

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	Laura Fasola
Project title	Invasive American mink spreading over areas of importance for 3 threatened native birds in Austral Patagonia
RSG reference	12587-1
Reporting period	Dec 2012-Dec2013
Amount of grant	£5837
Your email address	lalifasola@yahoo.com.ar
Date of this report	1 st January 2014

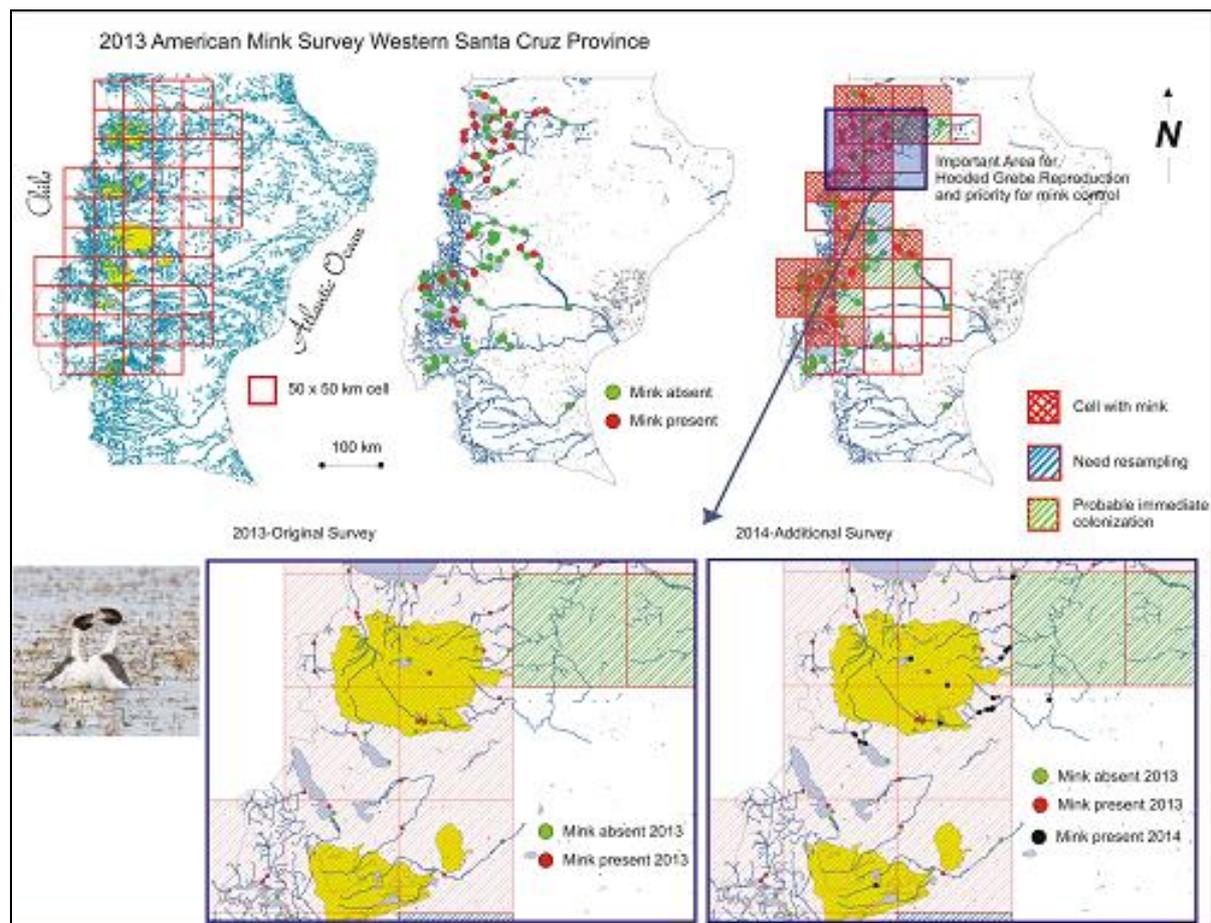
1. Please indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Present distribution of invasive American mink in Santa Cruz Province (50 km x 50 km resolution)			x	We generated a comprehensive baseline map of mink presence in Austral Argentinean Patagonia -where information about mink colonisation was really poor, scattered and people were not aware of the putative presence of such damaging species and in particular at key areas for endangered birds that are preyed on by mink. Please see 6 months report.
Relative abundance of invasive American mink in three areas important to three endangered bird species			x	We developed a more intense mink survey at three areas important to three endangered birds. We could define the relative abundance of mink for these areas based on our own survey and interviews obtained from local people.
Dissemination of fieldwork techniques			x	Sampling included areas from three national parks (one of them in its formation process) and two private reserves.
Dissemination of information among stakeholders - land owners, ranch cattle workers, fishermen, park wardens, tourists and people living in small towns in the area. Make them aware of the impact of this invasive mammal on native species and domestic animals		x		Along the survey we had the opportunity to talk to landowners, cattle workers, park rangers, fishermen and tourists, transmitting our message regarding problems associated to mink presence and the importance about reporting it.

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

Remoteness of several of the areas visited and such long distances supposed logistic difficulties that we faced daily during fieldwork. These difficulties and logistic challenges stopped us from getting to all the sites we planned to survey in advance. At some remote areas we completed information with

interviews to local people and we received the help from people of the team of the hooded grebe program to cover additional sampling points. During the current season 2014 we continued surveying certain areas, important mainly to the hooded grebe and Austral rail, to get more detailed information on mink occupancy (map below). Besides these difficulties, we consider that we fulfilled the objectives of the project as we generated a comprehensive baseline map of mink presence in Austral Argentinean Patagonia where information about mink colonization was poor and scattered- and in particular at key areas for endangered birds that are preyed on by mink.



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

The map generated during this work was central to define the first important management decision on mink situation with regional impact: mink will be declared 'plague' for Santa Cruz Province and a similar outcome is expected for the other Patagonian provinces after the Wildlife National Office has formally suggested to the National Environmental Agency that a Mink National Eradication Plan is urgently needed. Defining mink situation in Santa Cruz Province had an important role in the last point.

Prioritisation of areas in relation to mink presence and abundance was achieved and at present mink is being controlled in the most important reproductive areas of hooded grebe (Buenos Aires Lake Plateau north-west of the province). This is the first organised attempt to control the species from an area in Argentina. This important task is undertaken by the Hooded Grebe Conservation Program.

Also, we are currently intensifying mink surveys at areas important to the Austral Rail, so more accurate information will be available soon, so actions can be applied to areas important to the second species.

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

The involvement and the interest on the problem of biological invasions that we are witnessing in the few local communities of the region are really encouraging. We attended some school activities organised by the Hooded Grebe Conservation Program where we had a space to talk about the conservation problems associated to mink presence to make them aware of the worrying situation. At present, we continue receiving people reports of mink presence, mainly from landowners, fishermen and cattle workers, that helps in improving the accuracy of our knowledge of mink regional situation.

5. Are there any plans to continue this work?

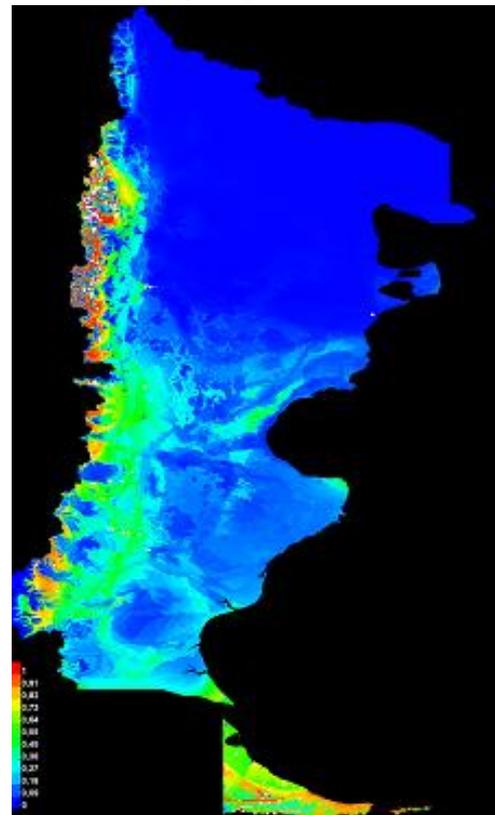
As we pointed at item 3, this project had a key role for the prompt management of the species in the region. Also, now that we produced the first general picture of the situation of this invasive predator in Austral Patagonia, an extension of this initial effort is needed to work more intensively at priority areas where the main goal will be to improve our detection capacity to achieve better occupancy estimations and learn more about the interaction invasive predator – native prey. We also plan to survey more areas important for conservation that are close to the new sites we found occupied by mink.

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

One scientific publication is under preparation where the information produced in this project was used to complete a model for mink presence probability in the region (see map below) that will be a key to prioritization of areas for management, more importantly on improving early detection efforts at certain areas.

We introduced people to mink situation and its importance for the conservation of the hooded grebe in a brochure in Spanish (see below) and now we are releasing a second one where the results of the mink project in Santa Cruz Province will be disseminated in more detail.

We already disseminated this in a more informal way by sending updates to interested landowners by e-mail, showing maps during talks at schools and reporting verbally the results at meetings with local environmental agencies. We are also organising informative talks with fishing tour leaders for next season.



Warm colours indicate higher portability of mink presence.

We expect to write before the end of the year an article to report the alarming mink situation in Santa Cruz Province, describing all the conservation concerns that this raises and the urgent need of management of the species. This will be published in a local NGO journal (*Aves Argentinas*).

During 2014 we will present project results at the Argentinean Mammalogical Congress.

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

This was the second year of the work with mink in Santa Cruz province. It is difficult to compare this period in an anticipated way as the results of this project opened a list of questions to be answered in relation to mink impact-colonization and it helped raising regional awareness.

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
Fuel	694	615	79	We received a donation that helped us lowering the amount spent in fuel.
Car hire	2774	3415	-641	Inflation and unforeseen problems with the car that should be fixed twice. We used our own vehicle at areas where all-terrain vehicle was not essential.
Food and Accommodation	694	478	216	We could reduce the costs of food and accommodation by using the biological station of the new national park and sharing food costs with the Hooded Grebe Conservation Program.
GPS Garmin Oregon 550	271	450	-180	Importation closed in Argentina before the application was accepted and we should buy this piece of equipment in Argentina.
Digital camera	247	615	-368	Importation closed in Argentina before the application was accepted and we should buy this piece of equipment in Argentina.
Field assistant	971	967	4	
Other costs	188.4	140	48.4	We still need to cover part the printing of the second brochures.
TOTAL	5837	6680		

Local exchange rate (28-AGO-2012; date of the application form submission): 7.32 ARG pesos = 1£.

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

- Intensify mink surveys at other areas important to conservation that are close to the mink locations found during this project (e.g. Perito Moreno National Park; San Martín Lake area).
- Develop an 'early alert programme' to continue monitoring mink advance in the region.
- Encourage national and provincial wildlife agencies to start with a mink control programme to stop it from expanding and to protect areas important to conservation in Santa Cruz Province, trying to involve other Patagonian provinces in order to spread the experience across the region.

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?

During talks, we presented a series of slides showing pictures of the environments where we have been working and the bird species. The RSGF logo was present in the central slide.

We are finishing the design and printing of a second brochure in Spanish where the results of the mink project will be directly associated to the conservation problems of the hooded grebe, which is at present a flagship species for Santa Cruz Province (see first brochure below). By doing this we expect a greater impact on people who already identify the hooded grebe as an endemic charismatic species facing critical conservation problems. Also, the number of brochures to be printed will be higher and consequently we will reach a greater public.



El Macá Tobiano es un ave acuática dependiente en 1974, que vive exclusivamente en la Península de Santa Cruz, Argentina. En la década de 1980 se estimó su población en entre 1.000 a 1.200 individuos, en la actualidad solo quedaban cerca de 500.

Hoy el ave enfrenta el peligro de extinción y cualquier pequeña medida podría impedir que su hábitat pueda prevenir su desaparición, por lo que es necesario actuar de inmediato.

QUE NECESITAMOS HACER PARA SALVARLO:

- Dar continuidad a monitoreos y censos en verano e invierno con equipos de investigadores.
- Promover el uso de técnicas silvícolas para garantizar su éxito reproductivo.
- Analizar y controlar poblaciones de especies invasoras que compiten e impactan sobre el Macá.
- Controlar poblaciones de aves y la fauna de acuáticas de las lagunas.
- Generar un área protegida y de conservación ecológica en las montañas de altura.
- Realizar capacitación al staff del Macá para mejorar sus datos investigativos.
- Realizar un tipo de comunicación efectiva en zonas de turismo y de recreación.

Las macás son aves vulnerables a la extinción. En el siglo XX se han extinguido tres especies de macás y la principal causa siempre fue la pérdida de sus hábitats acuáticos y las lagunas que habitaban. Una de sus últimas dependió del planeta en el año 1988.

EL MACÁ TOBIANO SE ESTÁ EXTINGUIENDO POR:

- Depredación por visones y gatos.
- Intromisión de salmonetas que atacan a polluelos y adultos.
- Distribución de su Fomento de alimento por competencia con las truchas.
- Destrucción de esteros por la acción del viento.
- Dedicación de lagunas y lagos.
- Competencia con otras aves acuáticas (tritos, patos y gallinetas), entre otros.
- Cambio en la dinámica de la vegetación, planta que crece para nutrirse y que se consume su alimento.
- Cambio en la composición química y turbidez del agua, debido al aumento de actividades por áreas silvícolas.



MAPA: Área donde habita y se ha hecho en el pasado el Macá Tobiano. Área reservada con un índice protegido por ley. Las flechas indican la dirección en la que los macás migran hacia las zonas silvícolas para pasar el invierno.

11. Any other comments?

Part of the process of results dissemination will take place this 2014, so we will send updates of these activities.