NEWS FROM AFRICAN PROTECTED AREAS

NAPA 201

CONSERVING NATURE IN AFRICA

THIS MONTH IN THE NAPA

Empowering ecological restoration through knowledge: A tutorial for all

By ***Karma Bou Azza***
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International Consultant

In a time where the planet's ecosystems face unprecedented challenges, effective restoration is no longer an option, it's a necessity.

To meet this global call to action, professionals and enthusiasts alike need not only passion but also a solid foundation of scientifically grounded knowledge.

Our new tutorial was developed precisely for that purpose: to bridge the gap between accessibility and academic rigor, empowering learners at every stage of their restoration journey.

Restoring our planet starts with knowledge. Aligned with the UN Decade on Ecosystem Restoration and based on internationally recognized standards and practices, this tutorial ensures that participants gain the competencies and perspectives required to engage confidently in restoration planning and implementation.

It was carefully designed to be customized to everyone, from newcomers exploring restoration concepts for the first time to experienced practitioners seeking to refine their expertise.

The content is easy to follow yet enriched with resources and references for those willing to dive deeper and ensure their work aligns with the most scientifically sound approaches available today.

Why should you take this tutorial?

Because it does more than sharing information, it transforms understanding into expertise. Participants will enhance their ability to plan, implement and monitor restoration projects, whether on a small community plot or across expansive landscapes.

The tutorial also helps learners become fluent in the terminologies used globally by restoration's leading stakeholders, enabling effective communication and collaboration in international contexts.

Moreover, it sharpens research skills through hands-on tools and guidance, ensuring that participants can identify, evaluate, and apply the best available knowledge in their work.

Restoration is a shared mission. With this tutorial, we aim to make high-quality, science-informed learning accessible, practical, and globally relevant, helping every participant take confident steps toward restoring our planet's health and resilience.

Join a growing global community of restoration practitioners dedicated to turning knowledge into action!

You can contact Karma on her e-mail address:
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NOVEMBER 25

Join our tutorial on restoration on www.mooc-conservation.org

OUR ONLINE COURSES: MOOCS, TUTORIALS AND ESSENTIALS

Our 8 MOOCs, 4 Essentials and 5 Tutorials are always open and available!

MOOC Conservation is the platform that hosts IUCN-Papaco's online training courses, developed in partnership with the Senghor University, in Alexandria.

See you on:

www.mooc-conservation.org

THE MOOCS
THEME-BASED TRAINING

MOOC PA management
Goal: understand the essence and goals of PAs. Students will be able to grasp the importance of PAs, 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...

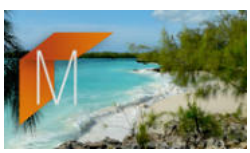
MOOC Law enforcement
Goal: understand the different legal contexts, their strengths and weaknesses as well as the techniques used to enforce rules in parks...

MOOC Species conservation
Goal: understand the techniques developed to conserve species in PAs, in situ and ex situ...

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

MOOC New technologies
Goal: new technologies applied to conservation, existing techniques, prerequisites for their implementation, their opportunities and limitations...

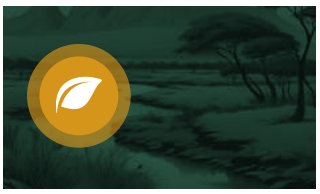
MOOC Governance
Goal: to understand what PA governance is, how to assess it and how to improve it...



MOOC Marine protected areas
Goal: understanding the design and creation of MPAs, governance, ecological monitoring, but also surrounding economic activities...

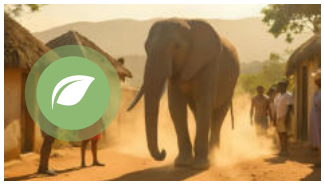
TUTORIALS
TECHNICAL TRAINING

TUTO EDUCATION
For teachers, educators, parents, etc., to provide them with the tools and methods they need to teach the children in their care about nature conservation...



TUTO WORDS
An interactive glossary with 100 essential words and expressions you need to know if you want to conserve nature and understand PA management...

TUTO PLANNING
A step-by-step guide to organising the preparation, implementation and evaluation of your protected area management plan...



TUTO H/W CONFLICTS
A simple method for understanding, anticipating and responding to conflicts between humans and wildlife...

TUTO RESTORATION
A practical guide explaining the different steps to follow to prepare, restore and assess a damaged protected area...

MOOC CONSERVATION IS SUPPORTED BY THE **FONDS FRANÇAIS POUR L'ENVIRONNEMENT MONDIAL**

OUR MOOCS THIS MONTH:
NEW TUTORIAL

NEW TUTORIAL: RESTORING PROTECTED AREAS

A new specialised training course is now available. It was developed by Karma Bou Azza, co-author of the *Standards of Practice to Guide Ecosystem Restoration: A Contribution to the United Nations Decade on Ecosystem Restoration*. **Register now**.

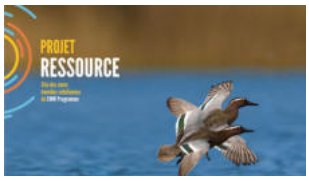
Objective of the tutorial
This tutorial introduces you to the fundamentals and essential practices for restoring degraded ecosystems and strengthening nature's resilience.

What will you learn?
Through concrete examples, scientific tools and a fictional park to rehabilitate, you will learn how to design and plan a comprehensive restoration project. A practical and inspiring journey to actively contribute to the regeneration of the planet.

PARTNER COURSES

En plus de nos MOOC et tutoriels, des partenaires du milieu de la conservation hébergent des MOOC sur MOOC Conservation. Les plus récents :

Human Rights for Rangers
Online!



Identifying and counting waterbirds in North Africa and the Sahel: How and for what purposes?
Online (French only)

ONLINE CERTIFICATE IN PA CONSERVATION

Since June 2025, graduates of the Online Certificate in Conservation of PAs from French-speaking Africa and Haiti can apply for a field internship to put into practice the knowledge acquired in the MOOCs.

>> How to obtain the Online certificate? Click here. <<

2025 MOOC CONSERVATION CALENDAR

4 November: launch of Restoration Tutorial

3 December : Online exam for French-speakers

4 December: Online exam for English-speakers

YOUTH CONSERVATION - SOME NEWS ABOUT THE PROJECT

ACTING FOR NATURE CONSERVATION: TRAINING AND INSPIRING THE FUTURE ECO-CITIZENS OF AFRICA

The "Acting for Nature Conservation" initiative — empowering and inspiring Africa's future eco-citizens — launched in early 2025 in partnership with the Audemars Watkins Foundation and Play for Nature, is already bearing fruit in the field!

This initiative supports 10 NGOs across **Burkina Faso, Benin, Cameroon, Senegal, and Madagascar**, all committed to raising young people's awareness of environmental protection through educational activities.

As Phase 2 kicks off, we look back at Phase 1 and the inspiring work carried out by two Malagasy NGOs — Lamoty Conservation and Impact Mada — which are leading the way in youth environmental education and community engagement.

SPOTLIGHT ON THE COMMITTED NGOS

NGO Lamoty Conservation

Learning from Nature: LAMOTY Conservation raises awareness among over 1,500 students in Andamoty

In the community of Andamoty, the association LAMOTY Conservation has implemented an ambitious environmental education program targeting students, teachers, and local communities.

The goal? To strengthen young people's ecological awareness and empower them to take concrete action for biodiversity and nature.

Environmental clubs to learn and take action

At the heart of the program, the creation and facilitation of school environmental clubs have mobilized students around diverse topics such as forests, wetlands, lemurs, deforestation, and eco-citizenship.

Every week, interactive learning sessions combined theory with hands-on experience. Students took part in tree planting, school garden creation, and eco-action workshops. These concrete activities helped them better understand environmental challenges while becoming directly involved in protecting their surroundings.

Lamoty Conservation - Creating an Educational Vegetable Garden

Lamoty Conservation - Beach Clean-Up Operation for World Environment Day

NGO Lamoty Conservation (following)

Lamoty Conservation - Creating an Educational Vegetable Garden

🤝 **Collective Engagement**

LAMOTY Conservation also participated in several environmental events involving students, local authorities, and community members.

These moments of exchange fostered dialogue and strengthened a shared understanding of nature-related challenges. Recreational and educational field trips complemented classroom sessions, providing children with a learning experience that is both fun and rooted in the local reality.

🌍 **Promising results**

The impact speaks for itself:

- **1,500 students reached**
- **3 school environmental clubs created**
- **800 young plants replanted**
- Improved adoption of eco-friendly behaviors among students and teachers

The program's influence extended beyond the schools: through a series of local radio broadcasts, over 20,000 people were reached with messages on biodiversity, climate change, deforestation, and the protection of endemic species such as the Simpona.

Lamoty Conservation - Creative Workshop Using Plastic Waste

💬 **A lasting momentum**

This initiative marks a significant milestone for LAMOTY Conservation, strengthening its roots in Andamoty and laying the groundwork for sustainable, continuous environmental education.

A clear testament that when we invest in youth, every tree planted and every eco-citizen action becomes a seed for the future.

NGO Impact Mada

Environmental Education: Phase 1 Overview of the Project with Youth Conservation

During this first phase, IMPACT Madagascar implemented its environmental education program in **three partner schools** across the Bongolava, Betsiboka, and Boeny regions (Mahajeby, Madiromirafy, Ankirihitra), **directly reaching over 400 students.**

In Mahajeby, **children were engaged on climate change through interactive workshops, local-language film screenings, and hands-on activities such as waste sorting, composting, and the planting of 223 trees.**

NGO Impact Mada (following)

In Madiromirafy, **a program combining theoretical lessons and educational forest excursions allowed 68 students** to explore the local biodiversity, including endangered species such as the crowned sifaka (Propithecus coronatus). It was a magical experience that awakened their emotions, inspired by the beauty of the forest and the discovery of Madagascar's exceptional wildlife.

In Ankirihitra, **over 200 students created a school vegetable garden** (covering 500 m^2) alongside the construction of a well, enabling them to practice sustainable agriculture and strengthen the connection between climate, food, and food security. The impacts extend beyond the school: more than 350 families were indirectly sensitized through children who became true project ambassadors.

Trained teachers ensure the continuity of education, while the infrastructure created (garden, well, plantings) guarantees lasting, tangible benefits. **Anchoring learning in practical activities adapted to the local context** is the most effective way to generate sustainable impact, both in schools and within the community.

Impact Mada - Learning Through Play: Climate Change and Responsible Behavior Training at Mahajeby Primary School

Impact Mada - Educational Field Trip to Mandrava Forest for Students of Madiromirafy Community School

Impact Mada - Awareness Session and Drawing Workshop for Students at Ankirihitra Public Primary School

Impact Mada - Creation and Maintenance of the School Vegetable Garden at Ankirihitra School

TUTORIAL ON RESTORATION OF PROTECTED AREAS
A FEW EXTRACTS...

This NAPA presents a few extracts from our new tutorial on restoration of protected areas

INTRO

Understanding the importance of healthy ecosystems under ecological and socio-economic contexts provides key drivers for implementation of ecological restoration projects globally. This manual will provide participants with key tools to be able to:

1) **improve the local expertise** on ecological restoration through learning aligned with academic courses and international certifications from renowned institutions and organizations, and

2) familiarize themselves with **the process of developing ecological restoration plans** and implementing them.

This manual is very important, providing that ecosystem degradation is impacting billions of people and causing major livelihood losses across the globe. **Ecological restoration is key to reversing degradation of threatened ecosystems** and decreasing or halting the risk of ecosystem collapse.

Module 1 – Overview of Ecosystems and Ecological Restoration

A – Définitions

An ecosystem is **an assemblage of biotic** and **abiotic components**, aboveground and underground, in water bodies or on land in which the components interact to form complex food webs, nutrient cycles and energy flows.

The terms biotic and abiotic are key. Biotic components are all living organisms such as animals, plants, bacteria, fungi, protists and archaea. Abiotic components are non-living components that interact with biotic components, such as air, soil, temperature, light, water, humidity, pH, salinity and minerals.

B – What is the link between a healthy ecosystem and species diversity?

Species diversity and ecosystem health are deeply **connected**; they sustain and reinforce each other.

1. Species diversity strengthens ecosystems

Different species play different roles: some produce energy, others consume, and others decompose. When there is high diversity, food webs and energy flows become more stable. This makes the whole ecosystem more resilient to disturbances such as disease, climate change, or invasive species.
Example: if one plant species declines, others can step in to provide food for pollinators and herbivores.

2. Healthy ecosystems support species diversity

Functioning ecosystems provide clean air and water, recycle nutrients, and maintain soil formation and pollination. These processes create the conditions that allow species to survive. When habitats are intact and connected, species have the space and resources they need to thrive. Balanced ecosystems also regulate populations naturally, avoiding overpopulation or collapse.

3. A positive feedback loop

The relationship goes both ways: more species diversity means stronger, more stable ecosystems and stronger ecosystems come with better survival and growth of diverse species.

This creates a **reinforcing cycle**, where biodiversity is both the foundation of, and the reward for, **healthy ecosystems**.

In short: **Species diversity is a key indicator of a healthy ecosystem, and a healthy ecosystem is what allows species diversity to persist.**

C - What is ecological restoration?

Ecological restoration is the process of **helping an ecosystem recover** after it has been degraded, damaged, or destroyed.

Ecological restoration vs ecosystem restoration? People sometimes use these terms interchangeably, but there's a difference.

Ecological restoration always aims to protect biodiversity and restore the natural health of ecosystems.
Ecosystem restoration focuses on helping degraded ecosystems recover, while also conserving ecosystems that are still intact. It may sometimes emphasize the benefits humans get from ecosystems (like food, water, or climate regulation), not just biodiversity.

Ecological restoration follows **eight principles**. These principles were developed by the Society for Ecological Restoration as part of the International Principles and Standards for the Practice of Ecological Restoration. They provide a framework to guide, measure, and improve restoration activities.
Principle 1: engage stakeholders = involve the people who depend on or influence the ecosystem.
Principle 2: draw on multiple types of knowledge = combine scientific, local, and traditional knowledge.
Principe 3: use native reference ecosystems = practice restoration based on local ecosystems while considering environmental changes.
Principle 4: support ecosystem recovery processes = assist natural processes that help the ecosystem heal.
Principle 5: set clear goals and measurable indicators = track progress and success objectively.
Principle 6: aim for the highest level of recovery attainable = restore ecosystems as fully as possible.
Principle 7: apply restoration at large scales when possible = larger projects gain cumulative benefits.
Principle 8: view restoration as a continuum of activities = restoration is part of an ongoing process, not a one-time effort.

Module 3 - Planning Phase of Ecological Restoration

A – What are project targets, goals, and objectives?
After our baseline inventory, we are ready to set targets, goals, and objectives.
·**Target** → the native ecosystem or habitat our project aims to restore. *(e.g., "evergreen moist forest")*
·**Goals** → the long-term ecological condition we want to achieve. *(e.g., "restore canopy cover and species diversity")*
·**Objectives** → the shorter-term, measurable steps that act as our roadmap. *(e.g., "plant 10,000 seedlings of 5 native tree species in the next 3 years")*

B – Stakeholder engagement planning
We have identified different stakeholders and their levels of engagement (inform, consult, involve, collaborate). In the planning phase, **stakeholders must be included in defining targets, goals, and objectives:**
·To align restoration with cultural, social, and spiritual values.
·To integrate local and traditional knowledge.
·To ensure the plan is accepted and sustained in the long term.

Stakeholders may have **different priorities**:
·Desired future state of the landscape.
·Specific areas they want restored.
·Goods and services they depend on.
·Ecosystem functions they want protected.
·Species they value; etc.

Make sure these perspectives are represented in your plan!

C – How to define targets, goals, and objectives
It is crucial to be able to identify the specific project target(s), goal(s) and objective(s).

Let's go through the order in which this must take place and how to proceed.

1-Identify the target: refer to your reference model and select the native ecosystem you want to restore.
2-Define the goal(s): compare your baseline inventory with the reference model to determine the condition you aim to achieve.
3-Set objectives: translate goals into measurable outcomes and include indicators for monitoring progress.
4-Plan interventions: link objectives to specific restoration actions.

Module 4 - Implementation phase of ecological restoration

Every restoration project involves **risks**. Some can be anticipated through assessments, while others arise suddenly and are more difficult to predict.

A - Predictable risks
These can be foreseen from baseline studies and planning, but they still require active management:

- **Environmental:** events like wildfires or flooding, which can often be forecasted. They are still considered high risk.
- **Social:** resistance from groups whose needs and priorities don't align with the project.
- **Personnel:** inexperienced staff, poor adherence to standards, or turnover.
- **Economic**: reduced funding, limited resources, or financial instability.

B - Unpredictable risks
These are harder to anticipate and often beyond local control:
Environmental → catastrophes like earthquakes or volcanic eruptions.
Social → conflicts or disputes between stakeholders during implementation.
Political → wars or major security threats affecting the project area.

C - Importance of adaptive management to mitigate the risks
Restoration interventions should be planned in a way to allow for adjustments to be made if unexpected (or predictable) events occur during the implementation phase.

An **adaptive management plan** should be developed during the planning phase to mitigate the risks and identify **all types of adjustments** or **corrective measures** required per intervention, in case of events that will have an adverse outcome on effectiveness of the intervention.

Etc.

Subscribe to the tutorial on
www.mooc-conservation.org

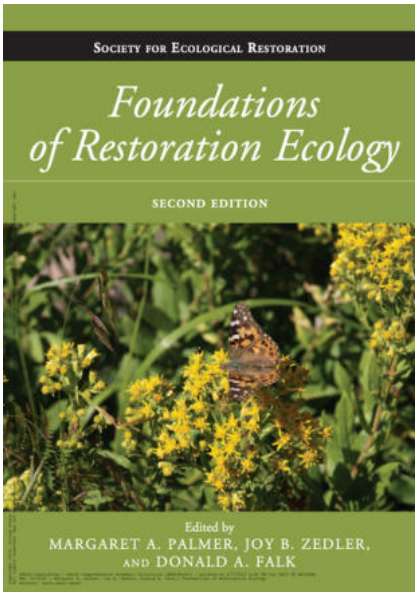
QUOTE OF THE MONTH

"Nature does not heal itself at the pace of our destruction. It needs our hands and our will."
— Jane Goodall (primatologist and environmental activist)

READING OF THE MONTH

FOUNDATIONS OF RESTORATION ECOLOGY

BY MARGARET A. PALMER, JOY B. ZEDLER AND DONALD A. FALK



This book is an essential reference for understanding the scientific principles and practices of ecological restoration. The authors explain how to restore degraded ecosystems by combining ecology, management, and an adaptive approach, illustrated with concrete examples at both local and global scales. It is a must-have guide for conservation professionals and enthusiasts seeking to deepen their knowledge and apply effective restoration strategies. Available in English only. Download the PDF HERE.

IN THE NEWS

IUCN WORLD CONSERVATION CONGRESS 2025: A ROADMAP FOR TRANSFORMATIVE CONSERVATION

The IUCN World Conservation Congress took place from 9–15 October 2025 in Abu Dhabi, bringing together over 10,000 participants under the theme "**Powering Transformative Conservation**." The Congress highlighted the urgent need to act on the triple planetary crisis — biodiversity loss, climate change, and pollution — and emphasized that nature must be central to economic and social decision-making.

Over 150 motions were adopted, including the **regulation of wildlife trade, a framework for the responsible use of synthetic biology, and a strong call for a just energy transition**. Discussions also underscored the importance of indigenous rights, community participation, and equity as pillars of effective conservation.

IUCN presented a 20-year strategic vision and a 2026–2029 program focused on measurable outcomes: **enhancing ecosystem resilience, promoting nature-positive economies, and aligning public and private funding with conservation goals.**

For Africa, these orientations offer major opportunities: **supporting inclusive governance of protected areas, boosting local restoration initiatives, and mobilizing new financial partnerships**. The Congress sent a clear message: **turn commitments into action, placing justice, innovation, and nature at the heart of development.**

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To contribute to a NAPA (article or publication on protected areas, cover photo, job offer, etc.), contact us at moocs@papaco.org.