



TRILLION TREES



ReForest Fund Update - Dec 2023

The ReForest Fund supports forest restoration across a portfolio of sites where our partners have long-term conservation programmes, and involve local communities every step of the way.



Restoring forests – for people, nature & climate

The Trillion Trees ReForest Fund is restoring forests all over the world for the benefit of people, nature and the climate - for generations to come. Our projects focus on recovering and regrowing native and natural forests. We take a landscape approach, using a wide range of methods, and looking for opportunities to improve livelihoods and address the underlying drivers of deforestation. This ensures our efforts make a difference to people's lives, a lasting contribution to reducing carbon in the atmosphere and preserve critical biodiversity.

Thanks to the generous support of individuals, foundations and companies that have donated to the ReForest Fund, we have supported 12 projects so far, which are restoring over 340,000 trees. Our new project in Laos is underway, and good progress is being made at new sites in Papua New Guinea and Brazil. Additionally, we expanded support for two of our projects – Kaptagat and Usambaras – and next year, four new landscapes will come on board in Atlantic Forest, Argentina; Jovel Valley Basin, Mexico; Mbeliling, Indonesia; and Ruvuma, Tanzania.

In the Usambara Mountains, local students and community members are restoring forests in a biodiversity hotspot. In Kaptagat, work continues to restore and maintain a valuable forest landscape, despite challenging drought conditions earlier this year. The Atlantic Forest in Brazil forms part of a UN World Restoration Flagship Landscape, where landowners are stepping up to restore their lands. In the remote Bismarck Mountains of Papua New Guinea, community-led forest restoration is helping protect wildlife habitats and support sustainable livelihoods. And in Laos, work is underway in the Nam Et Phou Louey National Park to restore degraded forest in abandoned agricultural areas using assisted natural regeneration techniques.

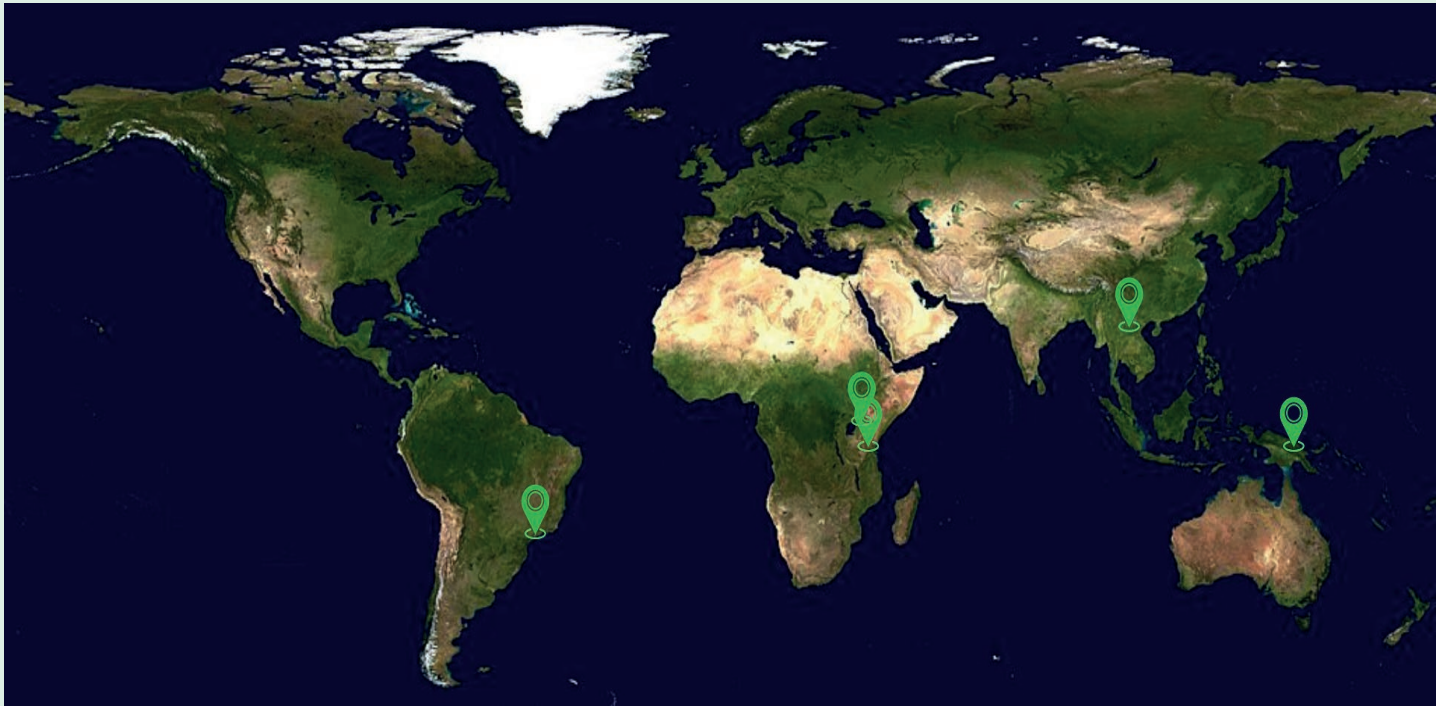
To ensure long term success of restoration efforts, project teams monitor restoration areas over several years, carrying out necessary maintenance to keep trees growing. Our restoration tracking tool, FORMAPP, is used by teams to track the performance of restoration efforts and we have been continuing to provide training on how to use it effectively.

Trillion Trees has over 40 projects worldwide in critically important landscapes that need your support to restore degraded forest and enable the recovery of vital ecosystems. Such as, protecting and restoring the largest intact rainforest in Guatemala for endangered species like the jaguar; or supporting local communities to restore biodiverse forests across Tanzania and Mozambique. With your support, we can bring back biodiversity where it has been lost, while also benefitting the climate by removing carbon dioxide as the forests regrow.

Restoring forests, ending deforestation: ReForest Fund Projects for 2023

At each place, we have built trusting relationships with local communities and work with them to develop appropriate solutions for all stakeholders. Support from the ReForest Fund helps these projects expand their efforts on the ground and increase their scale of ambition: growing more trees and restoring more forest.

But there is much more to be done. With your help, we will expand our support to more projects restoring forests and tackling the causes of deforestation in some of the world's most biodiverse forest ecosystems.



Atlantic Forest
Brazil



Usambara Mtns
Tanzania



Kaptagat
Kenya



Nam Et
Phou Louey
Laos



Bisil Ku
Papua New
Guinea

New Projects 2024



Atlantic Forest
Argentina



Jovel Valley
Mexico



Ruvuma
Tanzania



Mbeliling
Indonesia

Reconnecting forest patches in a threatened ecosystem

Restoring a UN World Flagship Landscape - the Atlantic Forest

The Atlantic Forest used to be one of the world's largest forests, covering 1.4 million square kilometres on the eastern coastlines of Brazil, Paraguay and Argentina - nearly 8% of all South America. Now, only around 24% of it remains across the biome, and in Brazil only 12% of it as primary forest – making it the most threatened of all tropical forests. Even in its current fragmented state, the Atlantic Forest is an incredible collection of eco-regions with biodiversity rivalling the Amazon. There are thousands of unique species not found anywhere else – including around 8,000 plant species and 200 types of endemic birds.

In the 100 km-long Serra do Urubu-Murici corridor in northeastern Brazil, just 16% of the original Atlantic Forest ecosystem survives. Located between two Brazilian states it encompasses 18 municipalities and is home to around 378,000 people. Most of the remaining forest fragments are on private land and only 7,500 hectares of forest are officially protected, but there is big opportunity for forest recovery. WWF and BirdLife partner SAVE Brasil are working with local landowners to restore and reconnect vital habitat used by 20 endemic and endangered bird species, alongside several other partners, and piloting agroforestry approaches with smallholder farmers. They are providing technical capacity support and education opportunities to support long-term success of restoration efforts, and using plant species that support agroforestry, while restoring critical connectivity of forest needed for wildlife. With this, forest cover is rapidly increasing, further improving the quality of the land and providing resources for people and biodiversity.

Agroforestry management workshop at Pedra D'Antas Reserve (Lagoa dos Gatos) August 2023. ©SAVE Brasil



Trees planted or regrown
14,000 planted (62 species)
Hectares restored
50.2 ha
People benefitting
40 community members



Bird monitoring © Taruhim Quadros

SAVE Brasil has been busy implementing, maintaining and monitoring restoration and agroforestry plots, and successfully engaged three new landowners to restore their lands in 2024. Overall, the programme has restored over 50 hectares with 11 demonstrative plots (7 agroforestry, 4 ecological restoration). These represent more than 14,000 seedlings planted from 62 different species.

The collaboration with local landowners has led to the creation of a group called Coletivo Gagauba, between three young smallholder farmers who are guardians of agroforestry demonstrative plots in Dom Helder Settlement (Murici). This youth group represents a strengthening of community bonding that is essential to the wider development of sustainable agroforestry systems. With support from SAVE Brasil, this group has organised a partnership with a technical school for student internships at the demonstrative plots – providing specialised support for the smallholders and valuable work experience for students. Overall, SAVE Brasil's technical assistance for agroforestry has been a success, with areas being better managed by farmers. It is an ongoing process to change behaviours, but over the past year they have seen great enthusiasm and participation.

Monitoring and maintenance of restoration areas has identified that *Brachiaria*, an invasive grass, is having a negative impact on seedling development. This invasive grass poses a significant challenge in restoring the Atlantic Forest. It has a rapid growth rate and outcompetes native plants for water, nutrients and sunlight. This can hinder success of restoration efforts. The cost to control the exotic grass is higher than anticipated, and adaptive solutions to address the challenge are being discussed with the team and landowners.

Restoring degraded forest in Tanzania

Working with local communities to protect and restore forest in the Usambara Mountains

The Usambara Mountains in northeastern Tanzania is one of the country’s most important biodiversity hotspots, but is threatened by unplanned clearing of the forest for agriculture, in particular fruit farming, and to supply the high demand for charcoal used as fuel.

The restoration project, led by WWF in collaboration with local partners The Friends of Usambara Society and 4H, uses innovative and multiple landscape restoration approaches to enhance the wellbeing of local people and support biodiversity. This enables communities to engage in supporting natural regeneration, through the sustainable management of community forests to generate more sustainable sources for fuelwood and livelihoods.

The project is restoring degraded and deforested areas, but also working with communities to ensure social needs are met through agroforestry. Alongside restoring native forest, avocado and cocoa trees are being planted on farms, and some near waterways as they are less likely to be cut down because they provide valuable benefits. This reduces the likelihood of agricultural expansion on riverbanks, protecting the watershed areas and providing wildlife habitat. Other native species of trees are also being planted near water courses to help provide habitat connectivity for wildlife and improve water quality.

Students tending a tree nursery © Friends of Usambaras



Students preparing to plant trees © Friends of Usambaras

Trees were planted earlier this year and are now being monitored and maintained to ensure survival. Trees growing include:

- 27,800 trees along water courses
- 17,500 trees in the Kibaoni area
- 22,400 at villagers’ farms
- 9,800 near schools – planted with students
- New trees naturally regenerating in restored areas

Farmers, students and other community members are all participating in looking after the growing trees, and WWF is helping track their survival using the Trillion Trees FORMAPP tool.

In the eastern Usambaras, more than 900 students have participated in learning how to grow seedlings in nurseries and plant them, and why it is so important to conserve the environment. The students are now helping care for two nurseries, which can produce 20,000 seedlings. The 4H will continue working with students to plant new seedlings next year near schools, which provide fresh fruit and shade.

Read Nietiwe’s story about her co-operative spice nursery in the Amani Nature Reserve [here](#).

Restoring and maintaining an important Kenyan forest

Greening Kaptagat: Establishing agroforestry and clean energy solutions within a forest-based landscape in Kenya

Since 2022, under the UK Government's Partnering for Accelerated Climate Transitions [PACT], along with Trillion Trees support, WWF-Kenya has partnered with the Eliud Kipchoge Foundation and the Ministry of Environment and Forestry to implement the **“Greening Kaptagat: Establishing agroforestry and clean energy solutions within a forest-based landscape in Kenya”** project.

Kaptagat in southwest Kenya, is not only an important forest landscape, providing many local communities with water, wood products and agriculture; it is also a training ground for professional long-distance runners including Olympic marathon champion, Eliud Kipchoge. The Kaptagat landscape covers an area of 32,000 hectares (including 13,000 hectares of protected forest) and has the potential to be scaled up to be part of the wider Cherangany-Elgeyo Hills ecosystem whose total land area is just under 415,000 hectares.

WWF-Kenya, with support from Trillion Trees, has continued to work with Eliud Kipchoge, local communities and government stakeholders to restore and maintain the 50.8 hectare forest site adopted by Eliud Kipchoge.



Beehives installed at the site to help generate income ©WWF Kenya

Trees planted or regrown
38,300 (18,345 replaced following drought)
Hectares restored
50 ha
People benefitting
256 community members



Section of adopted site with pits dug in readiness for planting © Eliud Kipchoge Foundation

This has been achieved by the following activities.

- After extensive consultations with the community, fencing off the site with a perimeter fence was determined to be a valuable method. The fence has continued to be maintained and repaired as needed and has allowed vegetation regrowth, providing good conditions for natural regeneration of the forest. So far, more than 96 young seedlings have emerged naturally and more are expected during the rains which have recently begun.
- Restoration work initiated and completed on the site with the planting of 38,300 seedlings procured from community nurseries, with labour provided by the local community through their Community Forest Association [Kaptagat CFA].
- Droughts throughout 2022 and early 2023 had an impact on the survival of seedlings in the landscape. Recently, 18,345 new seedlings (procured from local community nurseries) have been planted to replace those that were lost. The seedlings were replaced by the local community (56 local people took part) in collaboration with the Kenya Forest Service and the Friends of Eliud Kipchoge.
- 75 beehives were installed on the site to help generate further income for the community and ensure that the forest continues to be protected for the long term. Training on bee keeping and management of the hives is being undertaken.
- The community is able to harvest grass from the site, under a ‘cut and carry’ system (allowing access to community members to cut grass and bring it back to their livestock).
- The initiative has cumulatively benefited more than 256 local people.

Building resilience for Laos’ most important National Park

The Nam Et Phou Louey National Park Western Corridor Restoration Project

The Nam Et Phou Louey National Park (NEPL NP) is the largest Protected Area in Lao PDR [Laos]. The park is vital for the conservation of the Northern White Cheeked Gibbon [Critically Endangered], Clouded Leopard [Vulnerable], and Dhole [Endangered] and supports over 40,000 people from 91 adjacent communities, who directly benefit from its clean water, and from timber and non-timber forest products harvested in the forest.

NEPL NP provides a diverse range of connected habitats – something which is becoming increasingly rare throughout Laos and Southeast Asia. For a number of species with wide ranges, such as dhole and many cat species, it is critically important to secure large, connected protected forest areas to ensure species survival.

The Nam Et Phou Louey National Park Western Corridor Restoration Project is restoring degraded forest in abandoned agricultural areas to widen a key link between the northern and southern parts of the Park. This project aims to widen the effective corridor, by rapidly accelerating forest regeneration through assisted natural regeneration techniques. The area is currently overgrown with fire-prone weed species and vine thickets, and without intervention is unlikely to recover in timeframes required for this area to provide a resilient wildlife corridor. Local communities are leading the restoration activities, providing important income and ownership of restored areas that are within the Total Protection Zone of the National Park. With the help of these trained community teams, we hope to restore 1000 hectares over the coming 10 years.

Ecotourism guide sits near summit of new cloud forest climb in NEPL © WCS Laos



Nam Et Phou Louey National Park © WCS Laos

Trillion Trees committed support to this project in mid-2023, and initial preparatory work has begun. Implementation is scheduled to begin in the early part of 2024 to coincide with the next major rains, which should start in May. Clearing of grasses and climbers, to help make way for the regeneration of new trees, will start in May 2024. The team has begun the process of community consultations before mapping out the restoration areas and is designing the layout of sampling plots that will be used to track natural regeneration in restored sites. Long-term community monitoring posts will start in early 2024. Staff are currently being trained in the use of FORMAPP, the Trillion Trees forest restoration monitoring platform, to ensure all the project’s interventions are tracked.

Support from Trillion Trees has provided an opportunity for the project to significantly scale up its restoration efforts, which we hope can be significantly expanded in future years. Forest restoration within the protected area will build resilience for endangered wildlife populations, improve ecosystem services such as water regulation, and support community incomes. Demonstrating cost effective reforestation approaches that can be scaled up will directly contribute to the Government of Laos Forestry Strategy target to achieve 70% forest cover across the country.

Key objectives:

- Widening the Western Corridor and promoting resilience and connectivity through assisted natural regeneration and wildlife-friendly native tree planting
- Supporting local Guardian Villages - Sakok and Nam POUNG - by providing income and ownership for the restoration activities under a conservation agreement.

Trees planted or regrown
Work begins early 2024

Hectares restored
-

People benefitting
2 Guardian villages

Projects

Indigenous groups lead natural forest restoration in Papua New Guinea

Community-led forest restoration helps protect wildlife habitats and support sustainable livelihoods

In the Bismarck Mountain Range of Papua New Guinea, a highly biodiverse forest landscape, Trillion Trees partner WCS has been working with a local community-based organisation called PNG Rural Development Inc. to establish a tree nursery and restore the degraded forest in Gebal. Gebal is a remote community of five Indigenous landowning tribal groups (Komneka, Minaka, Waikale, Mininz and Hasband), with an estimated population of approximately 600. These landowners have constitutionally recognized tenure rights over the Bisil Ku forest, an area of over 3,000 hectares.

The Bisil Ku forests are in a remote part of the PNG Highlands with limited infrastructure. The forest provides critical habitat for the Endangered Goodfellow’s tree kangaroo, the New Guinea Harpy Eagle, Boelen’s python, the Long-beaked Echidna, Dwarf Cassowary, and at least 10 species of birds of paradise.

Tree planting at Bisil Ku will help restore tree cover in deforested areas and enrich degraded forest with tree species of key importance for animal food, stabilizing soil, ensuring clean water provision, and enhancing socio-economic benefits to rural communities. The restoration project has a primary focus on native tree species [at least eight different native species are being planted], but some fruit trees are also being planted, to help provide food for local people.

Community members at the Bisil Ku restoration site © WCS Papua New Guinea



Trees planted or regrown
12,300 planted
8,900 growing in nurseries and ready to go
Hectares restored
11 ha
People benefitting
600 community members



Restoration site and site of one of the tree nurseries © WCS Papua New Guinea

The Forest Restoration project aims to plant a minimum of 20,000 trees within degraded areas of Bisil Ku over a two-year period. The project is also training community rangers, known locally as ‘wasman,’ to monitor restoration progress through the use of the Trillion Trees FORMAPP platform to document the tree species used, the number of trees planted, planting locations for future monitoring, the survival and growth rate of the planted trees and to produce digital maps of the reforested areas.

Materials and equipment have been distributed to the project sites to support tree-planting programs. Activities in the nursery and banners and posters have been printed for the program, to raise awareness of the project and its aims.

Despite the challenges of traveling to such a remote site, and persistent rains affecting access, this year to-date, a total of 12,300 seedlings have been planted on site, with a 99% survival rate, covering an approximate area of 11 hectares. An additional 8,900 seedlings are now growing in the nursery and ready to be transplanted out in the field in the next planting season or the next trip.

FORMAPP: Tracking our progress

Trillion Trees partners are committed to ensuring forest restoration activities supported by the ReForest Fund are tracked and monitored, ensuring transparency and accountability and allowing us to measure our impacts over time.

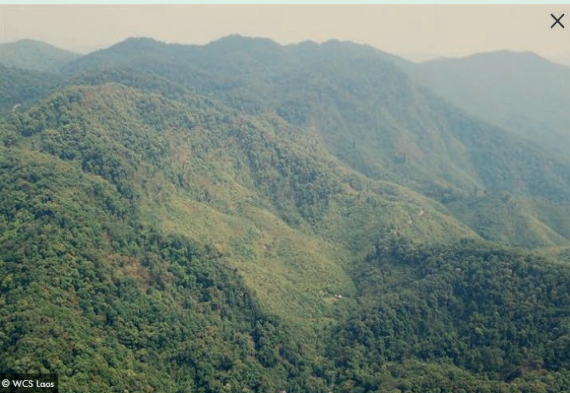
We track the performance of restoration efforts using a mapping tool that has been developed for the ReForest Fund. The tool, called FORMAPP, uses open source software, and allows projects to map their restoration sites via the free Cybertracker smartphone application.

FORMAPP allows projects to create their own database of restoration sites and permits the automatic sharing of restoration information with Trillion Trees without the need to invest in technical GIS skills or expensive GIS software.

Data from the projects is automatically uploaded to an online dashboard [a beta version is shown below], which allows the headline statistics from each project to be visualised on a map.

The data tools are provided freely to projects benefiting from ReForest Fund support. Trillion Trees also provides training to project staff on how to collect field data and use the platform. Over time we will offer more monitoring tools through the platform, such as tools for measuring social impact, and sampling biodiversity.

We are also working with Restor.eco to integrate our local level data into their global platform and hope to make FORMAPP a public good in 2024.

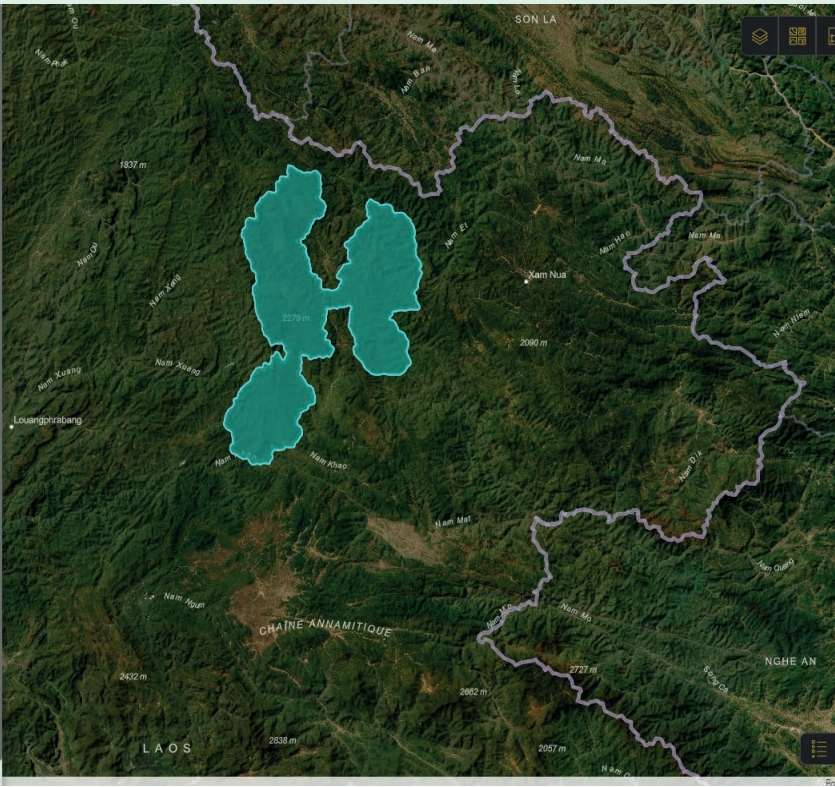


Nam Et-Phou Louey National Park

HOME

Background

The Nam Et Phou Louey National Park Western Corridor Restoration Project will restore degraded forest areas to widen a key linkage between the northern and southern parts of the Park. Clearance of forest in this area between 2011 and 2016 threatened the viability of this corridor, and this project aims to rebuild resilience by widening the effective corridor, by rapidly accelerating forest regeneration through assisted natural regeneration techniques. The area is currently over grown with fire prone weed species and vine thickets, and without intervention is unlikely to recover in time frames required for this area to provide a resilient wildlife corridor. All restoration activities will be conducted by local communities, providing important income and ownership of restored areas, that are within the Total Protection Zone (TPZ) of the National Park. The project has two objectives: (1) Widening the Western Corridor and promoting resilience and connectivity: the project will promote or



The right trees, in the right places, and in the right way

Trillion Trees applies a science-led approach to regrowing the right trees in the right places – and in the right way.

This means we prioritise the restoration of natural forests with native species; we apply the landscape approach to address the underlying drivers of forest loss; and we ensure local people are in control of decision making.

We always aim to ensure that our efforts conserve biodiversity, sustain ecosystems, and lift people out of poverty.

We recognise that restoring forests in the right way takes time and money.

- **Native species, locally sourced:** Our projects promote natural regeneration where possible, and source seeds locally when planting is needed to restore natural forest. We support community groups to establish nurseries to provide for future plantings.
- **Consultation and consent:** We choose projects that have long commitments in landscapes, and have taken the time to develop effective partnerships with local community structures. Our funds help projects to develop and deepen these relationships.
- **Monitoring and verification:** We ask our projects to map their restoration sites, so that the eligibility of the land can be independently verified, and so that the success of restoration efforts can be monitored in the future. We use a custom-built data storage system to track the progress of our projects.



In loving memory of Jean Luc, 1,903 trees are being planted. Jean Luc was committed to restoring humanity’s harmony and balance with nature in ways that engage closely with local populations and that are sustainable. Trillion Trees would like to thank Jean Luc’s family for their generous support.



Thank you

Thanks to the generous support of Starling Bank, Global Returns Project and Climate and Land Use Alliance and all of the individual donations that have made the ReForest Fund possible.

With continued support, we can restore our forests and protect the future of our planet.

For further information about Trillion Trees and how you can play a vital role, please contact **action@trilliontrees.org**

You can donate directly to the ReForest Fund at **trilliontrees.org/reforest-fund**