

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 Paul F Donald
Project title	Discovering the eastern migration routes and wintering grounds of the critically endangered sociable lapwing <i>Vanellus gregarius</i> using satellite telemetry
RSG reference	16.11.07
Reporting period	2008-2009
Amount of grant	£4990
Your email address	Paul.Donald@rspb.org.uk
Date of this report	November 2009

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
Fit two 9.5g satellite tags to sociable lapwings in Kazakhstan in summer of 2008			Yes	Tags fitted successfully
Track subsequent movements of birds		Yes		One bird was tracked as far as Turkey, where a new stopover site was discovered. The tag then seems to have become dislodged and no further data were received. Unfortunately, the other tag failed soon after being fitted
Get local field teams to locations of tagged birds		Yes		Field teams went to locations in SW Russia and Turkey of the bird that migrated on the western route, but could not find the bird
Birds tracked back from wintering grounds to breeding grounds		Yes		One bird lost tag but was relocated in Kazakhstan in summer of 2009 and identified by its colour rings
Train young ornithologists in Kazakhstan in bird handling and research methods			Yes	Kazakh students were involved in expeditions to fit the tags and throughout subsequent work

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

The biggest problem was the premature failure of the tags. We have successfully tracked birds of a number of species before using the same tags and the same harnesses, but one tag stopped transmitting very shortly after being fitted and the other was tracked as far as Turkey where transmission ceased. However, the bird carrying this tag was relocated, without its tag, in Kazakhstan in summer 2009 and identified by its colour leg rings. It thus appears that in this case at least, the harness had failed, and the tag had been lost. Although it was disappointing that the tag was lost so soon, it provided very useful information on the methods used to attach the tag and we are reviewing harness design as a result. The failure of satellite tags, generally for unknown reasons, is a common problem in any such study. In this case, uniquely, we were able to ascertain that the failure of at least one of the tags was due to the failure of the harness, since the bird was relocated alive and well the following summer with its tag. This has profound implications for harness design in this and other species. A further problem was that the 9.5g tags available at the time are at the top limit of what a bird the size of Sociable Lapwing can carry so we were only able to fit them to the largest birds. Despite capturing a number of birds in eastern Kazakhstan, only one was sufficiently

large to carry a 9.5g tag, so the other was fitted to a bird in central Kazakhstan. The arrival in 2009 of new 5.5g tags, replacing the 9.5g tags we used in Kazakhstan, will reduce this problem in future.

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

1. In visits to eastern Kazakhstan to fit the tags, a number of new breeding colonies were found, greatly adding to our knowledge of the distribution of this species in this little visited region. This expedition involved local students, who were trained in bird survey methods at the same time.
2. A new migration stop-over location was found in Turkey, which members of the local BirdLife Partner visited to look for the tagged bird. A film of their expedition is posted here: http://www.dailymotion.com/ondercirik/video/x78h7g_sociable-lapwing-survey_tech. The map below shows the movements of the two birds fitted with tags. The western bird also stopped at a migration point in Stavropol, SW Russia, that is known to have held large numbers of birds in the past, thereby confirming the importance of this site. A Russian field team visited this site in October 2008 but failed to find the bird.
3. The rediscovery in Kazakhstan in spring 2009 of the bird that reached Turkey the previous autumn but then stopped transmitting, found by its unique combination of colour rings, proved immensely helpful, as we know that the reason the tag had stopped working was that the harness had failed and the tag become detached. Previous instances where tags have stopped working could not be ascribed to tag failure, harness failure or death of the bird. We now know that harness failure is an issue that needs to be addressed.

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

The project involved representatives of the Association for the Conservation of Biodiversity in Kazakhstan and the Turkish BirdLife partner, Doga Dernegi. Also involved were a number of students from universities in Kazakhstan. A Russian field team visited the Manych Wetlands in Stavropol, and although they failed to locate the tagged bird, they did find a large number of Sociable Lapwings, confirming the importance of this site.

5. Are there any plans to continue this work?

Yes, we have secured some funds to buy more tags to deploy in 2010 and are currently seeking more funds to purchase the newly available 5.5g tag. In 2009, we were delighted to receive an extension to an existing Darwin project to expand the work we have so far been undertaking on the breeding grounds to the passage and wintering grounds. This Rufford-funded project, which followed on from a previous Rufford-funded project, has provided invaluable lessons for taking this work further.

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

All this work will be published in scientific papers in due course. The project website, currently under development, carries news of all project activities. See <http://acbk.kz/index.php?lang=en> , then 'Sociable Lapwing Project'. All major discoveries are accompanied by press releases.

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

The tags were fitted in summer 2008 but unfortunately, both had failed by the end of October 2008. We were hoping that the tags would transmit locations for a year or more. We used the money saved by truncated data download to try to relocate the tagged birds in summer 2009 by their colour rings. We managed to locate one of these birds in May 2009 and followed it through the breeding season.

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
Two 9.5g solar PTT tags, from Microwave Telemetry Inc., USA	£2990	£3150	+£160	Change in £/\$ exchange rates
Cost of data downloads	£1000	£300	-£700	Early failure of the tags
Field surveys	£1000	£1540*	+£540	Additional field surveys
TOTAL	£4990	£4990		*NB actual costs higher than this, difference paid from other sources

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

The tracking of more birds to understand better the migration routes and wintering grounds of this critically endangered species remains a major conservation priority that we are committed to address. The need for this was highlighted by the discovery of significant hunting pressure on the species on migration. To address this problem, we need to know more about the migration routes and stopover sites. The development of the new 5.5g tag should greatly help, as this is light enough to be attached to any Sociable Lapwing and harness retention should be better. As a result of this project, we are revising our standard harness.

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?

Yes, RSGF was mentioned as a funder of this work at a talk to the German Ornithological Society in Bremen in October 2008. The paper was published in the proceedings of the conference as:

Kamp J, Donald PF, Koshkin MA, Schäffer N, Sheldon RD (2008) Zugrouten und Winterquartiere des global bedrohten Steppenkiebitzes *Vanellus gregarius*. Vogelwarte 46:304–305. Symposium presentation, 141th annual meeting of the Deutsche Ornithologen-Gesellschaft (DO-G), Bremen 01–06/10/2008.

RSGF was also mentioned as a funder in an article appearing in the popular German birdwatching magazine *Der Falke*:

Kamp, J. (2008) Der Steppenkiebitz. *Der Falke*, 55: 130-135.

RSGF has also been acknowledged in other articles and will be fully credited in all further published outputs of this work. The RSGF logo is currently being added to the project website.

11. Any other comments?

The early failure of the tags was a disappointment but nevertheless we gained a great deal of useful information from the work. We found a number of previously unknown breeding colonies in eastern Kazakhstan, found a new migration stopover location in Turkey, trained a number of Kazakh students (some of whom have remained with the project in 2009), funded an expedition to a rarely-visited part of Turkey by the local BirdLife Partner and learned about the reasons for apparent tag failure.

