towards developing a comprehensive National Conservation Framework

# Valuing Biodiversity

- ❑ Kenya needs to quantify the value of its natural capital
- ❑ Establish the ecosystem services provided by Biodiversity
- ❑ Take advantage of opportunities such as promoting the use of Payment for Ecosystem Services for sustaining Biodiversity

# Biodiversity Informatics

- Develop a national open-access biodiversity and environmental database
- Prepare a Biodiversity Atlas of Kenya
- Document our wealth of Knowledge on our Biodiversity by compiling centrally what is already published and collating the various articles and grey literature
- Develop a Biodiversity Informatics policy and best practices



# Sustainable Use

- Putting a price on nature will protect biodiversity better than traditional conservation (*TEEB Report*)
- Putting an economic value to ecosystems will enable us to plan on its sustainable utilisation
- Costs of Climate Adaptation to Biodiversity ad ecosystems
- And agribusinesses recognize that unless they have healthy ecosystems their business models will collapse.

# Local Efforts - I

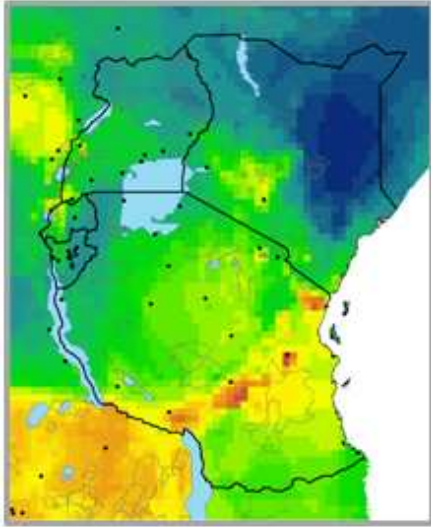
- ACC and National Museums of Kenya and other partners reviewing the feasibility of the setting up of a regional centre of excellence in Biodiversity Informatics
- Cross border Workshop on elephants – Kenya & Tanzania Sharing of information and developing integrated strategies
- Ministry of Higher Education is documenting all past research in the country
- ACC is working with partners to build a biodiversity database for Kenya which will be the groundwork for Kenya's Minimum Viable Conservation Area

## Local Efforts 2

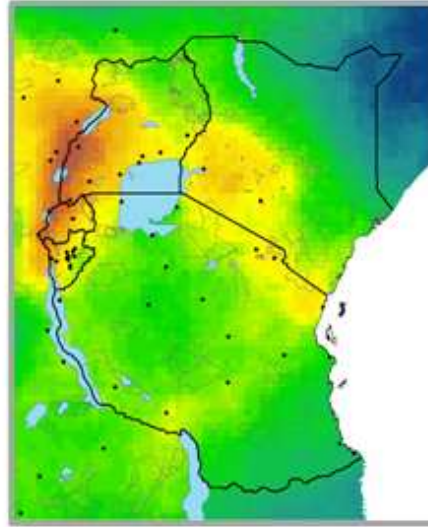
- Seeking to work with Ministry of Environment and Mineral Resources (MEMR) and other partners to co-ordinate the production of a Biodiversity Atlas for Kenya
- Developing herbarium and local community resource centre in Southern Kenya – Lale'enok Resource Centre
- SERVIR-Africa project developing a web-portal on assessing vulnerability of biodiversity to climate change

# Climate Change

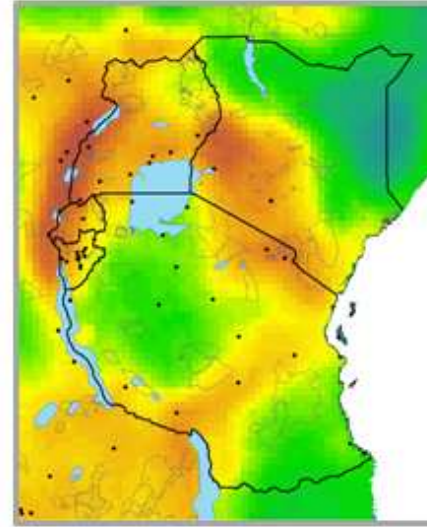
**Amphibians**



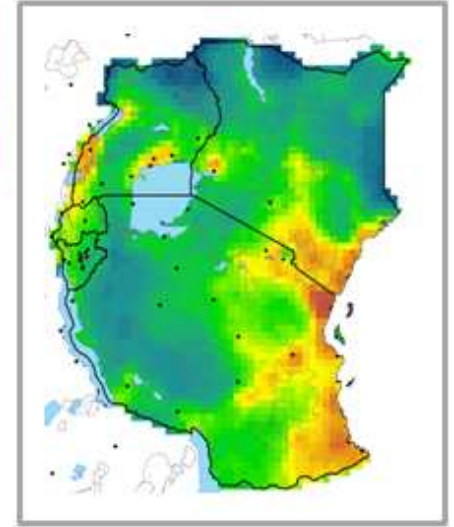
**Mammals**



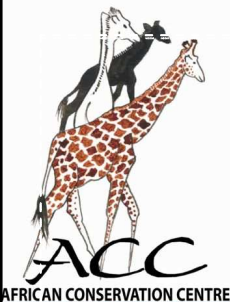
**Birds**



**Reptiles**



Geographic patterns of species richness for amphibians (208 species), mammals (532 species), birds (1,558 species), and reptiles (406 species). Maps are displayed, but not accurate, at  $0.25^\circ$  resolution. Colours indicate low (blue) to high (brown) species richness. Grey outlines and black dots are protected areas



# Community Resource Centres – Citizen Science

## *Lale'enok Resource Centre*

1. A way bringing together communities and researchers in mapping biodiversity, its conservation and sustainable use.
2. Formation of **Community Learning networks** – knowledge exchange, data/information storage and exchange
3. **Community Resource Assessors** – the resource owners are the investigators
4. **Community based Science** –  
*Science demanded*

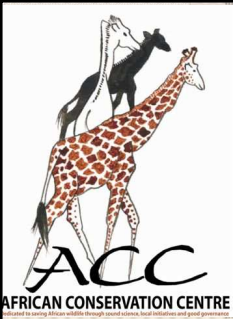


# Challenges

- Diverse information and data scattered across various institutions
- Limited expertise to set up robust systems for data integration
- No clear mandated institution to undertake the compilation and provision of access to Biodiversity data and literature
- Data ownership and data sharing policies
- Data and information management platforms
- Poor writing and documenting culture
- Poor long term perspective on the value for information/data
- Local data and information held in museums and universities abroad – repatriation
- Role of government key to setting up national initiatives

# Possible Collaborations..

- Mobilise scientists and researchers to write and publish – Mentorship programs
- Mobilise access to biodiversity data and information on various taxa for the Atlas
- Engage citizens in information generation use and dissemination. Science demanded. Community Resource Assessors
- Partner with Biodiversity Heritage Library (BHL), Encyclopaedia Of Life (EOL), Natural History Museums in target programs and to access services such as educational tools, art illustrations of biodiversity, etc



# Biodiversity

Information  
Mobilization  
Access/Sharing

Outreach  
Tools

Biodiversity  
Priorities/Projections

**STRATEGIES!  
ACTION!**

Socio-cultural,  
humanities

Models

Policy Framework

Policy Framework





# THANK YOU

