

## The Rufford Foundation

### Final Report

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Congratulations on the completion of your project that was supported by The Rufford 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](mailto:jane@rufford.org).

Thank you for your help.

**Josh Cole, Grants Director**

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Grant Recipient Details	
<b>Your name</b>	Kerri Wolter
<b>Project title</b>	Cape Vulture captive breeding and release programme Magaliesberg Mountains, South Africa
<b>RSG reference</b>	14872-1
<b>Reporting period</b>	Nov 2014 – Nov 2015
<b>Amount of grant</b>	£2,760
<b>Your email address</b>	Kerri.wolter@gmail.com
<b>Date of this report</b>	21 October 2015

**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
Supplement the existing Magaliesberg Cape vulture population		X		10 captive bred chicks have been released to date. Eight chicks are free-living (one is suspected dead, the other was re-captured) yet all have failed to range further than 7 km from the property or forage outside of VulPro's pro-offered food. They require some management in the form of recaptures when becoming grounded outside the property in unsafe (human harm) areas.
Publish protocols used for egg collection, artificial incubation, and housing of Cape vultures			X	Version 1.0 is available at <a href="http://www.vuplro.com">www.vuplro.com</a>

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

Our 2015 breeding season was a disappointing one. Our captive breeding population produced the most eggs to date but the success rate (chick to fledge) dropped from 50% in 2014 to 33%. Numerous parents killed their chicks in the hatching process within 1 day after eggs were returned to the parents, soon after the chicks externally pipped (broke through the shell). Two chicks died with their parents at 3 and 9 days old.

Our failures constantly force us to re-evaluate our protocols. In June 2014, we were warned by expert breeder Jemima Perry-Jones that a decrease in success may happen from parental 'sabotage'. To combat this, upon her recommendations, we plan to hand raise each chick to 2- 3 weeks old before returning them to the parents for rearing. Kerri has ample experience hand raising Cape vultures, yet had never tried to return an older chick to parents. This was successfully conducted for the first time with the last chick of the 2015 season. We are prepared to continue this method with all chicks and attempt any new protocol which has the potential to increase success rates. However, this method is extremely labour intensive and our facilities are not adequately equipped to handle the hand raising of 15 (or likely more) chicks each season.

VulPro lost an integral staff member (Assistant Manager) in June 2015, spreading the workload among all other staff members. The responsibility of managing the breeding programme, including hand raising chicks, fell onto the shoulders of volunteers and an in-resident student. The position has since been filled.

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

1. Our protocols were augmented to increase hatching success. VulPro now aims to hand raise every chick for 3 weeks before returning them to the parents.
2. Our captive Cape vulture population is breeding successfully and in large enough numbers to sustain a highly influential supplementation programme. Our breeding population has expanded to 13 breeding pairs this season and is still growing. The programme has the potential to reintroduce over 10 chicks to the wild each year. In addition, the programme is expanding to include other species. Our first African white-backed vulture pair successfully bred this year. Given the rate of decline of this once common species, VulPro plans to release all captive bred AWBV individuals as well.
3. Our current protocol of releasing at the breeding facility is not feasible. Released chicks have failed to forage outside of the breeding/release site for food. A hacking location must be sourced and created as soon as possible to foster desirable ranging, flying, and feeding habits.

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

The supplementation programme especially benefits the indigenous people of South Africa who are not a historically wealthy people. They are rural dwellers who rely hugely on subsistence farming to survive. In many cultures, such as the Zulu, a man's wealth is calculated by how many cattle he has. Drought and disease are two of the biggest fears for them, especially highly contagious diseases which can wipe out their entire population. Vultures and their unique ability to metabolise disease are vital to the maintenance of a healthy ecosystem, especially in the rural areas, where dipping and vaccinations are not routine. The swift disposal of any carcasses especially infected ones by vultures is vital to breaking and preventing the spread of disease and ensuring the survival of rural people trying to maintain a traditional way of life. South Africa's rural communities are huge and quite isolated from the rest of the country in terms of veterinary support, education and understanding the benefits of a healthy environment. The supplementation programme is one way in which VulPro works hard to balance this without jeopardising ancient tribal customs, assisting rural farmers.

## **5. Are there any plans to continue this work?**

This project must and will continue indefinitely. A satellite breeding facility has been donated from private funds. This site is located 3 hours from VulPro's main facility near Belfast, South Africa. This satellite facility will run under the auspices of VulPro and has been constructed to house up to 75 members of our increasing non-releasable breeding population. The number of non-releasable Cape vultures, African white-backed vultures, and lappet-faced vultures housed at the centre increases annually. As these birds mature they will pair and breed, placing growing pressure on VulPro's facilities and resources.

It is imperative each captive bred chick is released with a GPS tracking unit to ensure their safety and confirm ranging and breeding efforts. We are actively working to fundraise for these units. Funding for multiple devices has already been secured.

We plan to initiate a new release site for captive bred chicks close to the Magaliesberg Nooitgedacht Cape vulture colony. This release site project materialised from the lack of natural foraging behaviour seen from the first 10 released captive bred chicks. We are in the beginning stages of putting together the project proposal with colony landowners but hope to move forward this year.

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

VulPro is hosting and sponsoring the second annual Vulture Seminar in October 2015. This is a 3-day workshop-based gathering of vulture conservationists and researchers from Southern Africa and abroad. Captive breeding and reintroduction, specifically of the Cape vulture and bearded vulture, will be the focus of one workshop. Protocols will be discussed as well as the potential for expansion to other species.

A Master's student with Rhodes University is publishing her thesis titled 'Release success of captive bred Cape vultures in the Magaliesberg Mountains, South Africa' in March of 2016. This thesis details the integration and survival of the released chicks, as well as how protocols may have impacted chick behaviors. We plan to produce our Cape vulture hand-raising protocols in the next year for website publication.

VulPro routinely consults with other vulture breeders around the globe to obtain and provide advice. In September 2015, VulPro hosted two volunteers from GREFA, a Spanish conservation organisation which breeds the Eurasian black vulture. The relationship was mutually beneficial with knowledge transferred to both sides. VulPro staff have also advised the Indianapolis Zoo, USA, which has been unsuccessful in breeding their Ruppell's vulture pair.

**7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?**

The sponsored Grumbach incubator was and is being used for our vulture captive breeding programme and we hope to further this support into next year's breeding season. VulPro has been fortunate enough to collaborate with a local conservation organisation, DeWildt Cheetah and Wildlife Trust, to incubate an Egyptian vulture egg which we hope to raise and keep here at VulPro. This has extended the use of our incubators past the Gyps vultures breeding season of 6 months/year. However, for the purposes of our vulture breeding efforts, the anticipated project length matches the actual length of time as per the original submitted proposal.

**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.**

The exchange rate used is 0.056 BPS to 1 ZAR. This was the amount quoted in the original RSG application and the rate used at the time of incubator purchase.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Grumbach incubator	1,957	1,982	-25	Inflation costs
Shipping	28	28	0	
6 months electrical costs (2015)	336	358	-22	Electrical costs taken from Sept 2015 electricity bill average 1.65 ZAR/kWh. Incubator output estimated 648 kWh/mo.
6 months electrical costs (2016)	336	0	336	Not yet spent as this was budgeted for the start of our 2016 season.
Patagial tags (20 ct.)	82	82	0	
Patagial tag shipping	21	21	0	Shipped locally within Madrid, transported to South Africa for free
<b>Total</b>	<b>2,760</b>	<b>2,471</b>	<b>289</b>	

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

For the ideal expansion and ultimate success of this breeding/release programme these objectives must be achieved within the next 2 years:

1. Increase VulPro's capacity for hand raising chicks - this includes the expansion of facilities to include one hatchery at least two brooders (i.e. Brinsea TLC-50 Advance Parrot Brooders) and the addition of a full-time Breeding Programme Manager.
2. New release site - an acceptable release site must be confirmed and construction started. This step is crucial for appropriate chick integration to wild behaviors, to prompt natural foraging and breeding at wild colonies.

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

The Rufford Foundation is thanked for their contribution to the breeding programme in monthly breeding reports which are distributed to sponsors, donors, and VulPro members. The Rufford Foundation was mentioned in all press releases published regarding the February release event and VulPro's bi-annual newsletter, the VulPro Flyer, which is distributed electronically to all of VulPro members, friends, and sponsors. The VulPro Flyer and press releases are also posted on our Facebook profile which has 5,000 followers and our Facebook page which has 3,200 followers. The Rufford Foundation logo is listed on VulPro's website under the Sponsor tab.

**11. Any other comments?**

This contribution has been instrumental in the success of our 2015 breeding season. Thank you for supporting our efforts to save the species!