

The Rufford Foundation Final Report

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.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details	
Your name	Maria Inés Pereda
Project title	Colony Guardians and predator exclusion to protect Saffron-cowled Blackbirds Populations in Argentina
RSG reference	23542-2
Reporting period	Final Report
Amount of grant	£5000
Your email address	ine.pereda@gmail.com
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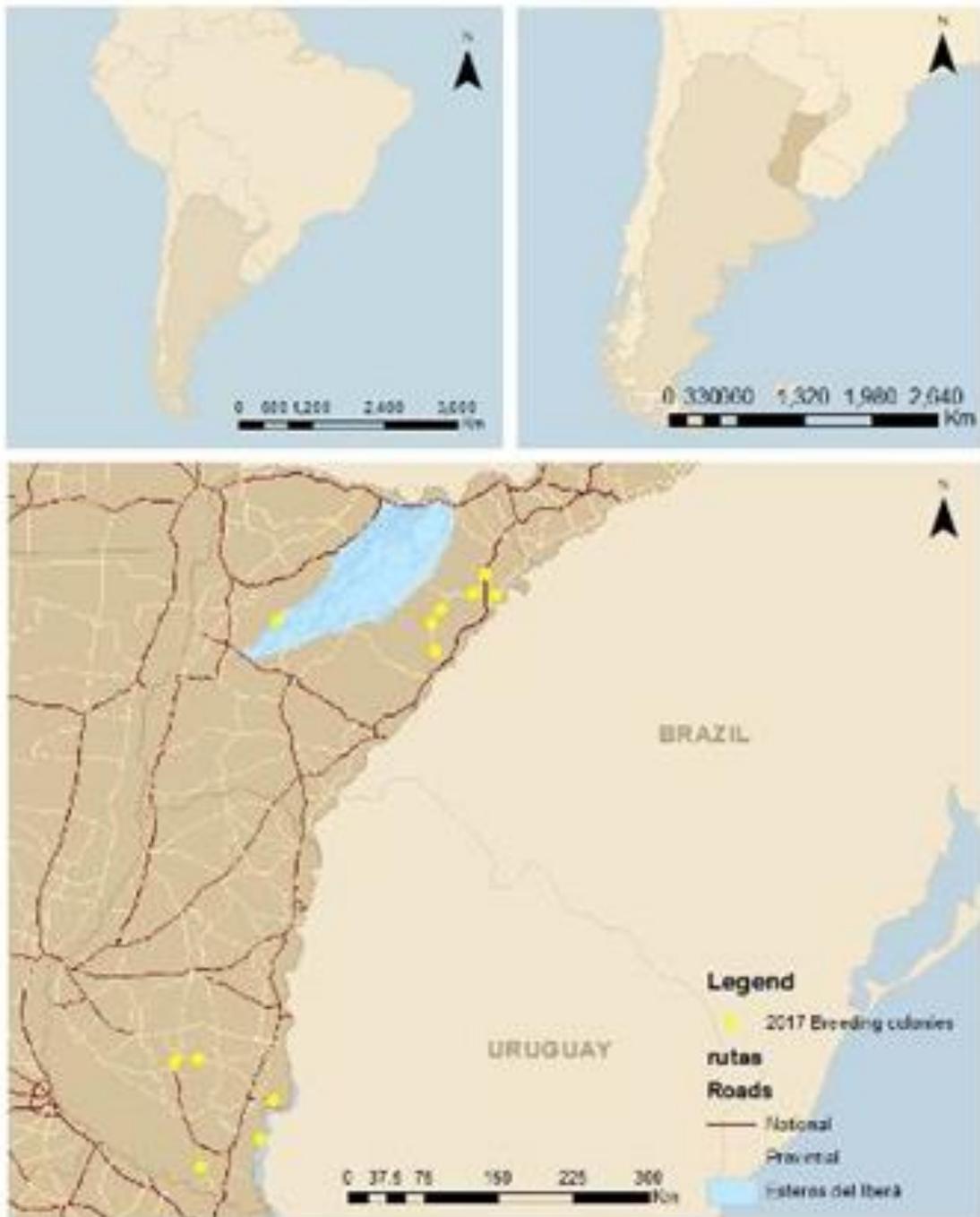
1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
1. Detect the reproductive colonies and know the actual distribution of the species.				We detected a total of 14 colonies, of which four were protected, eight were monitored and two were detected but not monitored due to their inaccessibility. Two provinces were prospected; however efforts were focused on the province of Corrientes. The campaign took 65 days, 23 people and 19.191 km were covered in both provinces. The activities are detailed in its section (see map below).
2. Increase the reproductive success				Out of the total of nests found (74 nests) we protected 34 nests with predator exclusions; 35 nests were left as control cases and the last five were detected but not monitored due to their inaccessibility. The protection, as in previous campaigns was firstly during the incubation stage and secondly during the chick stage. During this campaign, there was a total nesting success of 31% in unprotected nests (percentage of nests with chicks that fledged), while we obtained a total of 62% of nesting success in protected nests. During 2016 and 2015 we obtained a 69% of nesting success in protected nests and a 32% of nesting success in 36 in unprotected nests (n = 57 as published in 2017 Pucheta <i>et al.</i>) showing constant values in the technique applied so far.
3. Monitor the species reproductive development to assess the reproductive success and identify how to tackle threats.				The main threats to colony sites in the 2017 nesting season were the burning of grasslands and the expansion of forestry plantations. The transformation of pastureland to forestry plantation over the last few

			<p>years has caused the loss of various colony sites in north-east of Corrientes. The main cause of nest failures was depredation, which could be associated with changes in the environment. The depredation of nests is greater in areas where natural vegetation is fragmented and in areas where the landscape has been greatly modified as compared to large areas of contiguous natural vegetation.</p> <p>Part of the monitoring protocol to assess the reproductive development involves banding adults and chicks to follow through in consecutive years. During the 2017 season we managed to band more than 100 individuals, of which 72 were chicks. This showed very positive results when in the 2018 campaign we were able to detect 19 banded individuals out of which XX were chicks from previous years already sexually mature.</p> <p>As part of the post monitoring objectives we performed a winter survey in search of wintering grounds in July 2018. We managed to detect a new colony in the northern most of its distribution in the province of Misiones. This finding happens to be of considerable importance as the great decline of the northern population of saffron-cowled blackbirds was due to the loss of its habitat after the construction and inauguration of the Yaciretá Dam in 1994. The species were within the company's private reserve and future work is programmed during following years.</p>
<p>4. Raise awareness about illegal poaching in the local communities and mitigate poaching in breeding colonies.</p>			<p>We participated in several local events and broadcast news programmes to disseminate the species threats, our work and raise awareness among local communities in both provinces. More towns are including the species as ambassador within their elementary school</p>

			<p>programs. We also contributed in the design of a conservation management project for the pampas meadowlark with the hope to apply similar techniques to this critically endangered species in the south of Buenos Aires province. Each activity is described below.</p> <p>A strong relationship was built with the parks and wildlife government of Corrientes being able to train one of their park rangers in the techniques applied in the project and surveying endangered bird species. During 2018 a workshop for the park rangers was to be organised but cancelled due to a last minute complication. However we wish to complete this during 2019.</p>
<p>5. Monitor, adapt and improve the methodology used</p>			<p>We adapted the nest protection to the different types of wetlands adjusting its size and the materials used and the time during the day when installed. The monitoring hours to assess the adjustment of adults to the protections was also adapted on previous experience during the 2016 campaign. We also managed to identify new sites within Corrientes province.</p> <p>However, a bigger effort needs to be done regarding predation risks and species and deliver science on the impact of the land use change (forestry industry) due to the loss of habitat experienced each year.</p> <p>During 2018 as part of my master's degree programme in the University of Western Australia I started research on the land use change of Corrientes province since the creation of the national law to provide incentives and subsidies to this industry. The remote sensing project aims to compare the land use change between 1994, 2002 and 2018 to be able to detect the actual habitat suitability for the species. The paper is being written at the moment.</p>

Objective 1 - 2017 breeding colonies. The colonies in Entre Rios where only monitored.



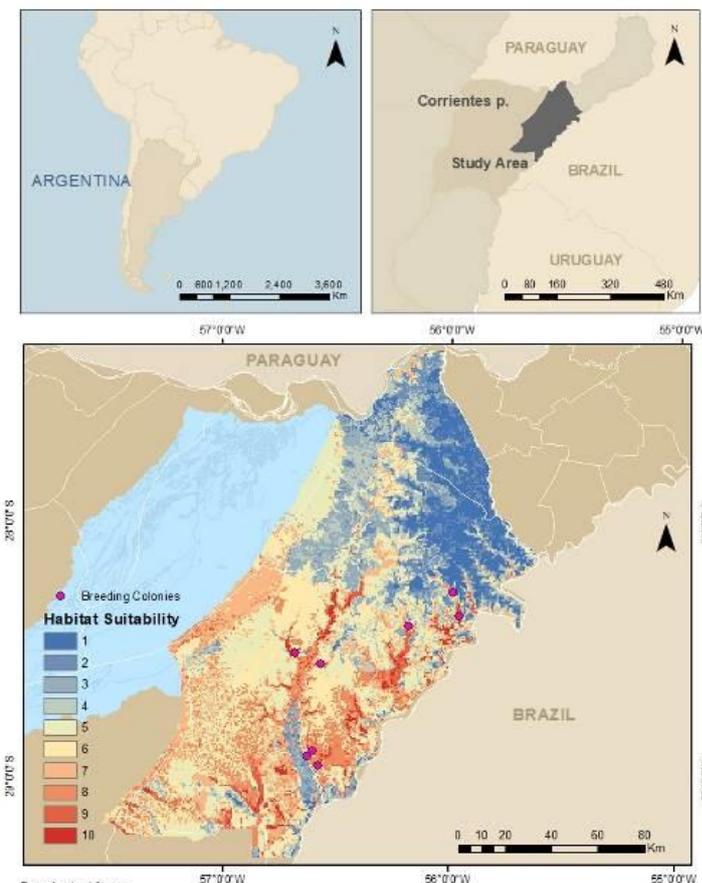
Objective 3 - Banded female. We follow a colour code that indicates the year in which it was banded and whether they are adults or chicks plus a metal ring provided by the Museum of Natural History "Bernardino Rivadavia". Banded male.



Objective 4: Local broadcasted TV news show in the town of General Alvear, Corrientes on the 20th of December 2017.



Xanthopsar flavus potential distribution sites for 2018



Objective 5 - Habitat suitability within UWA Remote Sensing Unit during October 2018.

Data Acquired from:
Instituto Geografico Nacional (Argentina)
Ministerio de Agroindustria (Argentina)
Centro de Ecología Aplicada del Litoral (CECOAL)
Personal Research Data (Pareda MI, Pucheta MF)

Cartography by Maria Ines Pareda
UWA Ms. 2016

Activities:

- **Activity 1.1: Organize local NGO, reserves and private ranches to search for the reproductive colonies.**

As in previous years, through the Aves Argentinas' mailing newsletter to members, its social media and Grasslands Alliance platform we were able to involve local NGO and birdwatching groups in the simultaneous prospecting through the reproductive season. Three birdwatching clubs a local reserve and another nationwide naturalist NGO (Fundación Azara) were involved in Entre Ríos. In this province, the Buenos Aires Zoo (Ecoparque Interactivo de Buenos Aires) provided the help of their technicians to become Colony Guardians and assist in the prospecting.

In Corrientes, one birdwatching club, three members of the Grasslands Alliance, the parks and wildlife government and the Conservation Land Trust (within its complex of private reserves) were committed in the prospecting both providing information as well as fuel and human resources.

This aspect was definitely one of our biggest accomplishments during the 2017 campaign as with the shortage of funds to rent a second vehicle the need for local and national support in this matter was very important and, fortunately, it exceeded our expectations.

- **Activity 1.2: Search in historical breeding sites, prospect rural routes in the departments of Gualeguaychú, Ibicuy, Uruguay, Alvear and Santo Tome with the help of municipality land registries.**

The search for saffron-cowled blackbirds in the state of Entre Ríos comprised two steps: the first took place from 31st October to 10th November 2018, and the second from 27th November to 30th December 2018, with a final check on the 26th and 27th December. Part of the departments of Gualeguay, Islas de Ibicuy, Uruguay, and Gualeguaychú could be travelled using a simple traction vehicle. However, Entre Ríos' minor roads were in very poor condition due to heavy rains in the previous months to the campaign. As a result of this we were restricted to asphalted roads for the first 10 days of the campaign.

During this stage we were only able to identify a group of roughly 20 individuals in the department of Ibicuy. However, no reproductive colonies were found in the department at that time.

In the second stage of the search we were able to identify a breeding colony, with at least five nests and around 20 adults in the area of Gualeguaychú, at the same site as in 2016. We were also able to identify a colony in the town of Ibicuy at a site where there are no records in recent years. In total we covered 3500 km in search of colonies in this province.

Other search efforts realised by the group Aves Gualeguaychú (local NGO) and field technicians from El Potrero Reserve, allowed the detection of more reproductive colonies in the department of Galeguaychú.

The colonies were situated in the remnants of native grasslands found alongside major and minor roads and ranches with cattle grazing on natural pastures. The groups found were of around 20 adults, with colonies having between three and 12 nests. Colonies tended to be found in sites where other important grassland bird species (such as the bearded tachuri or seedeater species) were also nesting. Although the landscape in Entre Ríos has been greatly transformed by agricultural activities, the species seems to have a tendency to continue using the same nesting sites as in previous years. This should allow for easy monitoring of the reproduction and status of its populations. However, this season the condition of the roads and difficulty of transit did not allow our teams to work to full capacity.

The campaign in the state of Corrientes started on 25th October 2018 with support from the State Government of Corrientes (Department of Parks and Reserves). Park rangers from Carlos Pellegrini helped search for saffron-cowled blackbirds during the first few weeks of the campaign, searching in the departments of Santo Tomé, San Martín and General Alvear. In total 12 groups and 7 colonies were found after a search covering over 3000 km. From 11th November 2018 work continued in conjunction with Local Bird Observers Club "Tingazú", members of Alianza del Pastizal (The Grassland Alliance), members of Aves Argentinas, and volunteers.

- **Activity 1.3: Participate in local events and local news broadcasts to raise awareness of our work and encourage citizens to participate each year.**

1. Radio Ciudad, Santo Tomé FM 102, 5: We appeared on the "Natural" radio programme that raises awareness about environmental, ecological and cultural issues. We were given this slot so that we could share the work's news and invite the active participation of local citizens.
2. Radio Spot in Ibicuy: From the school Number 8 "20 de Junio" in the town of Ibicuy in Entre Ríos, we worked with children from the 6th grade to raise awareness about the saffron-cowled blackbird with the children preparing short audio clips which were later played through the summer on various local radio stations.
3. Street Art: Aves Ibicuy included the saffron-cowled blackbird in a series of street art strategically located in different parts of town with an end to increase the awareness on illegal poaching both to the local communities as the touristic community that the town receives during the summer.



Kids from the school N8 "20 de Junio" in the town of Ibicuy recording the radio spot to be transmitted in the local broadcasted news shows.

4. TV Mercosur: on 19th December 2018 we appeared on the TV Mercosur's local television programme "La Ventana", broadcasted in General Alvear where we presented the saffron-cowled blackbird, the problems faced by the species and the work being done in order to protect it.
 5. National Media Coverage: The news of the presence of blackbird flocks in a private reserve owned by the Conservation Land Trust (Tompkins Conservation) had welcome repercussions in the national media, with articles by La Nación and Infobae helping raise awareness about the species nationwide.
 6. Natural Fest, Santo Tomé 2018. Natural Fest is a cultural event held in Santo Tomé in order to raise awareness about the current environmental situation. The saffron-cowled blackbird was featured in an artistic intervention as well as a small introduction of the work for the species.
- **Activity 2.1 Place a Colony Guardian with volunteers in each colony to apply the methods necessary to protect nests and gather data on reproductive success and Activity 2.2 Apply predation enclosures to nests in egg stage and chick stage until fledged.**

This campaign, nest protection and management were focused in Corrientes, with four colonies being successfully protected. Said colonies were situated in the departments of Santo Tomé and General Alvear and were protected by teams working from three camps in addition to a mobile team dedicated to logistics and scouting for new saffron-cowled blackbird groups.

The colonies found were situated in wetlands with areas of natural grassland, inside actively producing ranches. These sites often become refuges for other emblematic grassland birds, such as the black-and-white monjita, streamer-tailed tyrant, black-and-yellow marshbird, and other wetland species like the crested doradito.

As described before 34 nests were protected from four colonies as well as the monitoring of eight colonies and 35 nests. A total of 23 people were involved including volunteers, birdwatching club members and park rangers.

During the incubation stage, 89% of the protected nests were successful while 61% of the unprotected nests were successful. During this stage we consider as successful the nests which eggs hatch.



Saffron-cowled Blackbird chick of around 12 days old, inside the predator's exclusion.



Female guarding nest on top of the camera trap placed to monitor the parenting behaviour and their response to the protection



Ines Pereda banding chicks from the protected nest.

- **Activity 2.3 Train Colony Guardians in anti-poaching laws and procedures according to each province and proceed when needed as accorded with each province's government with the help of rural police and private reserve's park rangers; Activity 4.2: Develop our legal power as "Guardafaunas" (Honorary provincial park ranger) if cases of illegal poaching are registered in the Saffron-cowled Blackbirds breeding colonies; Activity 4.3: Incorporate in the "Guardafaunas" (Honorary provincial park ranger) squad the actors from the local birding and conservation groups.**

In the 2017 campaign, with the scouting team created in both provinces, we were expectant in the case of a possible poaching event but we didn't experience any. It is worth adding, however, that Entre Rios suffers of more poaching activities than Corrientes mainly due to cultural reasons and as the roads were very difficult to access to this might have reduced both the poaching activities as well as our capability to detect them.

We did however participate in the anti-poaching workshop held in the Ave Encuentro in April 2018 to unite actions and strengths with local NGOs and birdwatching clubs. The "Guardafaunas" Ricardo Palacios and Pablo Machado from the Birdwatching club of Santo Tomé, Corrientes became

- **Activity 3.1 Analyse de data to assess effectiveness.**

All the data collected regarding the reproductive success of the species is being analysed as part of Florencia Pucheta's and our National Council of Scientific and Technical Research (CONICET) in the Centre for Ecological Research (CECOAL) in Corrientes. Part of these results are the ones expressed in this report.

In 2019 we will represent part of these results in the 18th National Congress of Ornithology in Argentina as we did in September 2017.

- **Activity 3.2 Disseminate with local NGOs, landowners, local governments, and fundraisers.**
 - 3rd Ave Encuentro in Concordia Entre Ríos: we assisted to the third reunion of ecotourism and conservation organised by the local birdwatching clubs of Entre Rios. Here we were involved in a workshop to address the anti-poaching efforts being done in the province with the help of the local government, local and national NGOs and the local birdwatching clubs. We also organized a workshop to reorganise the saffron-cowled blackbird team in this province and share our findings in the 2017 campaigns in Corrientes province.
 - 8th Bird and Wildlife Fair: in the 8th Birds and Wildlife Fair in the Village of Carlos Pellegrini we shared the results of the 2017 campaign in a 30 minute symposium under the topic grassland's endangered birds. The fair which takes place every year from 25th - 29th May each year is of great importance for the dissemination of Argentina's conservation projects.

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

The government political party changes in Entre Rios impeded the work in anti-poaching in the province. Plus, the bad conditions of roads due to the heavy rains in the spring of 2017 made it impossible to access to the roads in the most critical moment for the formation of breeding colonies. Finally, as the 4WD truck provided by Aves Argentinas was broken we didn't count with the funds enough to rent two vehicles. This, plus the poor conditions of roads oblige us to choose Corrientes as our scope for work during the summer of 2017.

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

1. With the implementation of nest management, we achieve the breeding success of protected nests to be the double of the unprotected nests in a natural situation. That is to say, we managed to double the number of nests with young that managed to leave the nests without being predated.
2. During 2017 we managed to re-sight the first time individuals banded in previous years. This gives a positive panorama for the monitoring of individuals year-on-year, and for the understanding of their movement patterns.
3. In 2017 we managed to strengthen ties with the Government of Corrientes whose help and support was fundamental in the search for reproductive colonies at the start of the campaign and in the training of park rangers. We managed to reach to more birdwatching clubs that detected more colonies discovering new flocks within our study area. BirdLife International recognised Aves Argentina's birdwatching clubs committed with the project for their work in the project.



Collaboration in the prospectations together with Corrientes' local government and Park rangers.

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

The first aim of this project is to combat the threats not addressed by other initiatives, trying to increase the SCB population size. To achieve this it is vitally important to work directly and actively with local communities as a team, both to raise awareness and to achieve research and management goals, and to ensure long-term success of the project through the passion and commitment of local collaborators.

To protect SCB we focus on increasing its reproductive success, To do this we work with the Grassland Alliance landowners network (an "alert network" through which members of the Grassland Alliance inform us about the presence of the species in their ranches), and implementing management techniques that are developed specifically by local communities volunteers during the breeding seasons, as well as working with them to raise awareness (in schools and events) through the rest of the year.

In both provinces (Corrientes and Entre Ríos) we work with local Birdwatching Clubs (COAs) whose members help, as local volunteers, both in the prospections of flocks, the identification of banded individuals, building contacts with ranchers, in the active application of the management techniques, as well as the development of community based activities and education. We believe that, in the long term, COA activities will be those that ensure the sustainability of this initiative. As breeding colonies are established all within the same time frame, it is very difficult for our scientific team to recognise and manage all of the breeding colonies at the same time. These local Birdwatching Clubs have been empowered by the capacity gained while working with us, encouraging them to develop more community based activities. Florencia Pucheta and Inés Pereda as project managers and coordinators, provide guidance and technical knowledge to design and fulfill the project's long term goals with the help of the COA team members. For their hard work, BirdLife international granted these Birdwatching clubs the award of "Nature's Heroes", a distinction for their commitment in protecting the species and their local natural heritage.

In addition to the COAs, the Grasslands Alliance and private reserves (The Conservation Land Trust and El Potrero), who's logo is the SCB, also work together with us in varies initiatives destined at preserving the habitat in this region.

Thanks to the help and commitment of the local collaborators, land owners, private reserves we are able to ensure the future continuity of this project. It's important that the SCB Project evaluate and improve intensive management and monitoring techniques, so that local members and collaborators can implement conservation actions with greater facility and ease.



Part of the team with the Birdwatching Club (COA) of Santo Tome town in Corrientes by the end of the season on the 23rd of December 2017.



Handing in the BirdLife's nature's hero distinction to the Santo Tomé BirdWatching Club. Florencia Pucheta on de left (Ph.D student from CONICET), Pablo Machado is the coordinator of the Bird Watching Club and Inés Pereda from Aves Argentinas.

5. Are there any plans to continue this work?

With a declining population worldwide and a critical situation in Argentina, we are using the information gathered in this campaign to plan ahead to conserve the species. Also, the saffron-cowled blackbird (and other endemic grasslands species) is an indicator of the health of what's left of our grasslands and an advocate for illegal wildlife trade and poaching. We wish to create a project with the capacity to generate a change in local communities through citizen science and a shift to a responsible production from cattle-ranching establishments which today are the last vestige of our grasslands.

The project continued is work through the breeding season of November and December 2018.

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

1. Feria de Aves y Vida Silvestre in Colonia Carlos Pellegrini may 2018 and 2019: We communicated our results in 30 minute dissertation at a local conservation event in Carlos Pellegrini, Corrientes. This event takes place from the 25th - 28th May each year and has great repercussion among conservation projects in Argentina; it helps to disseminate and gather both knowledge and nurturing opportunities between different projects and institutions.
2. Third "Ave Encuentro" in Entre Rios during April 2018: we shared our results in 2018 in the ecotourism and conservation fair in Entre Rios.
3. National Ornithology Congress 2019: we plan to present part of our findings in the next national congress held in September 2019.
4. We are preparing more studies regarding the land use change within the species habitat and plan to publish the study within 2019.
5. We will continue to participate in Aves Argentina's anti-poaching programme that consists in the training of local government and police forces to know what species to detect and build a stronger anti-poaching network in Argentina.

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 grant was provided in December 2017 when the campaign was already ongoing. This permitted us to cost the hire of 1 more month of the 4WD vehicle used also to prospect the region in Entre Rios once the roads were in better conditions. Also, we used it to cover for food and fuel during this month. We used the rest of the funds through out 2018 to attend to the different activities planned at communicating and disseminating the projects outcomes and a short winter campaign of 10 days during June 2018 to assess the survival of banded individuals and non-breeding colony sites. There were some left funding to help in the costs of the first 3 weeks of the 2018 campaign regarding fuel and food.

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
Campground gear	300		+300	Due to the lack of a vehicle we managed with our personal gear plus what when purchased on 2016
GPS	169		+169	Due to the lack of vehicle we managed with our personal GPS plus the two devices purchased with the Rufford fund provided in 2016
Nest predator exclusions to protect 50 nests	500	300	+200	Because we were only able to work in Corrientes protecting nests we could recycle some of the gear from 2016
Sampling equipment	250		+250	The sampling equipment was provided with the help of the laboratories funding
Workshops	400	267	+133	Because of political changes we could only attend to one workshop in Entre Rios during April 2018. Costs involved bus tickets for the team.
Leaflets to deliver for workshops and landowners during surveys	400	300	+100	We printed 2000 leaflets that were handed in to the birdwatching clubs, the landowners of the region and common points as groceries stores in small towns and fuel stations
Fuel to cover 20000km in three months by two vehicles	1481	1030	+451	With this fuel we managed to cover the December fuel, the winter season campaign fuel and part of the firsts three weeks in late October 2018. Because we covered the fuel of December we manage to spend less in fuel to be able to cost the rent.
Food to cover 10 people in three months as Colony Guardians and Volunteers	1500	973	+527	We covered the food for four colony guardians and 7 volunteers that were camping beside the colonies

Vehicle rent for 1 month (Not foreseen when applied to the grant)		2130	-2130	We rented a 4WD vehicle for an extra month thanks to the fund which let us finish our work through the end of the season.
Total	5000	5000		

We used ARS with a local exchange rate in: 1 ARS = 23, 32 Pounds when it was exchanged on November 2017.

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

1. Strengthen local networks with local stakeholders and landowners to identify colonies that we might be missing out both in reproductive and wintering season.
2. Strengthen and sharpen management techniques. We need to sharpen the predator exclusion technique to standardise the method and make sure that adult saffron-cowled blackbirds enter the predator enclosures to attend to nestlings.
3. Occupation studies: with the 2017 data, in 2018 we adjusted the surveying methods into a methodology that would let us study the population within occupation models helping us detect possible breeding sites. This in turn would help in designing a more effective plan to detect colonies with the help of local communities.
4. Predator studies: we must increase our efforts to better detect the predators that are still able to predate in spite of the protections. Even more, in 2018 we discovered the predation of nests by wild boars (*Sus scrofa*) an invasive species with severe damage to the ecosystem in both provinces. Thus, we are planning to work with the private reserve El Potrero, who are active participants of the project since 2015, in maximizing their control on this species in the coming years.
5. Genetics: as part of Florencia Pucheta's doctorate thesis we are commencing with the research on the genetic variability within the species population to detect possible conservation units within Argentina and at a regional scale.
6. Impacts at landscape level: at the moment as part of my master's programme at the University of Western Australia I am studying the land use change in the province of Corrientes to advocate for the protection of the species habitat due to poor governance strategies in the incentive of tree plantations under the climate change flag.
7. Regional Studies: We must now search for banded chicks and adults during reproductive and winter seasons with help of local birding clubs and a strengthen network.
8. Community support: we need to strengthen the communities work outreach and scale of work. The birdwatching club lacks funding to be able to extend their work to local rural schools and towns.

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?

We used the RSG logo in the leaflets; articles in the Aves Argentinas Magazine and in the dissertations given and in the acknowledgements the short communication as well in the different posters and assignments handed in as part of my new master's degree at the University of Western Australia.

