

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	Tomás Rivas Fuenzalida
Project title	Monitoring Network of Threatened Raptors in Southern South America
RSG reference	19686-1
Reporting period	Final Report
Amount of grant	£5,000
Your email address	trivasfuenzalida@gmail.com
Date of this report	July 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
Production of diffusion material				The posters were replaced by our own material (a poster of diurnal raptors of Nahuelbuta mountain range in flight) and we use that money to cover fieldwork costs.
Generation of new information about the distribution, ecology and current status of endangered raptors				We obtain new and relevant data about the target species, including range expansions, a new population discovered, estimation of densities and population status, natal dispersal data, and the first stopover and communal roosting records for a migratory species.
Publication of results				Only in one year, we generated relevant information that actually form part of one scientific paper and other two in preparation, and other data that will be used in future publications. Some updates about the project were included in our Facebook page and our Annual Report 2016, available in our website: www.nankulafken.cl/publicacion/reporte-anual-2016-fundacion-nankulafken/
Create a Monitoring Network of people working together for raptor conservation in Southern South America				We create the first Monitoring Network of Threatened Raptors in Southern South America, in a tri-national project involving 12 monitors from Chile, Argentina and Peru. Although is in his first stages of functioning, there is the basis of a collaborative long-term work for the conservation of these group of predators.

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

We spend more economic resources than expected in fieldwork activities. However, this is normal considering the wide geographic range of the project, and the transfer and other operational costs. We were able to solve it soliciting resources for our (new) foundation by internet. Due to adverse climatic and logistical conditions (very rainy summer months), we change part of the southernmost expedition (remaining pending southern Magallanes and Tierra del Fuego), for a fieldwork in northern Chile and central Peru, in order to gain new information about the, until then, unknown migratory stopover areas used by the white-throated hawk. However, this change allowed us to generate very relevant information for the conservation of the white-throated hawk, since the stopover areas are vital for the successful migration of the species. In addition, we incorporate Peru, as a new country conforming the monitoring network, becoming a tri-national project now.

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

1. Distribution range expansion, first non-mountainous population discovered and new information about the status of the rufous-tailed hawk (*Buteo ventralis*) in Chile and Argentina. During our first fieldwork in September 2016, in central-southern Chile (Maule region) we found 10 new breeding sites of the species and the first three records in the Curicó Province (34°S) that represent the northernmost records of the species along his global distribution range. During our expedition to western Argentina Patagonia, we obtained three new records of breeding sites of this rare species for the country. The result of this and previous expeditions to the zone, suggest that the species is critically endangered in Argentina, with a very small breeding population. Having in mind that western Argentinean Patagonia and central and southern Chile represent the total distribution of the species, the low population numbers in Argentina and in the Andes of Chile, the species may be placed in the Endangered classification by IUCN. However, it is pending a fieldwork in the southernmost Patagonia, to complete information gaps. Between October 2016 and March 2017 we monitored the densest breeding population known for the species worldwide in the coastal plateau from the Arauco's province (37°S). Some nesting sites was separated by only 1.5 km, that is a half of the average inter-nest distance in other relatively well conserved populations of the species. This population is currently endangered by the installation of wind farms that cover most of the breeding area.
2. The first records of stopover and communal roosting use by the white-throated hawk (*Buteo albigula*) during autumn migration in the Andes of northern Chile and central Peru and the first data of natal dispersal for Chilean hawk (*Accipiter chilensis*) and rufous-tailed hawk. During our last fieldwork activities in April and May 2017, we find the two areas used as migratory stopovers by the white-throated hawk, one in Putre (northernmost Chile) and another in Mantaro's Valley (central Peru). These are the first reports of stopover areas for the species, that represent very important conservation sites, because many individuals refuel and rest in these areas to

complete a successful migration. In Putre, we also fund the first communal roosting site used by the species, which represents, as the stopover areas, a very important site for the white-throated hawk conservation. During the fieldwork in Nahuelbuta mountain range, we located two individuals previously marked with radio transmitters, one juvenile female Chilean hawk, and one juvenile male rufous-tailed hawk. Those records represent the first information about natal dispersal of these two forest-dwelling raptors species.

3. A first exercise of the monitoring network with the participation of fourteen monitors in three countries: Chile, Argentina and Peru. We established the basis of the first monitoring network of threatened raptors in southern South America, incorporating fourteen monitors among biologists, falconers, ornithologists, birdwatchers and nature photographers from three countries: Chile, Argentina and Peru. We began to define the architecture of the network and its operation features, starting with standardising sampling methodologies for its application in all the study areas.

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

Local communities were involved in the project through environmental talks, information feedback and in some cases as long-term data contributors. Many villagers are in contact with us by cellular phone, so we can obtain any updated information about the presence of the target species in certain sites.

5. Are there any plans to continue this work?

Yes, I have plans to continuing to reinforcing the monitoring network and test it with more fieldwork and information generation. The next season (Sept 2017 – April 2018), I want to continue with fieldwork activities especially in southernmost Patagonia of Chile and Argentina, and in central Chile regions, were we were unable to generate sufficient information due to logistical problems. The network also is too young to prove his operation capacity, so we need more activity time to gain some maturity and to identify weaknesses to overcome.

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

Through our website, our Facebook page, and through the publication of scientific papers and conference presentations with the more important findings. The following articles are published or in preparation:

1. **Rivas-Fuenzalida, T. 2017.** New observations on the breeding biology of the Rufous-tailed Hawk (*Buteo ventralis*) in a coastal area of southern Chile. Boletín Nahuelbuta Natural N°1: 31-38. (In Spanish with English summary)
2. **Rivas-Fuenzalida, T. & Y. Quispe-Flores. In prep.** First records of stopover areas and communal roosting use by the White-throated Hawk (*Buteo*

albigula) during the autumn migration in the Andes of northern Chile and central Peru.

3. **Rivas-Fuenzalida, T., V. Rosales. F. Fadel, N. Asciones-Contreras & Ricardo Figueroa R. In prep.** Population status of the Rufous-tailed Hawk (*Buteo ventralis*) in the Maule region, central Chile.
4. **Rivas-Fuenzalida, T., N. Fica, C. Salazar. In prep.** A new population of Rufous-tailed Hawk (*Buteo ventralis*) discovered in the coastal plateau of the Arauco Province, southern Chile with comments on his threats.
5. **Rivas-Fuenzalida, T., S. Castrilli, M. Costa & N. Asciones-Contreras. In prep.** Conservation status of the Rufous-tailed Hawk (*Buteo ventralis*) in western Argentinean Patagonia.
6. **Fundación Ñankulafkén. 2016.** Ñankulafkén Annual Report 2016 (In Spanish. An abstract of our 2016 activities and results including some of the Rufford's project results during that year)

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

We used the grant between September 2016 and May 2017. Anticipated project length was between September 2016 and March 2017. The northern expedition to study the stopover areas and communal roosting use by the white-throated hawk allows us to develop fieldwork after the breeding season, so we spend more time in the field than expected.

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. Local exchange rate: 1GBP = 860,051 CLP (Chilean Peso)

Item	Budgeted Amount \$	Actual Amount \$	Difference	Comments
Diffusion material	155	0	-155	This item was removed and changed by solve fieldwork costs.
The Maule and Nahuelbuta Survey (Food)	465	730	+265	Food expenses was higher than expected, in part because we extend the survey to January and February
The Maule and Nahuelbuta Survey (Gasoline / Vehicle)	929	1,570	+641	Gasoline expenses was higher than expected, in part because we extend the survey to January and February
The Coastal Center Forest Survey (Food)	155	165	+10	Food expenses was higher than expected
The Coastal Center Forest Survey (Gasoline / Vehicle)	465	480	+15	Gasoline expenses was higher than expected
The Andean Araucanía	155	180	+25	Food expenses was higher than

Survey (Food)				expected
The Andean Araucanía Survey (Gasoline / Vehicle)	310	360	+50	Gasoline expenses was higher than expected
The Northwestern Argentine Patagonia Survey (Food)	309	720	+411	Food expenses was higher than expected
The Northern Argentina Patagonia Survey (Gasoline + Vehicle)	671	1,200	+529	Gasoline expenses was higher than expected
The Southern Patagonia and Tierra del Fuego Survey (Food)	929	0	-929	We cancel the Southern Patagonia and Tierra del Fuego survey due to adverse weather conditions (more than one of the two scheduled months were rainy)
The Southern Patagonia and Tierra del Fuego Survey (Gasoline + Vehicle)	2,582	0	-2,582	We cancel the Southern Patagonia and Tierra del Fuego survey due to adverse weather conditions (more than one of the two scheduled months were rainy)
Northern Chile and Central Peru Survey (Transfer + Food + Accommodations)	-	3,200	+3,200	We change the Southern Patagonia and Tierra del Fuego survey for a fieldwork in northern Chile and central Peru, to find the first stopover and communal roosting areas of the migratory White-throated Hawk.
Total	7,125	8,605	+1,480	In general we spend more resources than budgeted due to higher expenses than expected in often all the items

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

The more important next steps are to validate the network with all the monitors working under a unified methodology in the field.

We need to create a virtual platform where each can update data from anywhere. Such platform may be incorporated under our web page www.nankulafken.cl.

In addition, we need to increase the information about some species in critical areas such central Chile and the southern Magellanic region and Tierra del Fuego.

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 use the logo in every presentation and publication we do related to the project.

11. Any other comments?

We would like to apply for the 2nd small grant to develop the second stage of the project.