

### 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	César Javier Pérez Hurtado
Project title	Earthkeepers Environmental Education: Inspiring Care for the Natural World.
RSG reference	18209-1
Reporting period	November 10th, 2015 to January 2017
Amount of grant	£4866
Your email address	cesarphc@gmail.com
Date of this report	January 2nd, 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
Directly benefit around 150 elementary students from different public and private schools in Santa Cruz.				115 elementary students, 20 from the countryside and the rest from different neighbourhoods of the city successfully completed the Earthkeepers programme. It is worth noting that five out of the nine elementary schools that attended the programme came from the countryside. Fifteen parents and eight parents also attended the programme along with their correspondent schools. We planned to achieve the 150 students goal but the climate conditions influenced only to have six sessions during the Spring 2016 (August to October). Sooner than August is too cold because of the Austral winds (called Surazos locally) and later than October is significantly hotter and we wouldn't have time to proper conduct the follow-up back to school in the coming months (the academic calendar finishes the end of November). Other reason why some students cancelled their participation at the last minute could be due to the parents' overprotective behaviour regarding having their children spending 3 days and 2 nights at the Training Centre in the woods. In Bolivia the concept of "summer



		camp" programmes it is inexistent. A positive aspect is that the Earthkeepers programme is starting to create this new "culture" and Bolivian parents are getting every time more and more familiar with. One aspect that we will improve for the following years is to create and distribute more information about the programme including positive testimonies from parents, teachers, and students about the
		experience.
Teachers who will also participate in the program will draw on their experiences with Earthkeepers to enrich classroom-based environmental curricula.		All eight teachers who attended the programme continued the follow-up back to the classroom for the following months. Six of the teachers conducted the standard procedures to promote the Y (yourself) and S (sharing) keys to be performed by the participants of the programme. Y-key activities aim to lower the ecological footprint by reducing the usage of energy and materials and enhance their experiences with the natural world. The S-key actions consist in teaching to others what they have learned at the Training Centre in terms of knowledge and experience. Two out of the eight teachers not only performed the standard protocol, they also enriched their Natural Science curricula with STEM (Science, Technology, Engineering, and Mathematics) activities that complemented the four ecological concepts of the programme.
It should help ensure stability in a foundation where the majority of		The Rufford grant was vital to conduct the programme this 2016 and also helped to get



indispensable equipment and
indispensable equipment and materials to improve the
programme for the future years.
challenges: a) Keep improving the
functioning and quality of it in the
field, b) having year-round
complementary Natural Science
and Conservation STEM activities
with the participant schools, c) run
the programme in other protected
natural areas of the country, and
d) develop a sustainable business
model that will help to cover all the
direct and indirect costs related to
the programme and with our
foundation. In 2016, we have the
positive experience to strengthen
our business model by leveraging
some funds from donations from
private schools. In this sense the
RFSG is working as a "seed"
investment.
The Earthkeepers programme
helped 12 last-year university
students to: a) develop their
undergrad thesis to obtain the
degree of Environmental
Engineering, and b) gain work
experience.
Two university students who were
trainers and collaborated in the
implementation of the
Earthkeepers programme have
already successfully defended their
thesis. Jorge Meza (The Aquino
Bolivian University – private
university in Santa Cruz city) and
Rosa Guizada (Simon I. Patiño
University - private university in
Cochabamba city). Both
conducted research related to the



C	different impacts of Earthkeepers
C	on the children and the
e	educational curricula.
	One university student, Ruddy
	Barreto, who volunteered during
	he field implementation of the
	programme wrote a monograph in
	order to earn his Environmental
	Engineering undergraduate
	degree at the State University
	Gabriel René Moreno in Santa Cruz
C	city. Currently, two university
S	tudents (Daniel Rodriguez and
F	ernando Balderrama) from the
	private University De Aquino Bolivia
-	n Santa Cruz are working on their
	hesis dissertations. Fernando is
	using the Earthkeepers data (pre-
	and post-surveys) to measure the
	mpact of the programme on the
	children's understanding of four
	ecological concepts (energy flow,
	material cycling, interrelations, and
	change). Daniel, who also was a
	rainer in the programme, is
C	conducting a research to predict
†	he anthropogenic land use
C	change for the coming years that
V	will impact the Lomas de Arena
r	egional park. This research will be
ι	useful for decision makers at the
S	tate and municipal level.
	n 2016, we were honoured to
	eceive support from seven
	volunteers, all of them last year
	university Environmental
	,
	Engineering students from the State
	Jniversity Gabriel Rene Moreno,
	and the private University Aquino
	Bolivia. These volunteers who are
	gaining professional experience
V	with our foundation are: Wendy
 •	



	Claros, Caren Gutierrez, Pamela Sossa, Luis Poggi, Mary Luz Ramos, Silvia Anagua, and Ximena Cruz. Finally, we received the consistent support during the programme implementation from Luisa Arancibia, a university professor of environmental and ecotourism topics at the private NUR University. Luisa.
Contribute to the work of educators and policy makers improving environmental education in Bolivia on a national level.	The programme contributed to enhance the natural science curricula directly to the eight teachers who attended the programme. Earthkeepers and STEM (Science, Technology, Engineering, and Mathematics) activities were conducted back in the classroom with the help from our team of trainers. Also, the District of Education of the Samaipata municipality, which is part of a province in the countryside located at 123 km from the city, approved the participation of five elementary schools in the programme. This is very encouraging since the District of Education manages in total seven schools including middle and high school. However, the City Education District of Santa Cruz, which is managed by the Central Government, is highly bureaucratic and significantly politicised. This is a challenge when a science-based education programme has to face politicised ideological arguments within the informality of public administration. We hope for the next year to knock



	doors to a more stable education district administration and to start conversations on ways to reach more schools in Bolivia with effective environmental education.
Contribute to the quality of environmental education both in Bolivia and the rest of Latin America.	So far, the Earthkeepers programme is the only outdoors environmental education programme that: a) teaches children the basic ecological concepts that explain how the earth works, b) enhances the appreciation for the natural world, c) make the participants reduce their ecological footprint by reducing their usage of energy and materials, and d) measures the impact of its intervention in terms of behaviour change, values and attitudes, and understanding of four ecological concepts. Most of the environmental education efforts conducted in Bolivia, and probably in Latin America, consider their main success indicators as: a) number of participants, and b)
Reinforce the conservation efforts to the protection of a 270ha natural area within a threatened regional park of where the program takes place.	spread of number of contents. The Earthkeepers programme is also a conservation tool. This because it needs an intact ecosystem where the participants feel they are part of something bigger, they are guests of home of thousands (maybe millions) of living organisms. By using a natural protected area, the Earthkeepers programme is helping the CEASIP (Centro de Ecología Aplicada Simón I. Patiño) to demonstrate and add actions in the site. This is particularly important since the national government can take



	away (revert) land if it's not proven
	to be "productive". Thus, the
	programme activities carried out in
	the protected area called "Los
	Troncos" are yearly contributing to
	be reported as training and
	conservation achievements by the
	CEASIP.

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

Probably the biggest challenge was to use the RSGF wisely knowing that it wouldn't be enough for all the costs of the programme if we wanted to deliver a high quality programme. We had to leverage funds to cover complete other costs like stipends for the nurse and volunteers, first aids kit and training, more trips to the countryside (Samaipata) for the follow-up, and other materials and equipment. However, this also represented a big opportunity to strength our economic sustainability plan. So we decided to leverage some funds asking for donations to the private schools that could do it. With this, we ensured the participation of public schools.

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

THE FIRST ONE. Teach effective Environmental Education. We could demonstrate the impact of the programme on the children in terms of: a) Understanding of four ecological concepts (energy flow, material cycling, interrelationships, and change), b) Environmental values and attitudes (preservation and utilisation), and c) Behaviour change (reduction of ecological footprint). For this, we conducted preand post-programme evaluations for the participants (target group) and for nonparticipants (control group).

Table 1a. Results showing the statistically significant impact of the programme on the participants' UNDERSTANDING of the four ecological concepts. The ecological concept of material cycling is the only one that doesn't present a p-value less than 0, 05. However, the mean scores improved from 69.84 (pre-programme) to 77, 25 (post-programme). This means they started with a high score and they already had some understanding of this concept.



Ecological Concepts	n _	-	an score rrect)	Standard	Deviation	t	q
<b>-</b>		Pre	Post	Pre	Post		
Energy Flow	63	34,13	44,18	12,50	17,50	-8,73	,000*
Material Cycling	63	69,84	77,25	26,58	24,55	-3,75	,085
Interrelationships	63	43,65	61,11	29,01	27,60	-1,75	,000*
Change	63	28,57	47,62	29,40	34,21	-2,20	,000*
	· ·			•		n_w	aluez 0.05

p –value< 0,05

Table 1b. Results show that the non-participants (control group) don't present a significant improvement on most of the ecological concepts. Excepting by the material cycling, the improvement in the other concepts are not significant.

n _	ECQ mean score (% correct)		Standard	Deviation	t	g
	Pre	Post	Pre	Post		
62	33,87	34,41	16,24	14,11	-0,22	,829
62	67,20	75,80	21,33	24,27	-2,29	,025*
62	36,29	47,01	30,25	28,53	-0,19	,849
62	36,29	37,90	32,85	32,24	-0,30	,766
	62 62 62	n (% cd Pre 62 33,87 62 67,20 62 36,29	(% correct)           Pre         Post           62         33,87         34,41           62         67,20         75,80           62         36,29         47,01	n <u>(% correct)</u> Pre Post Pre 62 33,87 34,41 16,24 62 67,20 75,80 21,33 62 36,29 47,01 30,25	N         (% correct)         Standard Deviation           Pre         Post         Pre         Post           62         33,87         34,41         16,24         14,11           62         67,20         75,80         21,33         24,27           62         36,29         47,01         30,25         28,53	n         (% correct)         Standard Deviation         t           Pre         Post         Pre         Post           62         33,87         34,41         16,24         14,11         -0,22           62         67,20         75,80         21,33         24,27         -2,29           62         36,29         47,01         30,25         28,53         -0,19

p -value< 0,05

Table 2. Results showing the scores improvement and the statistically significant impact of the programme on the participants' environmental VALUES and ATTITUDES. Data show an overall improvement of values and attitudes, in particular with intend and care of natural resources and alteration of nature, where the pvalues showed a significant statistical significance.

Ecological Concepts	n	ECQ mean score (% correct)		Standard Deviation		t	р
		Pre	Post	Pre	Post		F
Total Preservation	57	4,17	4,26	0,61	0,57	-1,38	0,17
Intent and Care of NNRR	59	4,01	4,14	0,68	0,62	-1,80	0,07*
Enjoyment of Nature	63	4,48	4,47	0,83	0,83	0,14	0,89
Total Utilization	55	2,70	2,63	0,59	0,74	0,80	0,43
Alteration of Nature	62	3,05	2,74	0,91	0,91	2,58	0,01*
Human Dominance	60	2,48	2,55	0,72	0,76	-0,78	0,44

p -value< 0,05

Table 3. Analytics showing a statistically significant BEHAVIOR CHANGE after the programme. While at the Training Centre, the participants commit to reduce their ecological footprint by reducing their usage on energy and materials for the following months. They need to comply their commitments if they want to graduate as Earthkeepers Level 1. In addition, during the pre and post-programme evaluations, 13 other behaviours were tested to which the participants reported new behaviour adoption.



Paired Samples Statistics Behavior Change Pre vs. Post program	n _		an score prrect)	Standard	Deviation	_ t	р
		Pre	Post	Pre	Post		-
	69	2,61	13,46	2,36	1,88	-3,81	,000
			•			р_ <u>v</u>	alue< 0.05

THE SECOND ONE. Inspiring Care for the regional natural area Lomas de Arena. In 2016, the programme had a direct impact inspiring 138 participants to care for the Lomas de Arena protected area. Adding from previous years (2015 and 2014), we reached a total of 371 participants who had a personal positive experience with this threatened protected area (Table 4).

During the follow-up back to the classroom we heard that many of the participants returned to Lomas de Arena with their families to show them the beauty of the ecoregion and the sand dunes.

Indirectly, through our social media channels, in which we have a reach of around 3400 followers, all our activities and achievement held in Lomas de Arena were broadly spread.

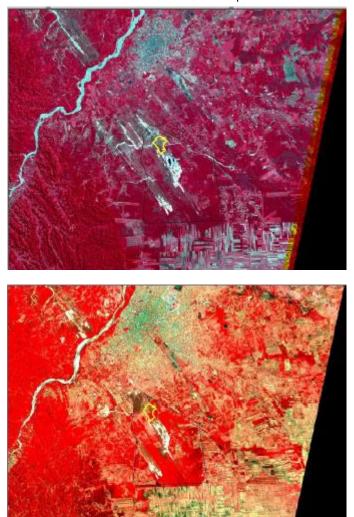
Table 4. Summary of participants 2014 – 2016 having a direct positive personal experience for the natural world at Lomas de Arena protected area.

Year	Students	Parents	Teachers	Total
2014	78	21	8	107
2015	108	14	4	126
2016	115	15	8	138
Total	301	50	20	371

THE THIRD ONE. Increase the conservation efforts to protect natural areas within Lomas de Arena. We believe the Earthkeepers is not only an education programme, but also an effective conservation tool. This because it needs a conserved natural area in order to function. The Earthkeepers Training Centre is located in a property called "Los Troncos". Los Troncos is within the "Lomas de Arena" protected area and regional park. The EK is one of the most significant conservation actions that take place in "Los Troncos". More conservation tools such as Earthkeepers are needed if authorities and civil society want to preserve this rich area against imminent destruction (Image 1).



Despite Lomas de Arena is a biodiversity hotspot, illegal anthropogenic destruction threatens the park every day. This constant menace comes not only from the outside but from the inside of the park. On the one hand, private landowners existed and settled in the area previous the consolidation of the regional park. This



means that although private initiatives are supposed to be regulated within the park, some private owners practice cattle ranching and extensive agriculture. On the other hand, an utter lack of policy reinforcement in different levels cannot stop the violent and uncontrolled penetration of illegal settlements inside the park.

Image 1. Upper and lower satellite images show а difference between the land use change from the year 1986 (upper image) to 2016 (lower mage). In these false colour images, the reddish areas show forests/vegetation. The light blue, grey, and pink areas are evidence of human intervention. The black polygon represent the extension of the Lomas de Arena regional park. The yellow polygon is where the Earthkeepers Training Centre takes place.

Image taken on July the 25th of 1986 approximately 30 years ago, the city of Santa Cruz (North of the park) extended only until the 4th ring. Some anthropic intervention can be noted in the north, south east and south of the park.

Source: Landsat 5 TM (Thematic Mapper) 30 m spatial resolution. Band combination 3 (Blue), 4 (Near Infrared), and 5 (Short-wave Infrared). Elaborated by Perez, 2017.

Image taken on October the 31st 2016 A few months ago, the equivalent of the city's 8th ring reaches the north part of the park. Also, there is imminent anthropogenic invasion all around it. It is worth noting that the Lomas de Arena Park is the last patch of relatively conserved area in such extractivist scenario.



Source: Spatial Resolution of 30 m. Band combination of 7 (Short-wave Infrared), 6 (Short-wave Infrared), and 4 (Red). Elaborated by Perez, 2017

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

We usually involve public elementary schools from the area such as the Hortencia Banegas de Pinto in 2014. In fact, we invited this same school last year but unfortunately the new principal and new teachers in charge of 4th and 5th graders were not interested in the programme despite our previous experience with the school.

However, we do involve and coordinate with local and regional institutions that have a direct impact in with local neighbourhoods. These two institutions are the State Government (Department of Natural Protected Areas) and the Applied Ecology Centre Simón I. Patiño (CEASIP). These two institutions are constantly in touch with local communities, families, and agro-productive farmers of the region.

#### 5. Are there any plans to continue this work?

Yes. We believe there is serious weakness in most of the environmental education processes in Bolivia and in the rest of Latin America. Traditional environmental education assumes that only spreading environmental information is enough to change habits, and the indicators of success are limited only to the number of participants attending the workshop, among other false assumptions.

The Earthkeepers programme responds to a real need of a different kind of education. It's planned that the Earthkeepers programme continues to work in the protected area within the Lomas de Arena regional park. Depending on the coordination with the CEASIP (Patiño's foundation agro-ecological farm) we would like to increase the number of schools and rise to seven or eight sessions per year. Ideally, we would like to have the participation of 50% of public and 50% of private schools from the country side, rural and urban areas. However, the number of sessions per year is limited by the seasons and the weather conditions.

Also, we are looking forward to expand the programme to other protected areas within the state of Santa Cruz or in the rest of the country. Although we have some people and institutions interested in La Paz and Tarija, we would like to explore these possibilities in 2017.



Finally, we are planning to develop complementary outdoors STEM (Science, Technology, Environment, and Mathematics) programmes to complement the Earthkeepers programme.

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

We plan to share our results using: a) Social media (Facebook, Webpage, Blog, and YouTube clips), b) Publishing in academic papers, c) Publishing the Earthkeepers book translated into Spanish, d) Through meetings with different local and international institutions, and e) Through the honest testimonies of the children who attended the programme.

- a) We are frequently updating our activities and results in our Facebook page (https://www.facebook.com/gaiapacha/) with a reach of over 3300 followers, in our webpage, which is temporally under maintenance (www.gaiapacha.org), and through our blog (www.earthkeepersbolivia.wordpress.com) which received more than 2600 visits from around the world.
- b) We have enough qualitative and quantitative data about the impact of the programme that we would like to publish. We had already some conversation for these publications with the co-author of the Earthkeepers programme and professor at the College of Education of the University of Arizona, Dr Bruce Johnson. The idea is to publish in two academic journals, one in Spanish and one in English. At this point, we are identifying potential journals to be published at.
- c) In 2017 we would like to share through Bolivia and the rest of Latin America the philosophy, principles, and contents of the Earthkeepers programme by publishing the book in Spanish. We have finished the translation of the entire book, so the next steps are the review from the authors and look for potential funding to print the books. This also counts as part of our sustainability plan, since we can sell the books to cover costs of the programme implementation.
- d) We will continue participating in meetings with schools and different institutions either to coordinate the participation in the programme or to search for cooperation. During the majority of these encounters we use the results of our work as the best evidence of the programs' benefits.
- e) So far, one of the best ways to spread the results of the programme was through the children's experience and testimonies. They share with friends, teachers, and parents the impact of the programme on them. As the programme continues to offer quality and care from our part, the positive experiences the children gain in the programme become one of our best propaganda.



### 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 RSG was used from the last period of 2015 (November) through the whole period of 2016 (until December). Actually, the RSG was used for a longer length of the project. When we wrote the proposal we were about to start the Earthkeepers campaign 2015, but the RSG was funded in November 2015, when the field activities were over but all the follow-up and data analysis started.

In this sense, we use the RSG for activities in 2015 and the rest of activities including preparation, implementation, and follow-up of 2016. The following table shows the dates in which we coordinated meetings with schools, the dates we conducted the pre-program baselines, the dates of the Earthkeepers program in the field, and the follow-up back to school (Does not include previous team preparation dates).

Schools	Meetings with Principals & Co- ordinators	Meetings with Teachers	Meeting with parents	Baseline (Pre- program)	Earthkeepers at the Training Centre	Follow-up & Post-Program Evaluation
5 schools from Samaipata	Apr-8	Aug-12		Aug-12	Sept-2, 3 &4	<ul> <li>Y &amp; S keys ceremony</li> <li>STEM activity (measuring giants) Nov-5</li> <li>Graduation Nov-18</li> </ul>
San Antonio	Jul-25	Jul-25	Aug-1	Aug-19	Sept-9,10 & 11	<ul> <li>Y key ceremony</li> <li>STEM activity (measuring giants) Oct-26</li> </ul>
Frances Santa Cruz (2 groups)	Aug-5	Aug-5	Aug-22	Sept-30	Sept-1 group 1 Oct-14,15 & 16 group 2	<ul> <li>Visit Science Fair Oct-20</li> <li>STEM activities Dec-12 &amp;13</li> <li>Graduation Dec-13</li> </ul>
Cambridge College	Jul-29 1 <sup>st</sup> meeting Aug-19 2 <sup>nd</sup>	Aug-11	Sept-26	Oct-7	Oct- 7,8 & 9	•Y & S ceremony Nov-14 • Post-program



	meeting					evaluation
						Nov-14
						<ul> <li>Graduation</li> </ul>
						Dec-13
Cardenal		Aug-5	Aug-5	Aug-23 &	Sept- 16, 17	• Y ceremony
Cushing				26	&18	Oct- 26 & 31
						<ul> <li>Graduation</li> </ul>
						Nov-27

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	
Copyrighted materials and a	ccessories	from the Ir	nstitute of B	Earth Education (IEE-USA)	
120 Earthkeepers Sets (keys, buttons, cards, certificates, seals) + postage and packing	583,00	667,53	-84,53	Shipping costs were more expensive than considered	
Evaluation of the Earthkeep Attitudes, and c) Understand		•		Behaviour Change, b) Values &	
4 packets of paper for printing baseline and post program tests (target and control group) + 2000 Photocopies.	0	52,22	-52,22	We figured out the way to leverage with our funds as counterpart.	
Training Materials, and equip	ment for th	e Earthkee	epers Train	ing Centre	
1 Big Metal Container of 4x4x4 meters in order to store all our accessories, materials, and furniture. This container could be transportable to anywhere if needed with all our equipment.	1160,00	2038,68	-878,68	Real cost was more expensive, and transportation costs to Lomas de Arena in a special truck wasn't considered.	
Program's Promotion					
Television advertisementInternetpromotionFacebook,Fickr,updating of the program's	20,00		20,00	We didn't spend on these since needed to cover other more prioritized items. And we used another strategies to spread	



blog in Bolivia and in the				out the program.
foundation webpage.				
Food for participants of the	program	for 3 day	s and 2 ni	ights provided by the Centro de
Ecología Aplicada Simón I. Po	atiño in the	e Earthkee	pers Trainii	ng Centre
320 Breakfasts for 160	200,00	215,00	-15,00	366 breakfasts updated
people X 2 days				
480 lunches for 160 people	600,00	642,00	-42,00	546 lunches updated
X 3 days				
480 dinners for 160 persons	600,00	361,00	239,00	361 dinners updated
X 3 days				
Refrigerios de la tarde	190,00	128,00	62,00	CEASIP covered some of the
para 160 personas X 2 días				costs
30 Food for	110,00	112,00	-2,00	
trainers/volunteers over				
three days of training and				
pre-programme				
preparation (Breakfast,				
lunch and dinner).				
Transportation				
5 Transport of the	207,00	61,00	146,00	We got the schools pay for the
participants from their				transportation. However, we
location to the Centre for				had to cover the balance for
Applied Ecology Lomas				one school from the country
de Arena (CEASIP) in the				side that didn't budgeted the
Lomas de Arena Regional				full cost of transportation.
Park				
40 Travel fare for team	74,00	95,00	-21,00	We didn't count to conduct
members to implement				the follow up in a town in the
pre- and post-programme				country side which added
activities.				additional transportation costs.
Fuel for meetings and	72,00	84,00	-12,00	In the practice, transportation
presentations.				costs for meetings with
				principals, teachers, parents,
				and representatives of different
				institutions were higher.
Communication				
Mobile telephone	45,00	50,00	-5,00	In the practice, communication
				costs were more expensive.
Internet Costs	24,00	48,00	-24,00	
Equipment for daily and night activities in Lomas de Arena				
5 Headlamps	52,00	45,00	7,00	We bought 2 headlamps at
				that price
2 Tents	120,00	312,00	-192,00	Prices were more expensive
				than expected
5 Sleeping Bags	120,00	37,00	83,00	We only bought 2 bags.



1 Metal sled to transport all the equipment around the sandy terrain in the field	40,00	0	40,00	We prioritized to get other items such as tents which were more expensive.
5 Machetes and racks to clean and maintain the trail in the protected area		51,00	-11,00	1 machete, 1 rack, and 1 saw to trim elevated tree branches
TOTAL	4267,00	4999,43	-133,43	

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

Looking ahead, our desires can be summarised in: a) keep improving the quality of this educational experience, b) look for another Bolivian natural areas where this programme can be implemented, c) spread the idea and the content of the Earthkeepers programme through Bolivia and Latin America, and d) develop more outdoors educational STEM activities that could complement the Earthkeepers programme all year round.

- a) There are couple of things that we need we think are important to implement the coming years. The first one is to construct a small covered wooden infrastructure (like a deck) in the middle of the natural area. In this place the children would be able to hide from rainstorms (having wet kids in the middle of the forest is not fun). Also, this place will be very useful to gather, give instructions, have a clean/safe place for infirmary activities, and have our outdoors meals.
- b) We want to expand the programme, or at least identify another natural area where the programme can be implemented. We want to support the conservation efforts through the programme either within the state of Santa Cruz, or in another state of the country. We have been having some conversations with people and institutions interested in having Earthkeepers in the highlands of La Paz or in the dry Chaco region such in Tarija at the south of the country.
- c) We also want to spread the spirit and contents of the Earthkeepers programme through the country and Latin America. This is because we think there is a great potential for its implementation in many natural protected areas. For this, we have already translated the original book from English to Spanish. However it needs a last review from the authors and probably the search for funds to print it and publish it. We could also include the Bolivian experience and the results we are having because of Rufford Foundation.



# 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?

Yes we did use the RSGF logo at three levels: a) web publications, b) power point presentations in meetings with schools, and institutions, and c) during the field training sessions we had the introductory session where we thank all the institutions that are collaborating with us, including the support from RSGF.

- a) Web publications. We have a specific blog where we update the programme's activities including the RSGF logo on them. You can access the blog at www.earthkeepersbolivia.wordpress.com. We also publish Earthkeepers news including the recognition of supporters like Rufford in our Facebook page: https://www.facebook.com/gaiapacha/. Finally, we have the RSGF logo listed in our web-page as big supporter of our Earthkeepers programme, but this website is temporarily disconnected due to maintenance issues. However, when available, you can access through: www.gaiapacha.org.
- b) During our various (maybe dozens) of presentations we have with school's teachers, parents, principals; different institution's representatives we always mention the support of Rufford and showing the logo.
- c) During our field activities that last 3 days and 2 nights, students, parents, and teachers are immersed in the programme. Besides the introductory session, during the whole outdoors experiences there were many opportunities where we mention Rufford's support.

# 11. Please provide a full list of all the members of your team and briefly what was their role in the project.

#### 12. Any other comments?

We are a small institution with big ideas and lots of energy. So far, the support from Rufford Foundation has been vital to start developing our own sustainability plan, and the results have shown great impact within the 3 years we have started this initiative.

We want to thank Rufford Foundation for trusting in our capacity in order to best invest not only the economic resources, but also to encourage us to invest our hard work to change lives and measure the impact of it.

Before Rufford, there was a big uncertainty of the number of schools that could attend the programme, also the field conditions in which the entire team worked



weren't the best, and we neither had a proper place where to store all our materials and equipment that were so hard to get.

Thanks to Rufford, schools and parents are getting more and more familiar with outdoors educational programs and most of them expressed their interest to continue attending/supporting the programme for the coming years. Also, the field conditions in which our team performed during the programme by counting with tents to sleep at night (not sleeping in the sidewalks of the main offices and exposed to insects), sleeping bags, and flashlights (and others) were improved significantly. Finally, we have a proper storage transportable unit located in a safe place within the agro-ecological farm in which we can store the stuff that cost a lot of hard work to get.

We are very proud to be able to demonstrate with quantitative and qualitative indicators the success of our programme such no other education/conservation program at least in Bolivia and probably Latin-American.

If in the future, there would exist any opportunity to apply for further Rufford support, we would like to know how. Rufford has main goals that are very compatible with our goals.