Final Evaluation Report

Your Details	
Full Name	Eduardo Guimarães Santos
Project Title	Surviving urban environments: effect of urban expansion on neotropical birds
Application ID	36888-1
Date of this Report	05/22/2023

1. 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
Capture birds in urban environments			■	It was challenging to capture birds within the city areas. However, the result was gratifying, since our sample number was almost double what was predicted. This motivated us to publish a paper sharing our experience (paper in press at The Wilson Journal of Ornithology).
Blood sampling			■	We collected more than 1000 samples, which the veterinary partners of our study are analysing. We believe that we will be able to answer many questions about the health of animals living in cities.
Collection of feathers, for isotopic analysis			■	We were able to analyse carbon and nitrogen stable isotopes from 480 samples. This record for our region is unprecedented and will help us understand the urban impact on the diet of animals living in cities.

2. Describe the three most important outcomes of your project.

a). We detected a significant impact of urbanisation on bird morphology.

b). We detected a significant impact of urbanisation on bird health (represented so far by the increase in leg skin lesions).

c). We observed changes in the feeding patterns of birds along the urban intensification gradient.

3. Explain any unforeseen difficulties that arose during the project and how these were tackled.

We had some difficulties regarding public acceptance related to bird catches. We had to adopt some protocols to deal with interpersonal interactions. Some of these were: (1) putting up signs with project information; (2) direct interactions with people to explain the procedures adopted; and (3) wearing vests with identification that we were a field team. In some situations, we had more difficulties doing the sampling, but in the end, they were all carried out. Despite the setbacks, these experiences were rewarding since we managed to awaken the local population's interest and spread the word about the importance of the project to those interested. As

mentioned before, we have an article (in press at The Wilson Journal of Ornithology) that reports on all the procedures adopted to deal with the sampling.

4. Describe the involvement of local communities and how they have benefitted from the project.

As our work was developed inside the cities, the interaction with the local population was intense and daily during the sampling. Our team was approached at every moment by people curious about the project. In fact, we were adapting ourselves to these interactions and we could see that the use of some artifices facilitated the interaction. Although, at first, the population was annoyed, after we talked to them and explained the project (its idea and main objectives), they were pleased. Many residents shared their experiences with the birds and even reported that they enjoyed living with the fauna in the city.

We sampled a total of 115 locations. In all locations, we were approached by locals and in many locations with tens of people. We can say that we interacted with at least 300 people. In all these interactions we had the opportunity to do a bit of scientific dissemination and environmental education, emphasising mainly the importance of biodiversity in our lives.

5. Are there any plans to continue this work?

Yes, we intend to continue the work, given the positive results with the catches and the many questions that still need to be explored.

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

The initial results are already being disseminated on social media and shared with researchers in my institution through lectures and seminars. However, scientific communication will be through publications in specialised journals and promotion blogs. In addition to the paper that has already been accepted for publication, and another paper that is in the review process, we are currently planning to write another three papers on the impact of urbanisation on health, feeding patterns and the occurrence patterns of community bird species.

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

The structuring of a long-term project in our urban area. In fact, I am already showing our results to other researchers in the region who have shown a lot of interest. Getting funding to study urban animals is on our radar for the near future. We also intend to improve our communication with the local community and further promote scientific dissemination and citizen science to engage the population in the search for more knowledge about our impacts on biodiversity.

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

In the lectures and interviews given, we always mention the institution and its importance as a funder of this project. Moreover, in all publications of papers, The Rufford Foundation is mentioned as a funding institution.

9. Provide a full list of all the members of your team and their role in the project.

Below I provide the list of partners. Many of these members were established after the project began:

MSc. Eduardo Guimarães Santos - general coordination

Dr. Vinicius Tirelli Pompermaier - Analysis and interpretation of isotopic data

Dra. Helga Correa Wiederhecker - coordination

Dr. Miguel Ângelo Marini – coordination (advisor)

Dr. Gabriela Bielefeld Nardoto - Analysis and interpretation of isotopic data

Dr. Giane Regina Paludo - analysis and interpretation of the birds' blood data

MSc. Sandy Menezes Honorato - analysis and interpretation of the birds' blood data

MSc. Thais de Oliveira Fernandes - analysis and interpretation of the birds' blood data

Stephanie Carolliny Nunes Ferreira - analysis and interpretation of the birds' blood data


ZERO
OFF
ON
inch/mm
PROFIELD
0
10
20
30
40
50
60
70
80