March 2024

NEWS FROM PROTECTED AREAS IN AFRICA

NAPA 183

Conserving nature in Africa

THIS MONTH IN THE NAPA

A GENTLE REMINDER...

>>> P.2 - EDITO

The issue today is not whether the world is going to change radically, but whether we are going to be actors in this change, with the hope of shaping it (somewhat), or simply victims, with the risk of being subjected to it.

P.3 - OUR ONLINE COURSES <<<

Learn about our online training courses, MOOCs, Tutos and Essentials: registrations are open!

MOOCS, TUTOS AND ESSENTIALS

YOUTH CONSERVATION

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Practical information and testimonials from partners working in the field with children, building the future!

P.6 TO 8 - SOIL EROSION CONTROL IN RURAL AFRICA <<<

Discover a useful practical booklet on soil erosion control that is specifically aimed at the control of soil erosion in rural Africa...

FEATURE OF THE MONTH

MOOC conservation

IUCN PAPACO

Youth conservation

A GENTLE (USEFUL) REMINDER

Geoffroy MAUVAIS
Papaco Coordinator

>>> In 1972, Dennis Meadows (of the Massachusetts Institute of Technology) published a report entitled "The Limits to Growth", in which he assessed the long-term impact of economic and demographic growth on the planet's natural resources. Unsurprisingly, the report concluded that if the trends observed at the time were to continue, the Earth's natural resources would eventually run out, with serious consequences such as reduced agricultural yields, water shortages and pollution - in short, a collapse of the system by... the 2020s. The "infinite growth" of our economic models would logically come up against the very real limits of our planet!

Almost 40 years later, Johan Rockström's concept of the nine planetary limits was published in the journal Nature (2009). The article established a framework for assessing human impact on the environment and the limits that we must not exceed if the planet is to remain in a stable state. Crossing them could potentially trigger chain reactions, leading to the collapse of our ecosystem of life.

We know that the accumulation of greenhouse gases (GHGs) in the atmosphere, mainly due to human activities, contributes to global warming. We also know that a key indicator is the level of CO2 in the atmosphere, because high levels have a direct impact on the climate. Airborne particles (aerosols) also have effects on climate and air quality, and we need to monitor their impact.
The erosion of biodiversity is another key element: it is due to factors such as the destruction of natural habitats and, of course, climate change. Added to this is the conversion of natural land to agricultural, urban or other uses, which further erodes nature and its balance.

EDITO

The nitrogen cycle needs to be controlled. Human activities, such as the excessive use of fertilisers, can disrupt the natural nitrogen cycle, with major environmental consequences. The same is true of the phosphorus cycle, where intensive use, particularly in agriculture, causes numerous environmental damages.

Of course, the acidification of the oceans, due to the increased absorption of carbon dioxide, is affecting marine life, particularly organisms that build shells or calcareous skeletons, with massive repercussions for corals, for instance.

The use of freshwater is also something to keep an eye on, as excessive consumption leads to shortages and problems for aquatic ecosystems. The same applies to pollution by chemicals and plastic, which is increasing all the time.

More than 50 years after the Meadows report and already 15 years after we defined these limits, we have to acknowledge that what we have done is not up to the challenge. In 2015, scientists demonstrated that we had largely exceeded the limit concentrations of greenhouse gases (in parts per million) as initially forecast. We also exceed the limit for the disappearance of biodiversity (in terms of the number of species disappearing per million species per year). Nitrogen and phosphorus exceed acceptable thresholds (in millions of tonnes discharged per year).Yes, land use is excessive (as a percentage of land to be preserved). The quantity of pollutants discharged into the environment exceeds the thresholds defined for each product, unfortunately not just plastics. In 2023, the water cycle was in trouble, with green water (naturally (re)generated) no longer able to compensate for the various uses.

In short, we were warned; we are now seeing what happens as we cross limit after limit; and yet we are only marginally changing our lifestyles. The issue today is not whether the world is going to change radically, but whether we are going to be actors in this change, with the hope of shaping it (somewhat), or simply victims, with the risk of being subjected to it. Is doing nothing or pretending that all this is "just a bad dream" really the right option?

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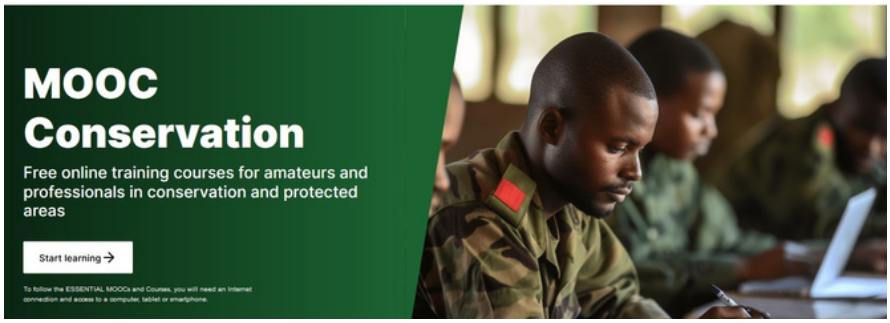
OUR ONLINE COURSES: MOOCS AND ESSENTIALS



MOOC Conservation is the platform that hosts IUCN-Papaco's online training courses, developed in partnership with the Senghor University, in Alexandria. **Our brand new platform is online. Subscribe now and join the course!**

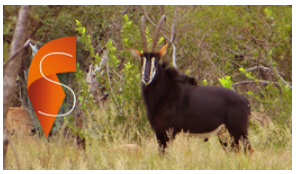
OUR MOOCS
THEME-BASED TRAINING

Registration will open mid-January

MOOC PA management
Goal: understand the essence and goals of protected areas. Through this MOOC, students will be able to grasp the importance of protected areas, their role and the different management aspects.

MOOC Ecological monitoring
Goal: understand the different techniques used in protected areas to assess the impact of managment by monitoring the ecosystem.

MOOC Law enforcement
Goal: understand the different legal contexts in Africa, their strengths and weaknesses as well as the techniques used to effectively enforce rules in parks.



MOOC Species conservation
Goal: understand the techniques developed to conserve species in PAs, in situ and ex situ. The MOOC covers the main threats, as well as solutions that can help face these threats.

MOOC Valorisation of resources
Goal: knowing how the valorisation of different protected area resources can take place, and understanding protected area valorisation through tourism.

MOOC New technologies
Goal: knowing the context of new technologies applied to conservation, existing techniques, prerequisites for their implementation, their opportunities and limitations, their uses in the field...

MOOC Marine protected areas
Goal: understanding as the design and creation of MPA networks, governance, ecological monitoring, but also surrounding economic activities, and how to include all this to MPA management.

OUR ESSENTIALS
PROFILE-BASED TRAINING

Registrations will open mid-January!

RANGER Essential
For protected area (PA) professionals who apply decisions and ensure the implementation of activities inside or around the PA.

MANAGER Essential
These two courses are for protected area professionals who need to plan, manage and assess the work carried out by field agents.

MANAGER LAW focuses on law enforcement and the valorisation of the PA and its natural resources.

MANAGER RESEARCH focuses on research activities, monitoring-evaluation and ecological monitoring.

LEADER Essential
For managers working in central management of parks or large NGOs, they elaborate national and regional policies, they proceed to cross-sectoral coordination and manage complex plans and programmes. This course focuses on more general skills to enable a better understanding of the stakes of bio-diversity conservation, all for better decision-making.

All our courses are available for free on

MOOC-CONSERVATION.ORG

REGISTRATIONS ARE OPEN

YOUTH CONSERVATION : DISCOVER, UNDERSTAND AND ACT FOR THE PLANET

IUCN-Papaco has developed in November 2022 online and free of charge educational resources to discover, understand and act for the survival of the planet. The youth-conservation.org platform thus provides young people aged 10 to 17 and their trainers with permanent, unlimited and free resources allowing them to understand and expose in a simple way:

1. The concept of nature;
2. Why it is important;
3. What to do to preserve it.

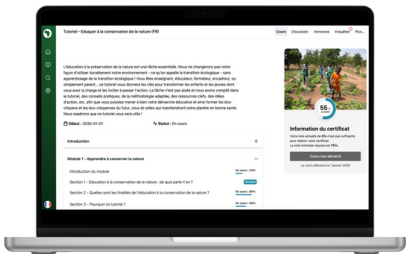
The themes covered for the moment are: terrestrial biodiversity, marine biodiversity, climate change, threats to nature, the relationship between nature and our health and finally the future of nature conservation. Other subjects will gradually enrich this set.

The subjects are treated in several stages and interactively: at the start of each module, a video presents the theme and serves as an introduction then the user follows a logical progression to discover what we are talking about, understand what is happening and finally think how to act. Designed primarily for smartphones, the site is fun and easy to use for young people.

Papaco has not forgotten the trainers; thus the youth-conservation.org platform offers additional resources for trainers (teacher, parent, environment club manager, NGO, etc.) to help them lead discussions with young people. Thus, for each module, a poster summarizing the key lessons is offered (it can be downloaded and printed), as well as a detailed guide with useful resources to go further in the lessons and facilitate learning. The guides also clearly present ideas for actions in favor of preserving the environment that the trainer can implement with the young people he/she supervises on the theme in question.

>>> OUR NEWS

- On Thursday 22 February 2024, our monthly **webinar** featured the passionate and fascinating testimony of **Mr Tamou Charaf Yarou**, an environmentalist from Benin who is particularly involved in his community with children and young people. He shared with us at length his experience in the field, highlighting the concrete resources that need to be mobilised to carry out actions that are in line with his convictions. Tamou is convinced that willpower is essential when it comes to taking action to protect the environment and combat climate change. As he told us several times, where there's a will, there's a way! Thank you to him and to the participants for attending. *Next webinar, Thursday 28 March at 5pm UTC/GMT.*



- Online tutorial **"Educating for nature conservation"**: aimed at all trainers working with children and young people, this tutorial, available in French and English, will shortly be available online at MOOC-conservation.org. Its aim is to provide **practical tools and teaching methods** to facilitate the transmission and training of young people. *Scheduled for April 2024*
- **New bilingual Youth Conservation website**: www.youth-conservation is getting a facelift to simplify navigation and update content. *Scheduled to go live in March 2024*

AWARENESS CAMPAIGN ON TIKTOK

Do you have videos recorded during your environmental awareness-raising activities with children and young people? Share them with info@youth-conservation.org for a TikTok campaign. We'll credit you and you'll be helping to raise mass awareness of environmental issues! Working together to protect nature and combat climate change!

TESTIMONIALS FROM THE FIELD

PROJECT NETWORK OF GENIUSES IN SCHOOL VEGETABLE GARDENS (MAURITANIA) - *BY DIOP SOULEIMANE, PHYSICS AND CHEMISTRY TEACHER, PRESIDENT OF THE ASPT ASSOCIATION AND RGPS PROJECT LEADER*

Cultivating Knowledge and the Environment : The RGPS Project

Dear members of the Youth Conservation community,

We are delighted to share with you the success of the Réseau des Génies en Potagers Scolaires (RGPS) project, which recently won the UNICEF Solunutrition Hackathon. The objectives of this network of kitchen garden geniuses are multiple and oriented towards solving major problems in Mauritania.

1. Combating malnutrition:

Mauritania, like many countries in the Sahel, is faced with child malnutrition.

Our project aims to turn children into active players in the fight against this scourge. We propose to creating a social network in Mauritanian schools, centred on the management of vegetable gardens. From nursery school onwards, we teach children to love and practise vegetable gardening activities, mainly using recycled materials such as used tyres and plastic bottles. As well as the educational aspect, our vegetable gardens have an essential nutritional objective, encouraging healthy, balanced eating through practical workshops and awareness-raising. The ultimate aim is for children to reproduce these methods at home to help their parents grow vegetables and fruit without having to spend any money.

2. Eco-responsible awareness :

The RGPS network also aims to educate and raise awareness among children of the importance of environmental conservation. Our vegetable gardens are made exclusively from recycled plastic materials, helping to solve the major environmental problem represented by plastic in Mauritania. We collect tyres and plastic bottles with the children to plant vegetables, while organising regular awareness-raising sessions on the importance of recycling and reforestation of plants endemic to the school's locality. To consolidate this experience, we have developed a dedicated IT platform, accessible at https://rgps-mr.org/. This application provides an interactive interface for following and supporting our project, connecting the community, sharing educational resources and demonstrating the positive impact. We look forward to continuing this exciting journey and sharing the future successes of the RGPS with the Youth Conservation community. Stay connected, and together, let's cultivate a sustainable future!

Thank you for this testimonial and congratulations to all of you for your commitment in the field.

If you would like to find out more about this project and support them, please contact Diop Souleimane directly: sdiopb5@gmail.com

NGO ASSOCIATION TO HELP YOUNG PEOPLE IN DIFFICULT SITUATIONS AGRO BUSINESS (TCHAD)

On 22 December 2023, the association Agro Business, which helps young people in difficult situations, carried out a reforestation activity at the Chad-China Friendship School in N'djamena. 50 pupils from the school took part. According to the association's volunteers, this activity enabled the pupils to benefit from and acquire knowledge about the fight against climate change, the preservation of ecosystems and the negative impact of plastic pollution. Thanks to these awareness-raising and information sessions, the children are able to understand their rights, make informed choices and become agents of positive change in their communities. A number of other activities are planned by the association over the coming months:

Environmental education workshops: organising interactive workshops in primary schools to inform children about the benefits of trees, the environmental issues we face and the actions they can take to help preserve the environment.

- **Field trips**: organising outings to natural areas or parks, where children can observe local biodiversity, learn about the different types of trees and understand their crucial role in the ecosystem.
- **Awareness-raising campaigns:** setting up awareness-raising campaigns in schools, using attractive visual aids such as posters, videos and demonstrations, to pass on information about the importance of tree planting and environmentally-friendly practices.
- **Collective tree planting:** organisation of tree planting days where children will be guided to actively participate in the planting of trees in designated public spaces, such as parks and school grounds.
- **Monitoring and maintenance of planted trees:** involving children in the monitoring and maintenance of planted trees, encouraging them to care for the trees, water them and protect them from potential threats, in order to develop their sense of responsibility towards nature.

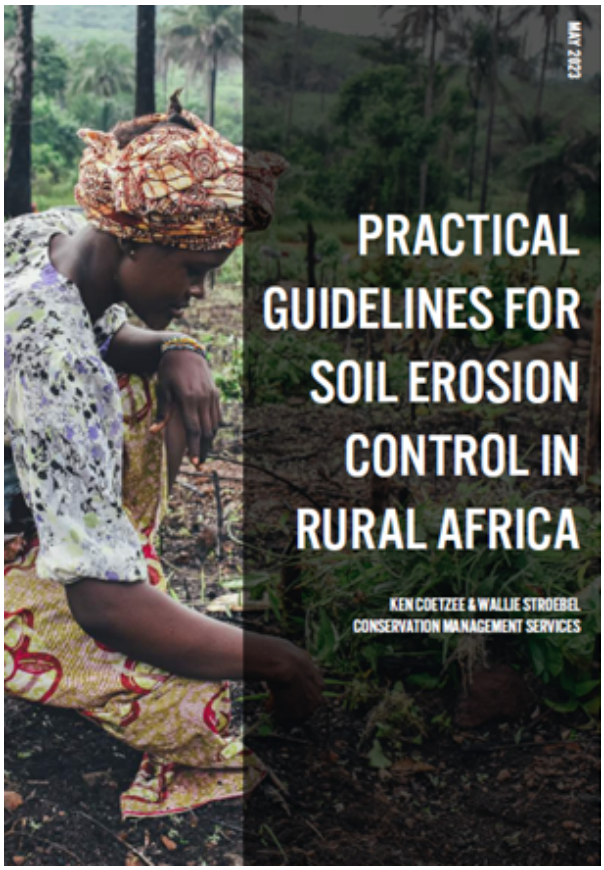
Thank you for this testimonial and congratulations to all of you for your commitment in the field.

If you would like to find out more about this project and support them, please contact the NGO directly: aajsdagrobusiness2@gmail.com

Practical Guidelines for Soil Erosion Control in Rural Africa

Ken COETZEE & Wallie STROEBEL
CONSERVATION MANAGEMENT SERVICES

THIS MONTH IN THE NAPA



>>> Ken Coetzee and Wallie Stroebel of Conservation Management Services (CMS based in South Africa) have prepared a useful practical guideline booklet on soil erosion control that is specifically aimed at the control of soil erosion in rural Africa. This is the first of a series of booklets that are intended to provide basic guidelines for environmental management and they have been written and illustrated so that even a basic education will allow them to be useful in most rural African situations.

The booklet discusses what soil is composed of, why we need to care for it and what the main causes of soil erosion are. The bulk of the booklet describes the various methods that can be used for the different types of soil erosion which are basically wind erosion and sheet erosion that occurs on bare soils and gully erosion which is caused by fast flowing runoff water. In almost every case the erosion is caused by the overutilization of the protective vegetation cover by man with his livestock or by footpaths made by the livestock on their way to water. In some cases, erosion may occur after fires when all the protective plant cover has been burnt away and fresh new growth is overgrazed.

The methods described are cost effective for rural farmers, they make use of the materials that are freely available in most African environments (except in desert areas) and they are easy to install with a limited amount of instruction. An important principle that is key to the control of soil erosion is that forest, woodlands or shrublands can all recover in time, but soil that is lost due to soil erosion can never be replaced, it is lost forever.

These guidelines are obviously useful for managers of protected areas, particularly those in categories IV and VI.

Hereafter, a few extracts of the booklet (pictures come from the booklet also).

In chapter 1, the following topics are covered:

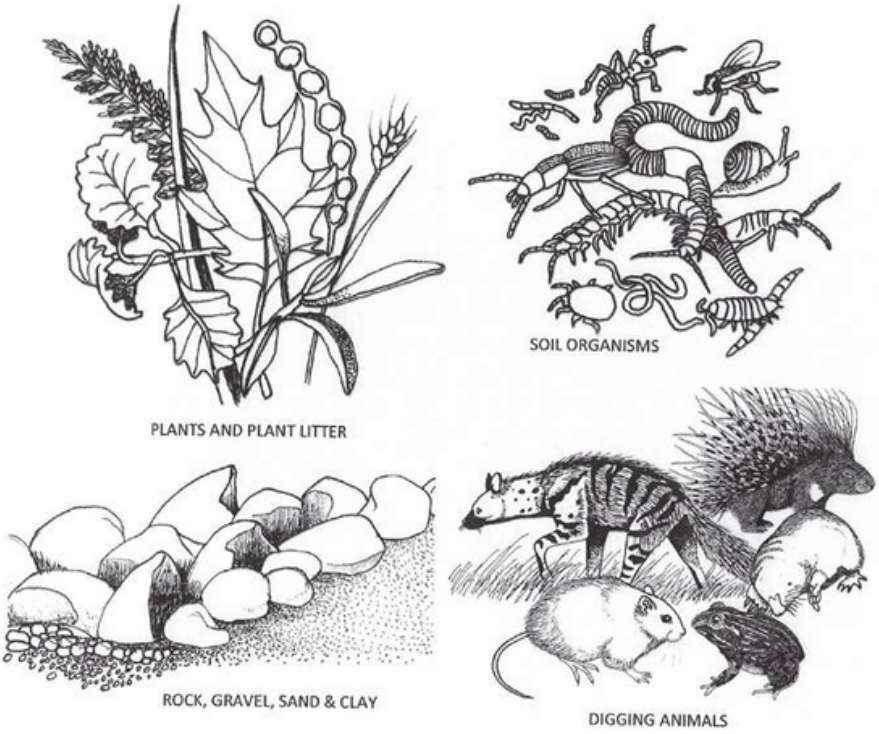
1.1 WHAT DOES SOIL CONSIST OF?

Soil is made up out of weathered rock and stones which break down into gravel, sand, silt and clay but it also contains broken down organic plant material like wood, leaves, flowers, fruits, seeds, animal droppings and dead animals. It is the variety of tiny organisms living in and on the soil that break down the organic material to create the humus that plants need for growth.

Healthy, productive soil should contain all the above, with anything less it will become useless for both nature and man. Rocks, gravel, sand and clay are the basic source for soil. Plants and other organic materials are broken down to create humus, which plants need for growth. The small soil organisms are necessary to break down the organic material and incorporate it into the soil. The larger digging animals aerate the soil, improve rain water infiltration and mix all the components to create a fertile topsoil.

1.2 WHY DO WE NEED TO CARE FOR THE SOIL?

1. Plants support a great variety of living organisms in the soil that help to feed the plants.
2. These living organisms in the soil keep the soil healthy and fertile.
3. Healthy soil makes all life possible; it produces our food crops and it provides plant food for our farm animals.
4. Without productive, healthy soil we will not survive so we must look after our soil, protect it from erosion and improve it whenever possible.



THE IMPORTANT COMPONENTS OF SOIL

1.3 WHAT ARE THE CAUSES OF SOIL EROSION?

When we do the following, we harm the soil that we depend on:

- Cut down all the trees that help to protect the soil and make it fertile.
- Allow our cattle and goats to eat all the plant cover that protects the soil.
- Allow soil erosion which destroys the soil organisms that make soil fertile.
- Strip the soil of all its plant cover making it infertile and exposed to erosion.
- Allow the rainwater to wash away the topsoil surface.
- Plough downhill on slopes, which causes the erosion of the soil into streams and rivers.

1.4 WHAT DO WE WANT TO ACHIEVE?

Before starting with the active rehabilitation of eroded areas, it is necessary to decide exactly what it is that must be achieved. The reasons why we do soil erosion control may differ from one place to another but the objectives are the same and can be described as follows:

- To reduce the effects of raindrop splash erosion on bare soil surfaces.
- To keep rainwater on the soil surface for as long as possible and increase the amount of water that is absorbed into the soil.
- To slow down the speed of run off water to reduce the erosive force of water on unprotected soil surfaces.
- To provide the methods to hold back and retain soil, plant debris, animal faeces and seeds that are usually carried away from the soil surface by run off water.
- To provide protected and stable sites for new plant establishment.
- To improve water retention in the soil.

The requirements for soil erosion control effort will include combinations of the above objectives.

Chapter 2 exposes the specificities of soil erosion control in Africa.

Chapter 3 presents different methods that can be used to prevent or fix soil erosion:

1 Reshape and stabilize erosion gullies
2 Brush fences
3 Stone gabions
4 Slope stabilization with grass fences and mulching
5 Slope stabilization with contour berms
6 Hollows or ponding
7 Brush and grass packing to cover bare soil
8 Stabilizing gullies with small trees
9 Breaking down steep gully sides.

Finally, chapter 4 explains how to maintain the soil erosion repairs or interventions.

Find the full booklet on:
https://conservationmanagementservices.co.za/wp-content/uploads/2024/01/Soil-Erosion-Digital-Compressed.pdf

Contact details for Ken: consken@mweb.co.za
Contact details for Wallie: walliecms@igen.co.za

QUOTE OF THE MONTH

"Nature doesn't have to adapt to our way of thinking. It's up to us to change our way of thinking so that it adapts to nature."
Hubert Reeves

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Website of the Papaco

Some reading!

>>> WHAT CAN COMMUNITIES TEACH US? INDIGENOUS AND LOCAL KNOWLEDGE FOR MOUNTAIN CONSERVATION

Indigenous and Local communities are keepers of valuable environmental knowledge accumulated over generations.

This knowledge is held individually and collectively, often orally transmitted and embodied. At least 25% of the world's land area is owned, managed, used or inhabited by these groups, and such areas are degrading less quickly than others.

Yet, despite abundant empirical evidence, Indigenous and Local communities struggle to have their voices meaningfully included in environmental governance. Much more work remains to be done on the integration of Indigenous and local knowledge within nature conservation. "*What can communities teach us*?" responds to this gap and the growing calls for decolonising the conservation movement.

Dowload the guide **here**.

A job offer with WCS in Congo: research manager in the Community Reserve of Lac Tele. Learn more.

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Consider publishing in the NAPA (article, stories, pictures on protected areas in Africa, job offers, etc.), contact us at moocs@papaco.org.