

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	Cédric Gilleman
Project title	Pilot Project: Capacity Building to Protect and Conserve River Dolphins and Habitats in Iquitos, the riverside Peruvian Amazon City, by 'Solinia' (new NGO)
RSG reference	14227-1
Reporting period	Feb 2014-Jan2015
Amount of grant	£5979
Your email address	cedric@solinia.org
Date of this report	Monday 9 th of February 2015

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
Monitoring and observation			X	Fully achieved for the first 1-year period. Good work to be continued to collect enough data for analysis over a period of 2 years and to compare year1 versus year2.
Training (capacity building)		X		From a total of 23 volunteers, some of them are really motivated and helpful and I am keen to continue with them, to further develop their skills and knowledge and to make them river dolphins specialists. And new volunteers continue to arrive... working with volunteers is a (nice) never-ending story.
Events			X	We completed less in total than predicted but the quality of the eight conferences with international speakers has been exceptional. To be continued with budget and objective refined.
Schools Education Outreach Programme			X	Almost 3000 children in 9 months, our programme is now taken as a reference, only missing adaptation to secondary schools and we can of course again improve it.
Influence Policy Makers		X		Good work done but with the election of the new regional government we have to restart some projects like the Action Plan.
Communication			X	Participation to several events, triptychs, posters, regional TV interviews and articles in newspapers were continuously made.

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

(1) Application and budget

(1-1) The application for this first grant was sent on 28th August 2013 and the grant was confirmed on 16th January 2014 (money received end of January and project started in February), during this 5-month period (September 2013-January 2015) we had already started the pilot education project in schools of Iquitos thanks to our sponsor CSI (Cetacean Society International). We had also made some outings on the river to monitor and observe river dolphins. So with these first experiences we have adapted a bit the proposed budget structure.

(1-2) Also now that we have finished the first period we have discovered that the observations are involuntary over-budgeted but the extra amount can be used to continue the outings in 2015.

(1-3) The use of the received Rufford logo is a bit difficult for the printed material, bad quality (jpg, 45Ko) and white background.

(2) Problem with material

(2-1) First meeting with the volunteers (28th January 2014) and our old projector died. Backup solution was to use the one of another association before we could find the money to buy a new one (+/- £440).

(2-2) Also my personal computer (an Apple PowerBook) did collapse in June 2014 and we had to use the laptop of a volunteer during the conferences, meetings and events. I have bought a new one end of September 2014 so I was four months with some limitation in the administrative work. Hopefully I was able to recover data from the previous hard disk. Also end of September 2014 we have received (from my ex-company) another Lenovo laptop that we can reserve for the education programme only.

(2-3) For the observations we are using a 10 m wooden boat called "peque". This boat (with the motor) is lent by a friend of mine but we had to pay for the maintenance and the watchman. It was not budgeted but as already mentioned we have restructured the budget. Unfortunately this boat is now in very bad condition and we have made a big maintenance in January 2015 to try to keep it again a maximum of months during 2015.

(2-4) We had found a good deal for the t-shirts but finally it was bad quality and the manufacturer had to make corrections.

(3) Working with Volunteers

(3-1) Working with young volunteers is not easy, most of them are still students preparing their thesis and they are not regularly present at the activities. Sometimes also they have already their diploma, trying to find more experience. Iquitos is a poor region and they are searching for a stipend with temporary missions to help their family and when they can find one they go sometimes for several months and we loose (temporarily) the investment we have made with them.

(3-2) Also the mentality here in Peru is so different than in Europe, they are never on time, always late for whatever reason. For the conferences we indicate the time at 7pm knowing that we will really start after 7:30pm. Same for the meetings, there is always a 15 minutes delay minimum. It was a real problem for the observations as the motorist had to wait, I was flexible the first 2 months but then I was a bit upset to always wait 15 minutes or more with the motorist (who is paid only for the time needed for the observation) and I had to put the rule "7am sharp"... I think some volunteers didn't come anymore for that reason! Regularly also they confirm their venue but they do not come without advising or even excusing.

(4) Weather conditions, dynamic of the rivers and guarding of the boat

(4-1) Not easy to observe when it's raining especially with our simple boat. Even if there is a roof the water is entering by the sides. Sometimes we had to cancel or postpone the outing for that reason.

(4-2) Also as the water level of the rivers is changing sometimes we have to change the location for the boarding. Most of the time we start from the "boulevard" but we had to change during the dry season, having to go sometimes outside of Iquitos.

(4-3) Our boat is parked far from the starting point (boulevard) and to start at 7am the motorist Regner and the helper Ney have to wake-up at 5:30am to be ready at 6am, to navigate one hour till the boulevard to be there at 7am, then to make the observation with us to be back at 11am again on the boulevard, then one hour more to go home. Parking the boat in another location is not an option

(more expensive and not secure), the only way to gain time for them is to have a faster boat but it cannot be included in our budget. Regner and Ney are persons of trust and I don't want to change them.

(5) Elections and New Regional Government

Solinia was able to work closely and effectively with the previous government, especially when helping to organise a workshop to finalise the National Action Plan for the conservation and protection of the river dolphins and manatees. We had regular and good contact with those responsible for fisheries and tourism. However the latest elections in October 2014 resulted in a new President with a new team, so everything and everybody is now changing (as from 1st January 2015) and we have to start again to develop a good working relationship with these new individuals and try to finalise the document, maybe reorganising a new workshop.

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

(1) Capacity building

Even if the volunteers were not all regularly present for whatever reasons, I am very happy with some of them who are really committed to Solinia and are ready to help when they can. All have learned a lot about river dolphins

A good example is **Gissela**, since 2013 she has participated in all important events (except when she was away from Iquitos for 3 months). Also she is the volunteer whom has taken part in more fieldtrips on the river (observations) and school visits. Gissela has learned a lot (including being on time!) and she wants to complete a PhD focused on river dolphins.

Abel and **Moises** are two young biologists and very active with Solinia. They are really interested in working with river dolphins and they took part regularly in fieldtrips and school visits/conferences. They have also read books and scientific publications to learn more. Moreover they are very professional and able to manage projects. Moises also would like to do a PhD about river dolphins and Abel has a project to create a private reserve with some friends in the region.

Ginna was a good helper for the conferences with real teaching skills and learnt very quickly. Unfortunately she has found a job, fortunately working in the new Regional Government!

Bismarck is also a good volunteer but unfortunately very busy with another association and he does not have a lot of free time.

Margarita, Vanessa, Flor, Paola and **Natali** helped regularly during the first months but less regularly since September 2014 for various reasons.

Lellys, Susana, Roxana and **Jhancy** started with Solinia but had to resign early because they had other obligations (job, etc.).

Angelica, Karen and **Paula** are recent additions to our team and seem to be very active and motivated.

Ney is an old friend of mine, also President of Solinia (he accepted this responsibility as a friend because I could not do it, not being a Peruvian), he has taken part in all the fieldtrips on a voluntary basis while living in a very poor region. First he was chosen to take care of the boat, to guard the

motor and to help the motorist but little by little he became very interested in the project and really helpful with the data collection.

Our motorist **Regner** also became an expert in counting and recognizing river dolphins. I am very positive about him and his expertise with wild animals.

During the year we also had some volunteers who came now and then such as **Stefany, Julio, Liz, Prissilla** and **Jose**.

During the current project period, Solinia has organized 40 meetings, seven special events (expo, etc.) and eight conferences with international speakers. Always thinking about capacity building of the volunteers.

Here are the details of the conferences:

- February 2014 - on 28th February, Bruno Antoine (France), Director of the Peruvian NGO Amazon CARES, "Captivity of wild animals and domestic animals, myth and reality behind the mirror!?" With a total of 26 participants.
- March 2014 - on 14th March, Mr David Bonnet (USA), Underwater Acoustic Specialist - "*Inia geoffrensis*, evolution, the threats, the existing technics to record them and theories about their sounds". With a total of 43 participants.
- April 2014 - on 26th April, Daniel Dietz (Spain), Mountain Guide "Antarctica, wild nature from the seventh continent - ¿So different from the Amazonian Basin?" With a total of 23 participants.
- May 2014 - on 26th May, Javier Velasquez Varela, (Peru), Director of the CREA Amazon Rescue Centre, presented "Rescue, rehabilitation y liberation of aquatic mammals in the Loreto Region". With a total of 24 participants.
- June 2014 - on 27th June, Francisco Rozas Valverde (Peru), Director of the CENDIPP, "Research and Promotion Popular Centre" did a lecture about the ornamental fishes in the Loreto Region. With a total of 25 participants.
- July 2014 - on 25th July, Susana Cubas Pochlin de Saboya (Peru), bird specialist with the PCBC (Peruvian Centre for Biodiversity and Conservation), talked about "Diversity and ecologic importance of birds in the city of Iquitos and birds associated with aquatic ecosystems". With a total of 18 participants.
- October 2014 - on 27th October, workshop (4 hours) with Prof. Dr Eckhard W. Heymann (Germany) about the technics to observe animals. Dr Eckard is primatologist, specialist of monkeys in South America. With a total of 38 participants.
- January 2015 – on 23rd January, Pedro Mayor Aparicio (Spain), Professor at the University of Barcelona, talked about "Amazonian Communities and their relation with the ecosystem". With a total of 42 participants.

(2) Education

From March to November 2014, 95 conferences in 18 primary schools representing a total of 200 hours with the distribution of 2892 certificates to children (53% boys, 47% girls).

Special events were organized with the district of Punchana (Iquitos), the CREA (Amazon Rescue Centre) one clinic for special children and also in three different riverine communities during the four days of the international raft race in September 2014.

Each conference with children is composed of various activities, first an introduction of the team and a presentation (12 to 14 minutes) to explain the differences existing between the pink river dolphin *Inia geoffrensis* and the grey one *Sotalia fluviatilis*. We introduce threats to wild animals such as keeping them as pets (especially monkeys here in Iquitos) and the pollution caused by plastics (bags, bottles, etc.). Images are projected to reinforce the messages. Then we teach the children the “plosh” song, a great success with the young ones but more difficult sometimes when we have children over 12 years old. After the song we introduce the origami, probably THE event they are all waiting for! A volunteer explains how to make a river dolphin and then they have to decide to create a pink or a grey river dolphin, this allows us to emphasise the differences between both species (beak longer for the pink and dorsal fin less triangular). Afterwards they can paint their own origami (pink/black or grey) or sometimes they decide to decorate it differently (rainbow, colours of the national flag, etc.). When the children are ready the volunteers read a tale written by Solinia, the story of two river dolphins, *Sholy* the grey and *Irvin* the pink, who meet at the confluence of the Amazon and Nanay Rivers close to Iquitos. They are talking about threats and especially pollution with plastics and they decide to swim till the city of Iquitos in order to meet humans and to have a talk with them. On the way to Iquitos they will meet four different animals (*Wilu* the king fisher, *Paola* the silver fish, *Rui* the iguana and *Mat* the pigmy marmoset monkey) who explain their difficulties and threats they face, each animal has its own problem (noise, overfishing, pollution and commercial hunting). Then the dolphins *Sholy* and *Irvin* decide to continue to the city of Iquitos. When they reach Belen on the Itaya River (poor district of Iquitos) they finally meet two children, one boy *Juanito* and one girl *Eva*, they play together and finally have a talk about the different threats mentioned by the animals. At the end *Juanito* and *Eva* promise to conserve the environment and to protect the animals, especially the river dolphins. During the tale, photographs in related to the story are projected and at the end we have a discussion about the story to be sure they have all fully understood the messages. Finally all children in the classroom will make the same promise as Juanito and Eva, right hand up and repeating the text. At the end for the last activity Solinia provides a sheet of paper and the colour pencils to a draw something, it is up to the children to choose but we help them with some ideas: animals, river dolphins, river, forest, contamination, etc. Images of both species of river dolphins are projected. If we have enough time we also do a giant puzzle representing both species of river dolphins, making it a competition between small groups of children. Each child is receives a certificate (with all logos including Solinia and Rufford) representing their participation in the conference event and to thank them for making the promise. Then we take a photograph of the whole group with the teacher and the Solinia Team, each child holding their diploma and if possible the origami.

(3) Observation

The route and methodology is always the same. We take the boat on the Itaya River from a location called “the boulevard”, we go downstream to the confluence with the Amazon River and then 2 km upstream on the Amazon River and we stop the motor and we drift during around 8 km passing again the confluence with the Itaya River, then the confluence with the Nanay River to arrive finally at the front of the Peruvian Navy Naval Base. Passing the two confluences (Amazonas/Itaya and Amazonas/Nanay) is essential as they are important zones for the river dolphins.

We have divided the route into 5 main zones:

- Z1 is from the start till the confluence Amazon/Itaya;
- Z2 is the Amazon/Itaya confluence;
- Z3 is the small zone between both confluences;
- Z4 is the Amazon/Nanay confluence;



- Z5 is the last zone from Z4 till the naval base.

We have also defined minor zones, not really included in the study but used to have more information about dolphins' behaviour:

- ZA the portion of the Itaya River we are navigating to go to the start (or to come back to the boulevard);
- ZB the portion of the Nanay River that we can visually observe when we are at the confluence;
- Z6 from the naval base (MARINA) till the Amazon/Itaya confluence at the other side of the island during the dry season.



During each outing we have a data sheet that we fill in with the general data (date/time, weather conditions, speed of the boat in the first zone, name of the volunteers and the motorist, water level) and each time that we encounter a group of dolphins, we complete with the following:

- localisation (GPS + zone);
- time;
- species (*Inia*/*Sotalia*);
- number;
- composition of the group (adult, juvenile, baby);
- behaviour (swimming, feeding, playing, reproduction, baby swimming);
- any other comments (close to fishermen, close to the shore, etc).

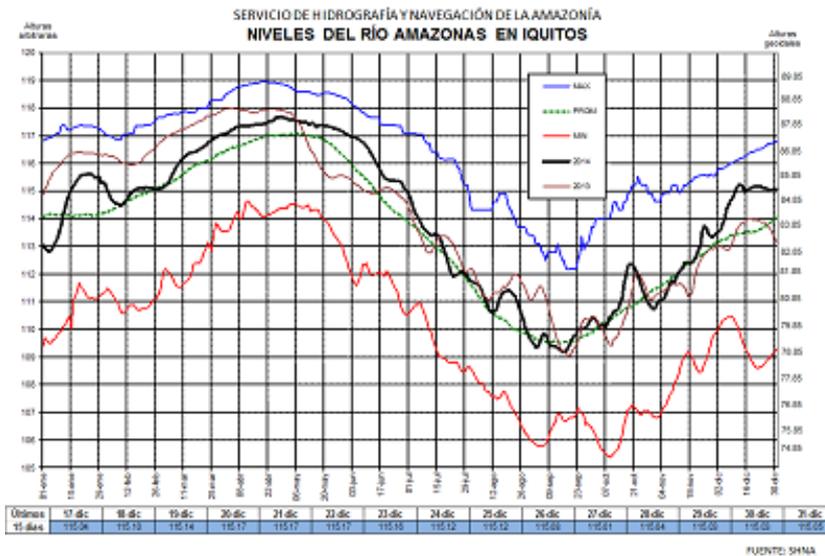
From February 2014 to January 2015, 89 fieldtrips were organized near Iquitos. A total of 382 pink river dolphins *Inia geoffrensis* and 554 grey river dolphins *Sotalia fluviatilis* were counted over a period of one year.

Here are the details per month (number of outings, average pink, average grey, average total):

- February 2014 – five outings – *Inia* 2, 00 - *Sotalia* 7, 20 – total 9, 20.
- March 2014 – seven outings – *Inia* 6, 14 - *Sotalia* 11, 57 – total 17, 71.
- April 2014 – seven outings – *Inia* 4, 14 - *Sotalia* 3, 86 – total 8, 00.
- May 2014 – eight outings – *Inia* 4, 88 - *Sotalia* 5, 63 – total 10, 50.
- June 2014 – eight outings – *Inia* 6, 75 - *Sotalia* 8, 38 – total 15, 13.
- July 2014 – seven outings – *Inia* 5, 86 - *Sotalia* 4, 14 – total 10, 00.

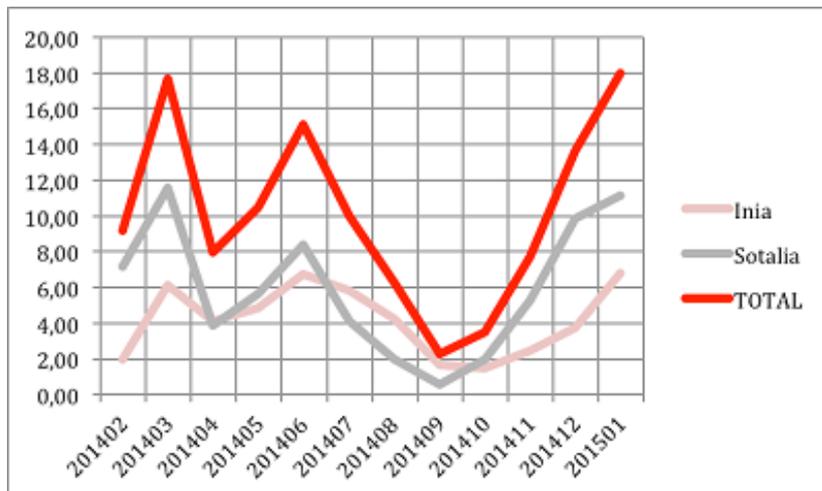
- August 2014 – eight outings – Inia 4, 25 - Sotalia 2, 00 – total 6, 25.
- September 2014 – seven outings – Inia 1, 71 - Sotalia 0, 57 – total 2, 29.
- October 2014 – six outings – Inia 1, 50 - Sotalia 2, 00 – total 3, 50.
- November 2014 – eight outings – Inia 2, 50 - Sotalia 5, 25 – total 7, 75.
- December 2014 – nine outings – Inia 3, 78 - Sotalia 9, 89 – total 13, 67.
- January 2015 – nine outings – Inia 6, 33 - Sotalia 11, 87 – total 18, 11.

The Amazon is a very dynamic river; the water level is increasing until the end of April (historic record in Iquitos max 118, 97 m over the sea level in 2012) and decreasing till end of September (historic record in Iquitos min 105, 38 m over the sea level in 2010).



In 2014 we had the maximum on 27th April with 117, 65 m osl (three river dolphins observed) and the minimum on 17th September with 109, 19 m osl (0 river dolphins observed).

We observed a lot of river dolphins during the flooded season from March to July, the best months were March (average 17, 71 per outing), June (average 15, 13 per outing) and the last month January 2015 (average 18, 11 per outing). Observation of less river dolphins during the dry seasons from August to November with low records in September (average 2,29 per outing with three days at 0) and October (average 3,50 per outing with one day at 0).



It is clear that during the dry season the river dolphins (especially the Tucuxi) are not spending as much time in the observed zones, probably that they are in zones with more depth. We do not understand why there is a

decrease in April and May but with more fieldtrips in 2015 we will see if we have again such results.

Generally we observe the dolphins swimming upstream or fishing/playing in or close to the confluences. They are most of the time close to the shore. There is probably a possibility to make analysis per zone but we need more data. If possible it could be also interesting to make a comparison with the presence of fishes. It is often difficult to understand the behaviour we observe, we need more practice!

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

Most of the volunteers are local students from regional universities. All are Peruvians living in or near Iquitos. They have learned a lot about both species (*Inia geoffrensis* and *Sotalia fluviatilis*) and about a conservation project.

All children in the education programme are from local schools or communities, they do not know and understand the differences between both species of river dolphin and they can create an origami river dolphin. They also know a new song they can sing whenever they want. They have all received a certificate from Solinia and Rufford to remind them of the Solinia conference and all they learnt.

5. Are there any plans to continue this work?

Definitely YES.

Solinia is continuing the outings with the remaining budget and we plan to continue the conferences in schools and other events as from March 2015. Solinia is a young NGO but we have already opportunities to develop our projects at the national and international levels and we have to reinforce our structure to be able to make it.

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

- Concerning the observation and counting of river dolphins around Iquitos, a publication will be written after we have collected 2 years of data (in 2016).
- Photographs of the education programme, observations and events are regularly posted on our Facebook page (now has more than 600 fans).
- We have already presented Solinia's work during the regional workshops in Iquitos in April 2014; during an international workshop in Cartagena in November 2014 and again during an international conference in Cartagena in December 2014. Recently we were invited to present Solinia's work during an event organized by the Regional Service in charge of the management of the Pacaya Samiria National Reserve (SERNANP).
- At the beginning of each monthly conference, before introducing the speakers we present Solinia and Rufford to the participants.
- A special meeting was organised end of December 2014 to present the results of the year to all the volunteers.
- During interviews with the press (regional journalists of TV and newspaper) we have also the opportunity to explain our projects and results.
- In 2015 we will invest time in the construction of a good relationship with the new regional government, presenting our work to them.

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

From end of January 2014 until now.

We still have some budget remaining to enable us to continue the observations and to prepare for the next period. Our original application was entered for a one year period but with the objective to continue the good work.

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.

Original budget in August 2013 was £5.979, 00 with an exchange rate S/.1 (PEN - Peruvian New Soles) = £0, 24 meaning a total of S/. 24.912,50.

On 22nd January 2014 we have received our first Rufford small grant, US\$ 9,635.93 on the Solinia US\$ bank account (Scotiabank Peru) including a transfer charge of US\$ 41.09.

We have kept the money on this account and we have transferred when needed based on the expenses on the Solinia PEN bank account with an average exchange rate 1 US\$ = S/. 2,785.

So thanks to a good exchange rate we have finally received S/. 26.835 (difference +S/. 1.922,50 with the budgeted amount).

The table below is based on the original budget and exchange rate while the attached Excel spread sheet is based on the real numbers and we have a rest of +£627,36 which is equivalent to +S/. 2.614. Thanks to this good exchange rate we have a bonus of S/. 1, 552, 50 that Solinia will still use to continue the fieldtrips in 2015.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Renting venue for monthly events	£144	£108	£36	To compensate the stationary costs.
Rooms rental for meetings	£288	£276	£12	To compensate the stationary costs.
Stationary and communication costs	£600	£688,61	-£88,61	Compensated by the above items and the excess for the outings.
Carving gift for guest speakers	£144	£24	£120	Not used because it was difficult to find a good artisan and we have used this budget for the snacks and drinks events.
First aid kits	£30	£5,64	£24,36	Used for the posters.
Life jackets	£180	£128,88	£51,12	Used for the posters.
GPS	£200	£212,16	-£12,16	Compensated by the positive difference in the education material.
Tee-shirts	£550	£480	£70	Used for the posters.
Equipment maintenance	£200	£196,76	£3,24	Used for the posters.
Education material	£1150	£1.137,89	£12,11	To compensate GPS.

Posters	£330	£480	-£150	We have also printed new triptychs. Compensated by the positive difference in above lines.
Boat fuel	£599	£488,16	£110,84	To be used for the outings in 2015.
Boatman stipend	£624	£552	£72	To be used for the outings in 2015.
Drinks for events	£240	£306,12	-£66,12	Compensated by the carving gift budget.
Water during observation	£520	£439,20	£80,80	To be used for the outings in 2015.
Drinks for meetings	£180	£200,84	-£20,84	Compensated by the carving gift budget.
Total	£5979	£5724,26	£254,74	Will be used to continue the outings during the next months in 2015.

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

- (1) To develop and reinforce Solinia with a real structure (office, stipends, salaries, etc.).
- (2) To maintain the motivation of the “top” volunteers with stipends.
- (3) To invest in a good boat that will permit us to make more outings to observe river dolphins without losing time and to go further upstream on the Itaya and Nanay rivers but also upstream and downstream on the Amazon River.
- (4) To maintain the good relationship and collaboration with other associations in South America.
- (5) To maintain the good relationship with the existing sponsors and to find additional ones.

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?

The Rufford logo was used on diplomas to children, slides, leaflets, tee-shirts, banners, posters and all materials used throughout the year for our projects.

11. Any other comments?

Solinia is a new association founded in June 2012 and has already had a positive impact in Iquitos. This is most likely due to Solinia’s rapid development and the keen capacity to learn shared by the team and volunteers. The Rufford grant has been vital in enabling Solinia to develop the educational outreach work desperately needed in Iquitos where river dolphins face a number of threats and environmental education is not generally available.

It’s really important to work with children as they are open to ideas and conservation suggestions, they have an impact on the previous generations and they are the future of the Loreto Region.

It is also important to include young student volunteers from local universities who have the potential to drive change in their hands; the best example is *Ginna* who was a key person during the education programme in primary schools and who has now secured a job in the Regional Government.

Fieldtrips to observe Local River dolphins are important as part of the process to learn more about these animals, their behaviour, their habitat needs and also to give them some form of protection

which is generated by people showing an active interest in them and their well-being.

This first small grant was a real and great help to develop our pilot projects in the Peruvian Amazon, an immense THANKS to the Rufford Foundation and I hope we will still continue the good work, being of great importance to further capacity build and outreach to more people in Iquitos, a very big city and population!

I have also to thank other sponsors and friends, especially Alison Wood from WDC (Whale and Dolphin Conservation in England), Bill Rossiter from CSI (Cetacean Society International in USA), Fernando Trujillo from Omacha in Colombia, Roberto Vieto from World Animal Protection in Costa Rica and Enzo Aliaga-Rossel in Bolivia.

Also thanks to my referees Bruno Antoine (who lived in Iquitos but who is now back in France) and Kris Hendrieckx (Belgium). Solinia is now part of a network in South America to conserve and protect river dolphins; this was a big challenge in 2012 that became a reality in 2014 thanks to the Rufford Foundation.