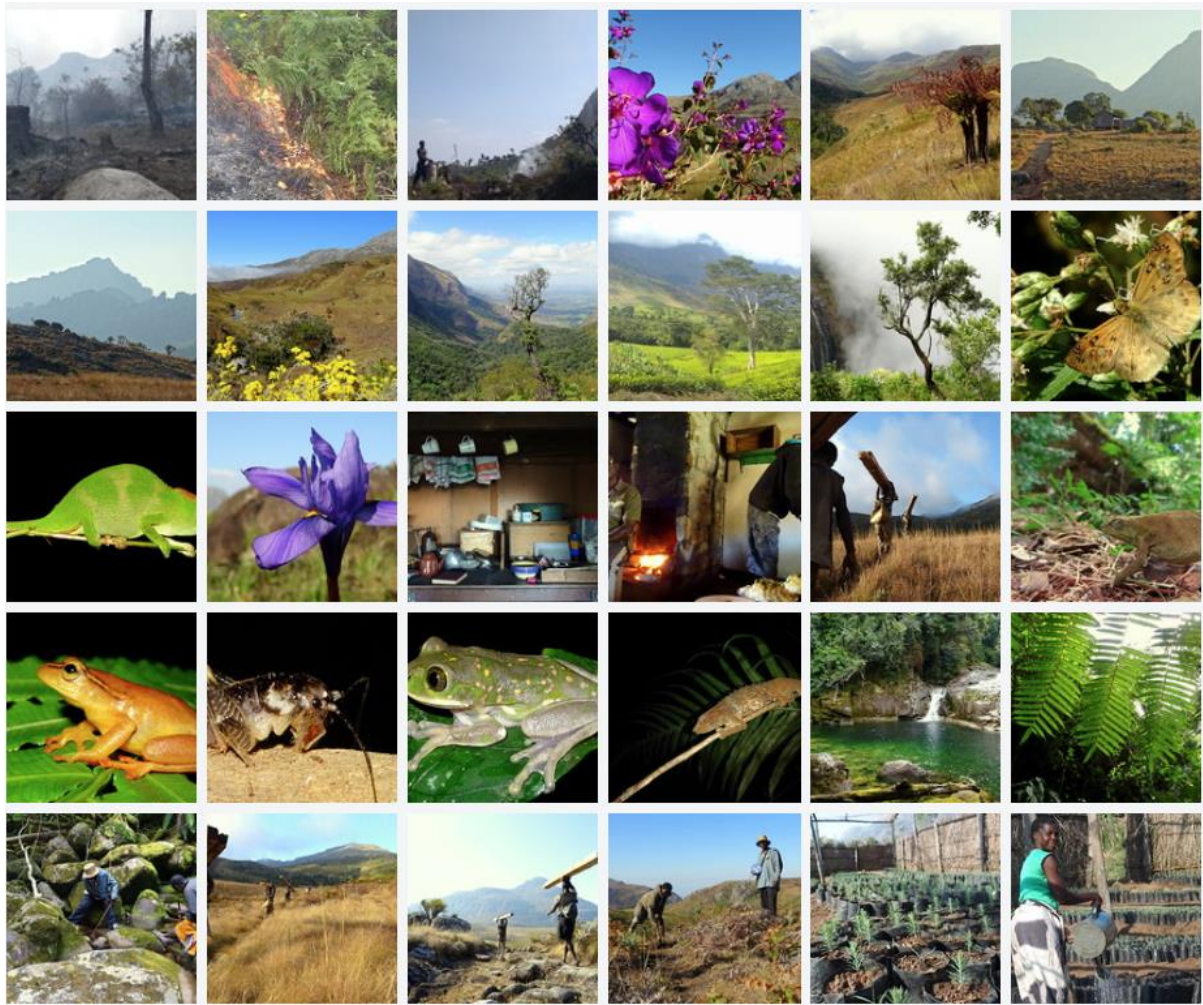


Malawi – Mount Mulanje

Restoring forest to protect water and biodiversity

Annual Update: 2019



Thank you for joining us at the very beginning of this restoration journey in Malawi! This project began in 2019 and we are delighted to share with you the progress so far and plans for 2020.

The Mount Mulanje Forest reserve is the size of 79,000 football pitches (65,800 ha). Located in Southern Malawi in the Mulanje district, it is the highest point in Malawi and South-Central Africa and the last reserve in the South where forest is still standing. Despite being officially protected since 1927, severe deforestation and degradation is still taking place and has led to the sharp decline of species like the Mulanje Cedar tree and the Mulanje chameleon that cannot be found anywhere else in the world. This forest is essential for the water supply of the surrounding villages, local agriculture (tea and macadamia production) as well as for Blantyre, the economic capital of Malawi in the South.



Our partner here is the MMCT (Mulanje Mountain Conservation Trust), local government Forest Department and 10 local community nurseries.

Our Goals

Landscape Transformation

Our 2030 goal is to restore the equivalent of 30,000 football pitches (24,400ha), initially with only 90ha of indigenous miombo forest each year and 50ha of pine and cedar trees. The rate of restoration will ramp up significantly when our partner MMCT takes on the management of the reserve from the Government, which we expect to happen during 2020.



A mature Brachystegia tree – a typical species in the Miombo woodlands.

Indigenous Miombo woodlands here are restored through a technique called assisted natural regeneration (ANR) that protects naturally emerging seedlings from disturbance and accelerates the restoration process. Up to 70 different tree species will grow here including *Uapaca* and the *Brachystegia*.

In the montane forests, our team plants the endemic Mulanje Cedar, a species that is sensitive to disturbance and not able to generate quickly by itself. Pine trees are planted in the buffer zone around the forest reserve, which provides a source of fuel wood and timber for the local communities to reduce their dependency on the indigenous trees in the forest reserve itself.

Community Engagement

Seedlings of pine and cedar are purchased from local community nurseries, providing much needed cash income and employment for the communities around the forest reserve. The local communities are also involved in the planting of the trees as well as taking care of their survival in the long term. An education and environmental awareness program for schools will see ten schools raise and transplant seedlings that will eventually improve the school micro-climate, reduce soil erosion and improve soil organic matter and fertility. Some of the trees will be planted at home farms and will form part of agroforestry systems, making the farms more diverse, resilient, productive and sustainable, as well as producing additional benefits such as fodder for livestock. Around 500 grafted mango trees will provide an excellent source of nutrition for the children.



Schoolchildren in the project area

Biodiversity



Nadzikambia – the Mulanje mountain chameleon

The structure and altitude of the mountain has led to the development of a unique climate for the area that favours the development of rare and endemic life forms. Several of these species are classified as vulnerable, endangered or even critically endangered by IUCN's red list including: **The Mulanje Cedar tree (*Widdringtonia whytei*)** is considered critically endangered, **Mulanje Pygmy Chameleon**

(Rhampholeon platyceps) is endemic to this specific forest reserve and is considered endangered. **Yellow-throated Apalis (*Apalis flavigularis*)** is an endangered bird that can only be found in this reserve and one neighbouring mountain, the Zomba plateau.

2019 at A Glance

Firebreak construction to counter the risks of fire

Forest fires are one of the main threats to biodiversity conservation in Mulanje Mountain Forest Reserve. Firebreak construction and maintenance has been found to be one of the main effective measures to slow or stop the spread of a low intensity bushfire. On the peak of Mulanje mountain the Nakhonyo community has been constructing and maintaining firebreaks where restoration and planting of Mulanje cedar and other species will take place. The community is paid for its efforts and so incentivised to be involved. They have managed to clear 99.47 km during the high fire risk months of July through to October. A total of 155 people were involved (116 men and 39 women).



A firebreak on the peak of the mountain to stop any risks of wildfires spreading.

Mulanje cedar seedlings for Nessa Community cedar nursery

The Nessa Community Nursery is one of the five community nurseries we purchased cedar seeds from during 2019. The community group of nine men and three women raise the seedlings of Mulanje cedar and take care of them at the nursery until they are ready for planting. In addition to receiving income from the sale of the cedar the community will also be paid to transport and plant the seedlings.



Cedar seedlings in Nessa Community Nursery



Data collection from planted cedar

Our data collection team studied experimental plots where cedar seedlings have been planted. This will give us a better idea of the restoration potential and help us to increase the survival rate of planted cedar trees.

Coming up in 2020

- We plan to plant 60,000 cedar seedlings on the mountain plateau and 40,000 seedlings of pine.
- Mapping an additional 140ha in 2020 (equivalent to 168 football pitches) as new restoration sites.
- Construction and maintenance of firebreaks – firebreaks are gaps in natural vegetation which are critical as natural barriers as they stop the spread of fires, should they encroach the area.
- Establish permanent monitoring plots. They enable us to track vegetation types, measure the growth rates of the trees and make any adjustments to our plans.
- Facilitate the formation of local forest management institutions and conduct trainings.
- Purchase and establish beehives (approximately 8 hives per football pitch) alongside training and monitoring. Beekeeping provides income that means farmers do not rely on cutting forests.
- The scale up of the Tree Planting and Environmental Education Awareness programme begins!

For more information on our project in Malawi

<https://www.weforest.org/project/malawi-mulanje>

[Click Here](#) for more high-quality photos from Malawi

