

The Rufford Small Grants Foundation

Final Report

Congratulations on the completion of your project that was supported by The Rufford Small Grants Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to jane@rufford.org.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details

Your name	Dr. M. Nicholson
Project title	Indigenous Forest Project, Plants for Life International, Kenya
RSG reference	1021-C
Reporting period	13.7.13 to 31.10.14
Amount of grant	£15000 (Ksh 1,980,000)
Your email address	mjlni@yahoo.com
Date of this report	Nov 2014

1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Control of exotic and invasive plant species		Yes		This has continued to be the most expensive part of the whole grant, especially the removal of <i>Cestrum aurantiacum</i> , bugweed, wattle and eucalyptus. We underestimated the magnitude of this challenge. We have a full-time team of workers getting rid of these invasive plant species. The eucalyptus stumps are too expensive to dig out so we have to keep cutting back the vigorous regrowth. <i>Cestrum</i> and bugweed have to be dug out. The problem is that the fruit of both species is eaten and spread by birds. The funds we received in 2013 and 2014 were insufficient to address this problem.
Tree planting			Yes	We planted up a further 4 acres of forest using approximately 6000 trees and shrubs of about 40 species.
Plant biodiversity			Yes	We have the largest number (>1350) of indigenous plant species in an <i>in situ</i> & <i>ex situ</i> collection in one area in any collection in East Africa. In 2013-14, we have collected and propagated two <i>Gigasiphon macrosphon</i> from the east African coast, an <i>Entandophragma angolense</i> , three <i>Zanthoxylum milbraedii</i> (four collections in Kenya's history), a further four of the rare African pawpaw <i>Cylicomorpha parviflora</i> , . We have also collected the largest of the Rubiaceae trees, <i>Fleroya rubrostipulata</i> . We are believed to have the only cultivated specimens in the world of these two species and our 40 <i>Embelia keniensis</i> , which we are ensuring goes on the IUCN Red List as Critically Endangered. We have also collected 1000 seeds of the IUCN CE <i>Vepris glandulosa</i>
Avian and mammal biodiversity		Yes		We now have recorded 183 species of birds compared with baseline in 2001 of 35 species. The forest is still too young for rarer canopy species and breeding colobus. Bush pig and clawless otter

				recorded in the forest.
Forest maintenance		Yes		The forest is growing well at all ages. Paths and forest maintained with new paths in main arboretum but invasive species are a major problem. Forest maintenance included removal of invasive, thinning, beating up, native forest mensuration, some labelling and extensive photography for field guide
Tree nursery and compound arboretum			Yes	The Brackenhurst compound has become the arboretum for rare trees. We let them go wild outside. The tree nursery has been moved. We have constructed a propagating house. We now line the whole nursery floor with plastic to prevent seedling roots going into the soil. We have brought in a lot of stone for both paths and the Impatiens beds.
Butterfly House	No			The funds budgeted have been used for staff salaries for invasive plant removal.

2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

Limited funds: we still need much more labour to control exotic invasive plants. We had hoped for £25,000 from Rufford and \$25,000 from American Forests (AF). We got £15,000 from RSG and nothing from AF who did not fund any African projects.

Rainfall was poor in 2013 which caused high seedling death. Rainfall unreliable in May 2014 but forest growth has been impressive.

3. Briefly describe the three most important outcomes of your project.

a. Networking and collaboration with outside agencies.

Kenya Tree Conference was held in our Garden in July 2013. Collaboration with MSB (Kew) was excellent in 2013 but they ran out of funds for the forest restoration work (FORRU) in 2014. Ashden (through BCGI) funding in part replaced this. We collected seed for KEFRI in 2014 and have now been registered as seed collectors for KEFRI and thence Genebank of Kenya GBK/MSB.

The PLI Director gave a lecture at the Morton Arboretum near Chicago in October 2013 and this is bringing in collaborative projects. We are also part of the BGCI / FFI Global Trees Campaign.

b. Plant biodiversity conservation: with over 1350 recorded species of native plants we have the largest collection of *ex situ* and *in situ* plant species in Kenya and probably East Africa. We have the only specimens in cultivation of four rare species, *Cylicomorpha parviflora*, *Embelia keniensis*, *Vepris glandulosa* and *Fleroya rubrostipulata*. We also have cultivated 28 of the plant species on IUCN Red List, a list which is in major need of revision.

c. Positive environmental impact is obvious (see photos): We have less soil erosion into the valley, soil organic matter is rising under the forest canopy. The visible impact is striking and widely-commented upon by visitors. Springs are returning. The birdlife is our main indicator of environmental health and this is increasing, as is the small mammal population.

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

We continue to have several local and Nairobi-based schools and churches that have visited for environmental training and started getting trees from us and planting up their compounds. We are now doing plant ID training for Maasai forest guides from community ranches in the Maasai Mara area. Locals harvest soap spinach (*Basella alba*) from the forest *gratis*, which improves nutritional standards.

5. Are there any plans to continue this work?

Yes, we need funds for another 2 years to complete our target of 60 acres over the period 2001-2012. We have been given access to government land on the other side of the river and are negotiating with Unilever to protect the immediate catchment upstream of our dam.

We are now trying to expand our restoration work to the Kakamega rain forest and to the borders of the Bwindi Impenetrable Forest in Uganda.

6. How do you plan to share the results of your work with others?

Yes. Our work has been the catalyst for others in Tigoni to replant with native forests. About 12 acres have been planted in Tigoni under private initiative in about eight different areas using our tree seedlings and advice. Our FORRU work will be published and we have been asked to publish an article in MITI, the Kenya tree magazine.

7. Timescale: Over what period was the RSG used? How does this compare to the anticipated or actual length of the project?

The RSG completion grant was used throughout 2013 and 2014 for salaries, fuel for machinery and transport, and tools/equipment but still our main limitation is shortage of funds. A larger grant would allow work to proceed much faster, especially on the control of invasive species. Forest maintenance will have to go on for at least a further 5-10 years to ensure invasive plants are controlled.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Staff salaries & casuals (inclu. NSSF & NHIF)	8000	9945	+1945	
Forest materials	1000	572	-428	
Tree nursery	1500	1636	+136	
Fuel	2000	1450	-550	

Vehicle maintenance	2000	1793	-207	
Office	500	12	-488	
TOTAL	15000	15408	+408	

We received the funds in USD Exchange rate in July 2013 was Ksh 132 to the pound. It rose in 2014 after we exchanged the funds. See attached file for exact financial statements.

9. Looking ahead, what do you feel are the important next steps?

If we can attract more funding through Ashden and Kew, the priority is to expand our seed collection and collection of rare trees and expand our restoration work into 2 new areas.

Did you use the RSGF logo in any materials produced in relation to this project?

The Rufford name is on our signboards. Several people asked us about Rufford and we always encourage branding of our donors.

10. Did the RSGF receive any publicity during the course of your work?

Yes, RSGF has been added to our billboard advertising the arboretum. Whenever we get visitors we inform them of our donors prior to our educational walks. RSGF was one of our main funding agencies in 2013/4, along with GEF and Ashden.

11. Any other comments?

Disappointment that we only received £15,000 not £25,000 which would have allowed a great deal more local employment (an extra 8-10 persons) for control of invasive plants.