

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. The Final Report must be sent in **word format** and not PDF format or any other format. 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. Please note that the information may be edited for clarity. 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	Colin Watkins
Project title	Wild African Violet Project
RSG reference	14.05.05
Reporting period	05/05 – 12/07
Amount of grant	£5000
Your email address	Colin.watkins@fastmail.co.uk
Date of this report	29.01.10

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
Wildlife field guide for the Uluguru Mountain Nature Reserve, Tanzania			yes	A four year task as the project trained and equipped guides and foresters to take photographs themselves and arranged for Tanzanian artists to be trained in RBG Kew to make botanical illustrations of key endemic Saintpaulia and other species.
Wild flower and butterfly field Guide to Mikumi NP,			yes	A two year task
Chumbe Field guide		yes		Research largely completed now that reef fishes have been identified and photographed.
Botanical art training		yes		Two Tanzanian artists, Riziki Semayani and Fredrick Maeda, were trained at RBG Kew by Christabel King FLS. The former has now recorded seven endemic species of wild flowers not previously illustrated including two species of Saintpaulia new to science described in Curtis's Bot. Mag. Of November 2009. If funds can be found one more Tanzanian will be trained as a scientific bird artist.
Collecting Gesneriaceae		yes		Eight 'missing' species of the plant family Gesneriaceae, and two new to science were collected by Dr. Elspeth Haston of RBG Edinburgh and Mr. John Mejissa of Sokoine University, Morogoro (SUA). More endemic species of the genus <i>Streptocarpus</i> will be sought if funds can be raised.
Training of Tanzanians		yes		Two Tanzanians John Mejissa and Mbaraka Abdullah were assisted with fees and subsistence through Forestry college to Diploma level and with continuing support are now attending University. John Mejissa is on the final semester of a BSc Forestry at SUA and Mbaraka Abdulla has commenced a part degree with the Open University of Tanzania having been appointed a specialist beekeeper for the Dept. of

				Forestry
Photographic training of eight Tanzanian foresters and wildlife wardens		yes		It will be noted that prior to this project there is not a photograph by any Tanzanian in any field guide – birds, butterflies, mammals etc. Photographic training was provided by Amy Gordon, Emmeline Watkins, both professional photographers and by Colin Watkins who provided the equipment. One of these Tanzanians the botanist Moses Mwangoka is becoming an outstanding close up/macro photographer.

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

The amount of time to find, photograph, identify taxonomically and describe wild flowers was seriously underestimated. Many of the important flowers were at high altitudes of up to 6,000 feet, in difficult-to-reach montane cloud forests. For example obtaining paintings of *Saintpaulia goetzeana* several expeditions were required as it only flowers when the temperature drops to a few degrees above freezing. This species had not been seen in the wild since well before WW2. The two new species took two expeditions by Dr. Haston and two further expeditions by the artist Riziki. The section on Gesneriaceae in the Ulugurus will be attached to this report.

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

- a. The involvement of Tanzanians in the compilation and illustration of field guides has generated a wider understanding of the importance of plants particularly in the Eastern Arc Mountains, a globally important Biodiversity Hotspot. It has also demonstrated the formerly underestimated competence, indeed brilliance, of Tanzanians in disciplines such as scientific illustration.
- b. The Uluguru Field guide coincided with the gazetting of the Uluguru Forest Reserves as a 'Nature Reserve' - NRs. These reserves now receive the same levels of wildlife protection as National Parks. Additionally through the Simpson Trust, we were able to introduce the Uluguru NR to the World Land Trust who now has a major tree planting project in the formerly farmed gap between the North and South Ulugurus. This in turn has drawn support from German Government aid agencies to provide funding for infrastructure to develop tourism in the mountains, which will provide employment for many local people.
- c. Support to research, notably to the National Herbarium of Tanzania and RBG Edinburgh and RBG Kew. RBGE undertake cytological and molecular research into the plant family Gesneriaceae and RBG Kew compile the definitive account of this family in *Flora Tropical East Africa*

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

It was noted by the late Mr. Sawe the Head of Tanzania's Nature Reserves that our project demonstrated a level of local teamwork that would be difficult to achieve through normal channels. This project used local foresters, guides and wildlife wardens throughout and Government

Departments such as the Department of Forests, the Commission on Science and Technology, the National Parks, the National Herbarium, the Herbarium at University of Dar es Salaam and the University's Department of Art and the Tanzanian College of Art at Bagamoyo. Local NGOs involved included the Wildlife Society of Tanzania (WCST) the Tanzanian Forest Conservation Group (TFCG) and CARE Tanzania. Free field guides have been made available to WCST, the Department of Forestry and through them to schools. One of the artists, Fredrick Maeda, now teaches botanical art at the University as a module in undergraduate fine art courses.

5. Are there any plans to continue this work?

Yes, it is hoped to compile at least three more guides for: Udzungwa NP, Usambara NR, and Ruaha NP. It is also hoped to train one more Tanzanian in scientific art to include flowers and birds. Currently all bird books for the East African region are illustrated with paintings or photographs by 'westerners'.

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

The field guides are sold both locally and through a bookshop chain in Dar es Salaam as well as through local hotels and lodges close to or in the National Parks. Because they are in Swahili and English they are invaluable to guides and others who only have rudimentary English, usually those who did not attend secondary school. As these books are 'field' guides it is not at this stage intended to put them 'on-line'. Riziki's botanical drawings are sold through local galleries and she has become an Artist in Residence' at the Ngorongoro Gibbs Farm Lodge (see their website under Sanaa/Art). She is, relatively, a high earner now selling originals for between US\$250-400 and prints for \$60-100. (The minimum wage in Tanzania is equivalent to \$130 a month)

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

The RSG funds, together with those from the Linnean Society of London, the Simpson Trust and Watkins family were used to kick-start the project. Because the project broke new ground by involving Tanzanians as project participants (as distinct from safari guides, drivers, cooks and porters etc) it was slow. Furthermore, as indicated above, obtaining images and details of plants demands considerable patience in the terrain involved. What might have taken an expert tropical botanist from a British University around 18 months for the compilation of a flower guide and another year to publish it, the African violet project training, equipping and involving local people took more than treble the time – 7 years rather than 2 or 3. An overseas botanist would have been unlikely to arrange for the translation of work into Swahili and oversee, as a by-product, the creation of some new botanical terms in that language.

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
Training and equipping local Tanzanians to photograph wild flowers and to train the first botanical artist	£30,000	£30,000		Grants from RSG, Linsoc and Simpson provide half this amount and the other half was from a legacy from Kathleen Watkins, a Colonial Service nurse and hospital matron who worked in Tanzania for more than twenty years.
Total	£30,000	£30,000		

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

1. To complete and publish the Chumbe Island Wildlife Guide as soon as possible, if possible before this summer tourist season but perhaps more realistically by Christmas 2010. A grant of US\$5,000 has been secured from the Wildlife Conservation Society,
2. To commence field guides for Udzungwa NP and Usambara NR.
3. To train one more Tanzanian in scientific drawing and botanical and bird painting.
4. To revise and reprint the Mikumi NP guide with plates of commonly seen birds (c.60 species)

10. Did you use the RSGF logo in any materials produced in relation to this project? Did the RSGF receive any publicity during the course of your work?

RSG logos were not used but acknowledgement in reports and published guides were included. It is possible that when publishing the Chumbe Island field guide RSG and WCS logos would be used. It is anticipated that WCS Funds of \$5,000 would be used to complete the research and RSG funds, if provided, used for the production, printing and distribution.

11. Any other comments?

The overall cost of the project has now reached just over £70,000. The Watkins family have provided a total of £40,000 but have now exhausted the legacy. A grant of US\$13,500 was provided by the CEPF administered by Conservation International and these funds have been used to fund the printing of the Uluguru Guide.

Dr Neil Burgess, now Professor of Conservation Biology at the University of Copenhagen but formerly of the University of Cambridge provided the 'Walking' section of the Uluguru guide and acted as editor. His contributions were *pro bono*. Similarly Colin Watkins time has been free and his flights, accommodation and subsistence have been paid for separately and are not included in the totals above.