

Final Evaluation Report

Your Details	
Full Name	Kathleen Frances Carstens
Project Title	Securing current and future breeding sites of the Cape Parrot (<i>Poicephalus robustus</i>) through research and direct intervention
Application ID	29098-1
Grant Amount	3,199
Email Address	kate@wildbirdtrust.com
Date of this Report	20 October 2021

1. 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
Searching for new and potential nests				Three forest patches searched systematically and comprehensively.
Nest inspections				20 known occupied nests inspected.
Monitoring nesting sites for activity				43 nesting sites monitored from the ground.
Forest scans using drones				Two forests scanned.
Construction of new nest boxes				Five nest boxes constructed, 35 more in 2022.
Installation of nest boxes				Four installed.
Data analysis and write-up				Data analysis currently underway with paper 75% written.
Submit for publication				Paper aimed to be submitted late 2021 or early 2022.

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

Unfortunately, a few months after receiving this grant, the Covid-19 pandemic hit, forcing field work activities to come to a halt due to the imposed travel restrictions. However, toward the end of 2020, it became possible once again for field work to resume, but where the project needed to prioritise habitat restoration over other activities to catch up on missed time due to the lockdown. In 2021, construction of nest boxes began, and we have been able to complete five boxes and install four. We will continue to construct the remaining boxes to achieve a total of no less than 40 boxes installed over the coming 2 years.

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

One of the most important outcomes of the project has been the ability to trial new technology to assist us with monitoring nesting sites. Through your support, we have been able to test and refine the use of a drone and a camera pole to inspect and monitor Cape parrot nesting sites. This has allowed us to inspect 11 nests that were previously inaccessible, increasing the number of nests we can inspect by 26%!

Secondly, one of the most important outcomes has been a refinement of the methods used to monitor breeding activity. This has allowed us to describe the breeding behaviour of this species in detail, something which has never been done in this area,

and previously only described at a few nesting sites elsewhere in the range. These new insights are going to be carried forward to allow for a rapid assessment of the activity at new nesting sites in new areas, as we work toward finding new nesting sites in previously under-explored forest patches.

Thirdly, the rollout of the nest box project has been much anticipated, and we were thrilled to kick off the installation at the end of 2021. A lot goes into the placement of each nest box to try and ensure that these artificial nesting sites match where possible the characteristics of natural ones. Each box takes roughly half a day to install and once the box is up in the canopy, we need to consider factors such as accessibility by the pair, line of site from the ground for behavioural observations, accessibility for future field researchers, and so on. Now that we have started, we know that we can do more! Over time, with the use of nest cameras and ongoing monitoring, we can establish how successful pairs are that use these versus natural nests.

4. Briefly describe the involvement of local communities and how they have benefited from the project.

The Cape Parrot Project employs eight members from the nearby rural communities to assist with various aspects of the organisation, including habitat restoration. For this project with Rufford, two members of the team assisted the Research Manager, Cassie, to build nest boxes, providing them with the opportunity to learn a new skill, something which they both felt gave them a sense of doing something to directly help Cape parrots for the future.

In addition, four members of this team accompanied Kate and Cassie during the installation of the nest boxes, where they got to learn some of the rope skills required in this process: setting up the main anchor for the climber and preparing the nest box before it got hoisted into the tree.

We enjoy allowing our team members to learn a wide variety of skills, and the construction and installation of nest boxes was something new and something that we know will be an asset in our team to roll out more boxes in future.

5. Are there any plans to continue this work?

We see this project as being something which we will keep ongoing for many years. Searching for new nesting sites is something that will expand into new forest patches in the area, and further afield in other parts of the species' distribution in 2022. Monitoring and inspection of nesting sites will continue annually. The construction and installation of new nest boxes in the three forest patches near the CPP base will continue until 40 nest boxes have been installed. In time, the potential to install nest boxes in other parts of the species' range will also be investigated, especially in the far north of the country where an isolated, relict population of only 120 birds remain, and who are believed to be limited by a shortage of natural nesting sites. Members of CPP will be travelling to that region in 2022 to scope future projects there.

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

We are currently writing an article on the breeding biology of the species which describes nesting sites, and the new methods used to inspect cavities. We aim to publish this paper in the coming few months. In addition, I will present information about this project at the upcoming International Ornithology Congress in November 2022. Our Facebook platforms have also been used to highlight the results of this work. You can view our Facebook page here: [Cape Parrot Project](#).

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

This grant was used during November 2019 to October 2021, 10 months longer than anticipated due to the Covid-19 pandemic.

8. Budget: 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. It is important that you retain the management accounts and all paid invoices relating to the project for at least 2 years as these may be required for inspection at our discretion.

Item	Budgeted Amount £		Actual Amount £	Difference £	Comments
DJI Mavic Pro Drone.	1133		1157	+24	
4KAM pole camera	923		1005	+82	
Go-pro Hero 4 camera	166	189	194	+5	
Monopod for Go-Pro	17				
1 x SanDisk 32 GB mem cards	6				
Climbing helmet	50		55	+5	
Pulley device	29		22	-7	
2 x Rope slings	16		22	+6	
Turboplane blade	174		146	-28	
Angle grinder	63		38	-25	Replaced drill
Working gloves	8	23	80	+57	Bought more than budgeted to enable more team members to work with own sets due to covid
Safety glasses	3				
Face masks	12				
6 x Notebooks	5		5		
TKY Power - Chainsaw			247	+247	Bought with money not spent on hardware
Baggage claim for pole camera			136	+136	

<i>Angle grinder</i>		36		Bought as a spare to allow two to work simultaneously
Sub-total	2605	3143	-538	
TOTAL	3199	3143		

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

- The construction of more nest boxes.
- Installing nest cameras to monitor breeding success.
- Installing more boxes in suitable forest patches where nests are lacking.
- Searching more forest patches for new nesting sites.
- Expanding our research into other parts of the species' distribution.

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

- Used logo in several presentations to the public.
- Used logo twice in our Facebook page.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

Dr Kirsten Wimberger - project director, assisted with project planning

Christine Jooste - project accountant, assisted with maintaining the budget

Cassie Carstens - research manager, data collection, nest box construction, nest box installation

Siya Sonjani, Wanda Limba, Yamkela Damba, Sakhi Mabaso, Vuyani Mafika & Dumisani Sohobo - nest box construction, nest box installation

12. Any other comments?

Thank you for your support and understanding of the delays with our project due to the Covid-19 pandemic.