

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	Protecting the Saffron-cowled Blackbird, the last populations of Argentina's grasslands symbol
RSG reference	19907-1
Reporting period	Final Report
Amount of grant	£5000
Your email address	ine.pereda@gmail.com
Date of this report	16 of June 2017

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
Objective 1: detect the reproductive colonies and know the actual distribution of the species in Entre Rios.				Below
Objective 2: know the impact of predators and parasites over the reproductive success of the colonies and tests different conservation techniques to define a conservation strategy for both provinces.				Below
Objective 3 know the impact of illegal wildlife trade over the species to design conservation strategies to mitigate poaching and illegal markets and advocate for the creation of political policies and education programs.				Below

Objectives Comments:

Objective 1: detect the reproductive colonies and know the actual distribution of the species in Entre Rios.

- Level of Achievement: Fully Achieved
- Comments:

Although when we presented the proposal we included the study of the colonies of Entre Rios, we thought that to really understand the greater picture for the species state of conservation and threats we should work with both populations in both provinces (Corrientes and Entre Rios). At that time, we didn't have the resources (vehicles) to carry the campaigns in both provinces. However, in October 2016, we came across the opportunity to ally with a sponsor that lend one 4 x 4 pickup for 2 months (November and December) to work in both provinces. For that reason, we decided that we shouldn't miss the opportunity thus duplicated our team and to work in both provinces given the species urgency.

We worked in the whole distribution for the saffron-cowled blackbird in Argentina, this involves both Corrientes province and Entre Ríos Province. The field campaign started on 23rd October and ended on 21st December 2016 with two more short visits in late December 2016 and January 2017.

We identified 10 colonies from November 2016 to January 2017. We registered a total of 84 nests; 50 for Entre Rios and 34 for Corrientes. We managed to protect 31 nests with predator enclosures during incubation stage and chick stage. 64 Chicks fledged form the nests. We covered around 10000 km between searching and protecting the colonies and formed four different camp grounds close to the colonies.

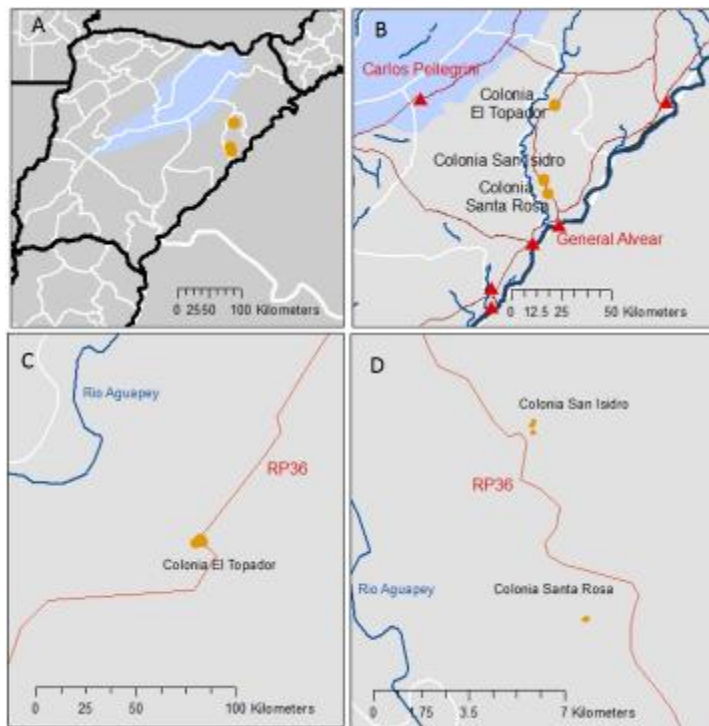


FIGURE 1 A Corrientes province. B. Santo Tomé department and the four colonies visible along the RP36. C. El Topador Colony (10 nests). D. San Isidro (8 nests), San Isidro B (2 nests) and Santa Rosa colonies (8 nests).

References

- Colony
- Rivers
- Province departments
- ▲ Towns
- Provincial Routs (RP)

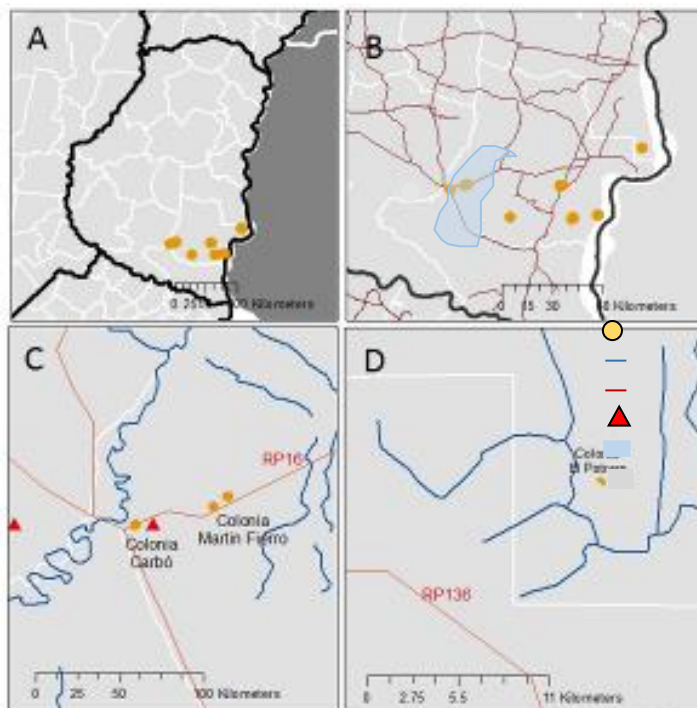


FIGURE 2 A Entre Ríos province. B. Gualguaychú department and the four colonies visible along the RP16, RN 14 and Perdices IBA. C. Colony Carbó (3 nests), Colony Silvata (4 nests) and Colony Martín Fierro (8 nests). D. Colonia El Potrero (8 nests).

References

- Colony
- Rivers
- Routes
- ▲ Towns
- Perdices IBA
- Province department



FIGURE 3 Colonies found in Perdices IBA (endangered). El Sauce (4 nests) La Joaquina (13 nests) and Punta Caballos (8 nests). Red lines are tracks from surveys done each week.

Objective 2: know the impact of predators and parasites over the reproductive success of the colonies and tests different conservation techniques to define a conservation strategy for both provinces

- Level of Achievement: Fully Achieved
- Comments:

Parasitism and predation. Brood parasitism of *Molothrus bonariensis* was recorded in 63% of nests in 2015 and 31% during the recent season (2016). In Corrientes, parasitism was lower than in Entre Rios (40% and 14% respectively). This might be due to the intensified productive practices in Entre Rios compared to Corrientes. Predation in 2015 was registered at 66% while in 2016, was of 36%. The species predating over saffron-cowled blackbirds were *Lycalopex gymnocercus*, *Tupinambis teguixin*, snakes of genus *Philodrias*, raptors that could possibly be *Milvago chimango* and we believe *Lutreolina crassicaudata* too.

Protection: Due to the nests low survival rate in the colonies, we designed a simple protection to protect them from medium-sized predators. Out of the 75 active nests found we installed predator enclosures to 25 nests at the chick stage to counter predation by medium sized predators such as foxes, racoons, felids and raptors.

The protection was a galvanized metal mesh (10 x 10 mm) spliced as a cylinder 1 m diameter and 1 m high, that surrounds the nest-supporting plant, with an open top square (20 x 20 cm) to allow the adults access for nest attendance and to allow the exit of fledglings, avoiding medium-sized predators. Out of 57 nests, we installed protection to 30 nests to evaluate the fate of one nest during incubation stage and 29 nests during chick stage. We installed a trap camera (Reconyx HC500) ~2 m from each protected nest to record the nest attendance of parental individuals and the activity of potential predators.

Because nest disturbance while in incubation stage usually presents higher rates of abandonment than during the chick stage, we installed protection only on nests during the chick stage. We recommend installing protection during the morning and then monitoring the attendance of parents to chicks during daylight by direct

observation from a prudent distance complemented with trap cameras at the nest site. In case that parental individuals cannot enter the enclosure to attend to their chicks in the next six hours after installation, the protection must be removed to avoid nest abandonment.

We obtained an overall nesting success of 72% in protected nests vs 42% in unprotected nests. Through this first experience we consider this simple predator enclosure device could be used to increase reproductive success of saffron-cowled blackbirds and other threatened grassland birds which breed with their nests attached to plants upon ground or water level.

Objective 3 know the impact of illegal wildlife trade over the species to design conservation strategies to mitigate poaching and illegal markets and advocate for the creation of political policies and education programs.

- Level of Achievement: Partially Achieved
- Comments:

We did a workshop during the campaign with Gualeguaychu's local NGO, local police, municipal government and the provincial government in a local ranch with presence of saffron-cowled blackbird's colonies to assess anti-poaching strategy during the campaign. In the same workshop the Colony Guardians and other actors became "Guardafaunas" (a type of nature police in Argentina's provincial laws) to make a squadron which gave us legal power to act in case of a poaching incident in the colonies.

Although we patrolled the sites in search for poachers, this year we didn't find people poaching in the sites near the colonies. We think that this might be because the pick-up wrapping with Aves Argentina's logo and the patrols of the local rural police might have kept them away just for that moment. Also, it is important to note that in Entre Rios the colonies this year were almost all of them inside establishments (and not on the verge of roads) making them less vulnerable to poaching.

Activities:

Activity 1: Prospection in search of colonies during August and September to identify possible nests to monitor during the breeding period.

- A. A GIS project will be done before the exploratory campaign to address the different habitats available and of importance for conservation management. This will be carried out in July and August 2016. After the exploratory campaigns for colonies, the GIS project will be assessed to define where the colonies were settled as part of the data analysis. The GIS project will be finished during February, March and April.
- B. Exploratory campaigns will be carried out with the help of local stakeholders (COA- local birdwatching clubs), volunteers, and local NGOs during September and October

- Level of Achievement: A. Partially Achieved B. Fully Achieved
- Comments:

We worked in the whole distribution for the saffron-cowled blackbird in Argentina, this involves both Corrientes province and Entre Ríos Province. The field campaign started on 23rd October and ended on 21st December 2016 with two more short visits in late December 2016 and January 2017.

The GIS project to identify habitats of importance through grids before the campaign was difficult to assess: grounds that were of importance in previous years were destined for agriculture in the following year, changing the satellite pictures. The same happened with road verges being weeded in the present and changing the available habitat for the bird month after month. For that reason we opted to survey the roads and establishments with historical and recent sightings.

Entre Rios Province

In Entre Rios, we worked with a land registry provided by the municipality of Gualeguaychú. We surveyed through the roads establishments and ranches with potential habitats and approached each landowner, or responsible person in charge, to access the ranch and survey inside. Once the contact was made, we accessed the establishment as regularly as possible until late December 2016 in search for late colonies.

Seven colonies were found in Entre Ríos Province in three different political departments within the province. The first colony was found on 16th November 2016, south of Gualeguaychú with 23 nests (13 active and 10 abandoned) in an uncultivated parcel of 100 ha, previously cultivated with soy (harvested 3 months before the colony was found). The second colony, only 10 km away from the first one was found on 23rd November 2016 with eight active nests in an uncultivated parcel with 20 cows (previously cultivated with corn). The third colony, with four nests, was found on 7th December 2016 in a ranch near the RN 14 south of Gualeguaychú in an abandoned parcel of 85 ha occupied with natural grasslands. The fourth colony was found in the Department of Concepción del Uruguay, north of Gualeguaychú in a ranch with a 19000 ha reserve. The blackbirds established the colony of nine nests in a small portion of grassland in a soy field. The nests were constructed on *Acacia caven* trees; this is unusual as this behaviour was only seen once in 2015 by our team. The fifth colony was found 26th December 2016 on the verge of RP 16 with four nests. The sixth and seventh colonies were found on the verge of RP 16 on 6th and 23rd January 2017 respectively. The sixth had eight nests and the seventh four. These two colonies are the first ever found during January; previous studies reported colonies between October and end of December at the latest. The surveys were carried out by Aves Argentinas (Inés Pereda), the local Birding Club (Aves Gualeguaychú) and the Private Natural Reserve of El Potrero (home of the fourth colony). We organised the weekly surveys between the three groups following the land registry and the contacts provided by Aves Gualeguaychú and the Municipality. The use of the leaflets created to disseminate the project, with our contact details, proved to be a good resource when assessing possible new ranches and colonies as several ranchers approached us to inform of possible colonies in their establishments.



FIGURE 4. Left, a nest in an Acacia at 2 m, this is the second record for the province and the first record of a whole colony built in trees. Right a nest from a colony in a natural grassland.

Corrientes province

In Corrientes we also surveyed through the roads establishments and ranches with potential habitats. We also worked with the two Birding Clubs present in the region (COA Tingazú and COA Virasoro) partners of Aves Argentinas) that were very helpful when contacting establishments and throughout the prospections. We covered around 8.900 km. within this province.

We prospected rural routes and principal ones in Alvear and Santo Tomé. During the rounds we managed to record three breeding colonies, all in the RP 36. Habitats chosen to breed seemed to share a pattern following a specific type of marsh formed in between knolls of short pastures. Nests were generally located on the verge of the marsh and the grassland.

All the colonies were found on private land and we accessed through the contact provided by the local birding club. The first colony was found on 9th November 2016 in a ranch with historical records of the species but never records of breeding colonies. This colony had 12 active nests. The ranch practised bovine ranching but we didn't have specific problems with them. The second colony was found 7 km from the first one on 18th November 2016 with eight nests. Last year, the same ranch had two breeding colonies inside. However, the marsh had been drastically transformed to forestry plantations making it impossible to use by the saffron-cowled blackbirds. This time blackbirds chose more flooded marshes approaching the Aguapey River. The third colony was found on 10th December 2016 and was located in a field with natural grasslands in good shape and the particular parcel was not being used for production. In this colony we found 14 nests.



FIGURE 5 Right. Camera trap picture of adult attending chicks inside the predator's enclosure.

Activity 2: During the breeding period, once the established colonies are identified, field technicians will survey daily until the fledglings leave the nests. According previous knowledge, the field work will be carried out in the months of October, November, December and January.

- Level of Achievement: Fully Achieved
- Comments:
Idem as objective 2.



Figure 6 Left. Taken measurements and tissue samples for genetic assay in an adult. Right. Saffron-cowled Blackbirds monitored day by day with a day born chick.

Activity 3: Raise awareness about the species importance and threats in local communities. Workshops and talks will be carried out in public schools in local communities of Entre Rios with presence of Saffron-cowled blackbird. This will be carried out in September and October, in different local events that promote birdwatching and tourism. School talks will be done during the reproductive period of the species before school ends its activities (August, September, October, and November).

- Level of Achievement: Fully Achieved
- Comments:

1. Expo Rural Gualeguaychú

2. Ave Encuentro: local event organised by Aves Gualeguaychú in Gualeguaychú city. It was the second running of the event, with dissertations, stands of other NGOs, reserves and birding clubs from the region. We participated with an Aves Argentinas stand, a dissertation about the species and communicate a true launch of the campaign.
3. VII Congreso Argentino de Pastizales Naturales: The VII Argentinean Congress of Natural Grasslands was carried out in Corrientes, Virasoro (within the distribution of the Saffron-cowled Blackbird) from 4th to 6th November 2016. We launched the field campaign to the Natural Grasslands Ranchers community of the region and to international NGOs and institutions (SAVE Brazil/US-FWS/US-FS/Bird Conservancy of the Rockies/BirdLife International/Calidirs/Colombia/Guyra Paraguay/Audubon) and to local ranchers with possibility of holding colonies in their ranches throughout the season. We also did an auction of different paintings donated to the project.
4. "Guardafaunas" Workshop: In the Province of Entre Rios we held a workshop organized by Aves Argentinas and the provincial government of Entre Rios (Natural Resources Direction) to train local police on poaching and species diversity and identification and the creation of a "conservation agents squad" (Guardafaunas in Spanish) to control, with legal power, poaching in the region. The squad is formed by Aves Argentina's technicians and Aves Gualeguaychú members.
5. Visit to the local School N9.: We did one visit to the national rural school N9 in the department of Gualeguaychú, held just 5 km away from a colony. To this school attends the sons and daughters of most of the workmen from the ranches with presence of saffron-cowled blackbird flocks. We rose awareness about poaching and taught how to use a telescope and binoculars to bring the children closer to their birds.
6. Radio broadcast in the local news programme in Alvear town, Corrientes where we talked about the project to disseminate the project and leave our contacts to the community in case they know of a colony.
7. TV Interview with local news TV show with the same local news programme.
8. Feria de Aves y Vida Silvestre in Colonia Carlos Pellegrini: We communicated our results in a 30 minute presentation at a local conservation event in Carlos Pellegrini, Corrientes (within the saffron-cowled blackbird distribution). This event takes place from 25th to 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.
9. Aves Argentinas Mag: "Saffron-cowled Blackbird: Endangered" And "How do we work: Guardians for the Saffron-cowled Blackbird". This magazine is published three times a year - the March 2017 edition was about grasslands and their biodiversity with two articles of the species and the project. This magazine is going to become very useful in the next campaign to give to landowners and stakeholders.
10. We printed the leaflet that helped in the field to advocate about illegal poaching and the species importance. It had our cellphones and emails for anyone to reach us in case they spotted saffron-cowled blackbird.



FIGURE 6: Leaflet inside and out.



Figure 7: Upper left talk in rural school next to the colony found in Entre Rios. Upper Right TV interview with the local news in Alvear Town. Down left. Radio interview in Alvear Town. Down right. Dissertation about the project and its results in Iberá Wetlands conservation congress (Feria de aves y vida silvestre de Iberá).

Activity 4: A final workshop will be carried out once the results of the campaign are analysed. The workshop will be aimed for local and national governments, landowners and stakeholders to implement the proposed techniques, fix goals and objectives in the short and long term to fight illegal wildlife trade and protect the colonies through their breeding season.

- Level of Achievement: Partially Achieved
- Comments

We organised a workshop before starting the campaign with local stakeholders, local NGO, a local reserve, local and provincial government, specialised scientists to organise and set the bases for the exploratory campaign in search for colonies and the management techniques.



FIGURE 8: Workshop before starting the campaign with local NGOs and municipality government.

We did a second workshop during the campaign with Gualaguaychu's local NGO, local police, municipal government and the provincial government in a local ranch with presence of saffron-cowled blackbird colonies to assess anti-poaching strategy during the campaign. In the same workshop the Colony Guardians and other actors became "Guardafaunas" (a type of nature police in Argentina's provincial laws) to make a squadron which gave us legal power to act in case of a poaching incident in the colony.



FIGURE 9. Workshop about illegal poaching and giving the Guardians the title of “Guardafaunas”. The provincial government was present, local reserve, local NGO and Rural police.

Although the workshop is being planned and organised for mid to late August 2017, we didn’t have the chance to gather all the participants up to the moment.

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

- GIS Project: The GIS project turned to be a theory objective rather than an achievable one. In Entre Rios, verges of roads change constantly depending on weeding campaigns. Also, at each ranch each season a new crop is being sowed and harvested or left to rest depending of the markets strategy. In Corrientes marshes are being modified to give room to cattle or forestry plantations. In order to maximise time and resources, we opted to survey for saffron-cowled blackbird colonies in their historical grounds and sightings while identifying transformation in these sites.
- Schools and time: The time management in between the protection of the colonies and the prospection for new ones left almost no time to visit schools as part of the awareness objective. We decided that, at this instance, it is more important to evaluate threats and try management techniques to help the reproductive success as well as study the species. School visits can be considered to be carried out away from the blackbird's reproductive season.
- Searching for colonies and time: although we had a first glance during the pre-campaign of 2015, this time we tried to protect as many colonies as we could find. This proved to be very hard as colonies are formed simultaneously and it was very difficult to protect the existing ones and prospect for new ones. To solve this we managed to support in local birding clubs for prospectations during the weekends and the leaflet became in handy. However, we need to strengthen the network.

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

1. We managed to find four more colonies than the year before and the actual protection of 31 nests and 6 colonies through predation enclosures. For unprotected nests that reached chick stage, we obtained an overall nesting success of 47% (percentage of nests which fledged) and, the overall nesting success of protected nests during chick stage was of 72%, thus we managed to increase the number.
2. The creation of a “provincial conservation agents squad” (Guardafaunas in Spanish) in both Entre Rios (while the opportunity in Corrientes is being prepared through June 2017) and the inclusion of our field technicians as part of the squad to control poachers with actual legal power. Although we didn’t identified poaching in the colonies, we do think that our presence (with the help of the local police) in the area helped to decrease poaching of the colonies.
3. Although there is much to strengthen, in this campaign we did manage to create a solid network of scientists, birders, politicians and landowners that are

sensitized with the species and compromised with the project. We managed to share passion in our local conservation agents and advocates.

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

Local birder clubs, natural reserves and also the local government of Entre Rios, town governments, field technicians and local birders who have been aware of this project were involved directly in the management of colonies.

Especially local birder clubs helped in the search for colonies, in the interaction with stakeholders and when reaching a landowner to provide the permission to enter establishments. They were also directly involved, when possible, in the protection of nests and banding (chicks and adults) and helped in the confection of predator enclosures.

In Entre Rios they are directly involved with education programmes as one member is a school teacher and in Corrientes we could access the local TV news and radio programme for a small interview about the project.

They are now not only more involved with the species and their value but they gained skills in direct conservation strategies and built new bonds and connections with landowners and stakeholders. This empowers their knowledge and citizen science capacity but it also allowed the generation of ideas about, for example, the possibility of building guided birding tours in the region.

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.

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: We communicated our results in a 30 minute presentation at a local conservation event in Carlos Pellegrini, Corrientes. This event takes place from 25th to 28th of 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. Aves Argentinas Mag: "Saffron-cowled Blackbird: Endangered" And "How do we work: Guardians for the Saffron-cowled Blackbird": Aves Argentina, is an institution of 100 years that depends on its partners and associates. Each year it prints three editions of a magazine where it rises awareness and communicates

about conservation projects and problematics. We created two different sections that talk about the species, its threats and the projects first year and its results (Attached).

3. Ornithological Congress of the Americas: We presented two posters to the Ornithological Congress of the Americas (XVII RAO/XXIV CBO/XCV AFO). The first one oriented to the results in the study of the reproductive biology of the species and the second one oriented to the results of the application of predation enclosures.
4. Short Communication: We presented a short communication to "Conservation Evidence" describing our first results with the predator enclosures.

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 used from September 2016 to January 2017 for the field campaign. During May 2017 we participated in the conservation conference in Corrientes. During June 2017 for the printout of 1000 more Aves Argentinas grasslands special edition magazines to hand in to local stakeholders, local governments and land-owners during next season. The timescale was used as planned, although the field campaign started later than expected because the formation of reproductive colonies was delayed compared to previous years.

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
Rings to band chicks in nest colonies	18		18	The Centro de Ecología Aplicada del Litoral (CONICET) provided the banding rings
Material to gather samples (gloves, eppendorf, forceps, pliers etc.)	67	262	-195	As we opted to work in Corrientes too, the budget shifted when counting the number of protected nests
GPS (for technicians in the field. At least three to cover at least the same colonies found in 2015)	167	169	-2	We bought 2 Etrex 10 GPS
Tents (at least three tents for the monitoring of the colonies)	200	290	-90	We bought 2 two marmot tents
Tomahawk traps to capture small mammals (6u)	143	143	0	We built two traps

Camping materials (stove, cooking ware and first aid kits for the field)	171	396	-225	As we opted to work in Corrientes too, the budget shifted when counting the number of protected nests
Food for the field at least for two months	1429	1513	-84	We received occasional housing from two estancias, so food cost was reduced.
Workshop with local and national government before and after the field campaign	548	285,72	262,28	We did a workshop before the campaign with local government, local NGO, local reserve and landowner.
Workshop with local NGO. Stakeholders and land owners in the region to implement conservation techniques	548		548	We did another workshop with the same stakeholders during the campaign to organize against illegal poaching but costs were amortized because we didn't need transportation or housing as we were already there
Communication leaflets and posters for educational campaigns and talks	667	429,95	237,05	We printed 2000 copies to deliver while searching for colonies and in the different workshops and talks we gave. Attached.
Lodging for technicians (for six people twice every 15 days for two months)	300		300	We received occasional housing from two estancias, so food cost was reduced.
Fuel, for exploratory campaigns	742	1511,32	-769,32	As we opted to work in Corrientes too, the budget shifted when counting the number of protected nests. We covered 15000km
Total	5000	4999,99		

We used ARS with a local exchange rate in: 1 ARS = 19,014 Pounds.

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 standardize the method and make sure that adult saffron-cowled blackbirds enter the predator enclosures to attend nestlings.
3. We must now search for banded chicks and adults during reproductive and winter seasons with help of local birding clubs and a strengthen network.

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

We used the RF logo in the leaflets; articles in the Aves Argentinas Magazine and in the presentations given. We are planning to add them in the acknowledgements for the short communication and in the acknowledgements for the two posters in the Ornithological Congress of the Americas.

11. Any other comments?

We would have loved to tag The Rufford Foundation in our Instagram stories and Facebook posts, however we couldn't find an account belonging to The Rufford Foundation to direct these posts. Social media is a great way to get new ideas and nurture form other projects and to communicate and disseminate projects to the public in general.