

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. 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	Victor Wodi
Project title	Tangkoko Conservation Education: Conservation Education Programme around the Tangkoko- Duasudara-Batuangus Nature Reserves in North Sulawesi, Indonesia.
RSG reference	11441-1
Reporting period	May 2012 – May 2013
Amount of grant	£ 5950
Your email address	tangkokoproject@gmail.com
Date of this report	22th June 2013



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

Objective	Not	Partially	Fully	Comments
Implement regular	achieved	achieved	achieved X	We have implemented our
conservation education activities held in schools, through regular lessons in classrooms, trips to Tangkoko forest and to Tasikoki wildlife rescue centre.				education programme for 12 schools in five different villages from September 2012 to May 2013: one theoretical lesson every 2 weeks (from the Tangkoko Conservation Education project, Macaca Nigra Project, local guides, and Tasikoki Centre), 12 field trips to Tangkoko forest, four field trips to Tasikoki Wildlife rescue centre (for the schools who haven't visited the centre last year) and evaluation questionnaires, for a total of 331 pupils.
Provide teachers with material about conservation in order to get conservation education into the local academic curricula (edition of a booklet with our lessons).		X		We have successfully presented the first lesson (bases about environment and environmental changes) to the pupils with the illustrations created by a scientific illustrator. We are currently preparing the rest of the booklet (six illustrated lessons in total, in addition with games and experiences). This booklet will be ready by August 2013 and teachers will be trained to use it afterwards.
Help the local population (especially children and youth) to become more familiar with their local environment, understand the reasons behind environmental changes, and encourage them to take appropriate conservation and sustainability action.		X		Through the first analyses of our evaluation questionnaires given to the pupils as well as informal discussions, we can measure that those who part in our project have significantly improved their knowledge about their local environment and have intended to change their attitudes towards local wildlife in a more sustainable way. The first results are explained in the section 3 of this report.
To develop the local empowerment by involving local communities and training other local coordinators to manage the		X		In addition to Victor Wodi (coordinator of the project), and Mathilde Chanvin (foreign volunteer who has left Tangkoko in October 2012 but still helps the



March to May 2013.

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

During this school year's project, some unexpected difficulties arose:

After two lessons implemented, the head teacher of one school of Batu Putih has withdrawn two classes of the programme. Therefore, one class out of three attended the full programme, except one trip to Tasikoki Wildlife and Education Centre, which was cancelled. We could not obtain any reasonable explanation from this withdrawal and trip cancellation and unfortunately faced a huge disappointment from the pupils involved, as well as their parents. This issue showed that we should more involve head teachers in our programme. We now explore the possibility of organising formal meetings with them (with the support of the Education Department of the Bitung district), bring them on a trip to Tangkoko forest and train them to take advantage of the booklet we will provide them. We also intend to create a Memorandum of Understanding (MoU) between Tangkoko Conservation Education project and each school in order to agree on common procedures and rules in order to avoid this kind of problem in the future. We also plan to design evaluation questionnaires for teachers involved in our programme, in order to receive comments and feedbacks and therefore work closer with them throughout the year.

Tangkoko Conservation Education project does not have an office yet. Our meetings are held in a relative's house where our material is stored. Most of the time we are in schools or on the road (the villages involved in our programme are quite far from each other), which makes the daily management and administration of the organisation difficult. In order to have a better structure, be more organised, settled, and closer to the local communities on a daily basis, we are considering building an education centre in Batu Putih Village. This project is detailed in the Section 5 of this report.

After 3 years of activity, we still have difficulties to involve and receive support from the local government, apart from getting authorisations to implement the project in schools (letter of recommendation from the Education Department of Bitung) or bring them on a trip to the forest (authorisation from the North Sulawesi Nature Conservation Agency of the Ministry of Forestry). We



would like to be able to receive financial and/or material support (for example using a municipality bus to bring pupils to the forest, or rooms in the Municipality to held meetings with teachers). To find a solution to this issue, we have participated in April 2013 in a workshop held by Selamatkan Yaki (more details here: http://selamatkanyaki.com/2013/04/26/selamatkan-yaki-workshop/), a conservation project supported by the Whitley Wildlife Conservation Trust, whose aim is to protect the crested macaque and its habitat. One aim of this workshop was to elaborate sustainable education actions in order to increase the awareness of local communities 'especially children and youth) in the protection of their local environment. We actively took part to the elaboration of this plan, in which the villages and local government are also involved. Hopefully this action plan will enhance the collaboration between our projects and the local authorities.

Although we have made several applications, we currently face a lack of funding to be able to continue our education project for 2013-2014. This is a difficulty that we face each year and prevents us to make long-term perspectives for our programme. This is a problematic issue which we hope to resolve through finding long-term funding of several years' length.

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

The first outcome of this 2012-2013 school year was a public event held on the 27th March 2013 and hosted by the Tasikoki Wildlife and Education Centre. This celebration marked the end of one year of education programme for 330 pupils of 12 schools and 5 villages. During this event, they were all gathered for the first time (the previous final events were organised in each village). During this event, the school pupils have passed on the conservation messages learnt during our activities to a wider audience by using original theatre plays, songs and drawings made of recycling materials, to sensitise their parents and the local community. Most of our partners took part in this successful event (local guides, Macaca Nigra Project, Selamatkan Yaki, Tasikoki Wildlife and Education Centre, the North Sulawesi Nature Conservation Agency of the Ministry of Forestry (BKSDA), local government and head teachers).

The second outcome is the creation of a booklet to provide a concrete education material for teachers and pupils who wish to implement the lessons and activities that we have designed. We have successfully developed and delivered the first lesson about environmental changes, made of exercises and illustrations by Elodie Philippe, a scientific illustrator with whom we collaborate on this project - you can find pictures of these illustrations here: http://www.elodiephilippe.fr/index.php?/nature/manuel-scolaire-environnement/).

We are currently preparing the other lessons (six in total) and this booklet will be ready for the school year 2013-2014. It will be distributed in local schools, and we will provide training sessions for teachers to facilitate its use.

The third outcome of our daily education activities relates to the evaluation of our programme: how we can help people living close to reserve to better learn about their environment and facilitate the adoption of more positive attitudes towards the forest, the macaques and their endangered status. This long-term objective should result within several years in a decrease of the amount of illegal activities such as illegal logging, forest fires and poaching. On a long-term basis, our activities should also help to reduce the consumption of monkey meat, as the children will have a positive influence on their surrounding thanks to the information learnt during the education programme. In the first analyses of our evaluation questionnaires for this 2012-2013 school year funded by the Rufford Small Grant Foundation, we have already established some comparative data (before and after the education programme) on certain topics based on knowledge, habits and attitudes changes.



This evaluation is based on 331 pupils' questionnaires before the school year programme (September 2012) and 292 after the school year programme (April-May 2013). These results are preliminary; when the full data will be analysed, we will provide Rufford Small Grant Foundation with an update about the final results with improve statistical analyses (use of McNemar test to compare two dependent samples and t-test to assess the overall effect of the programme). The evaluation questionnaires can be found in Annex 1 of this report, and the detailed tables of these first results can be found in the Annex 2 of this report.

First results of the evaluation and comments (work in progress):

About the pupils' habits regarding the forest and wildlife (Figure 1), we don't perceive an improvement about the activities such as taking wood from the forest but rather a small increase: 73% of the pupils declared that their families took wood before the programme and 86% after. This result might be explained by the difficult socio-economic situation in Indonesia at that time. Indeed, during this 2012-2013 year, the price of cooking fuel has drastically increased in north Sulawesi, and during some weeks the towns were running out of gas, both essential for the villagers to cook. Therefore, local communities relied on wood, and we have witnessed ourselves that many Batu Putih villagers were collecting wood from the Tangkoko forest or their gardens to replace the gas during these difficult periods.

However, we can see an improvement regarding pupils' habits towards wildlife (Figure 1), as they seemed to realise, thanks to our lessons, that wildlife should remain in the wild: 18% of the pupils declared having wildlife as pets before the programme, and 10% after. Before the programme, 24% wished to have one, whereas 10% still wish after the programme.

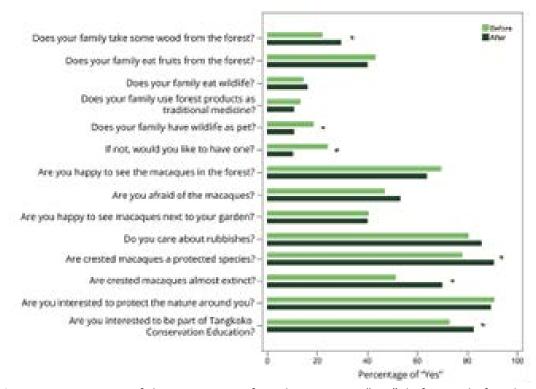


Figure 1: Comparison of the percentage of pupils answering "YES", before and after the programme to questions regarding knowledge and habits about wildlife and the forest (*P < 0.05, Chi-Square test, df = 1).



Regarding their knowledge about Sulawesi and Tangkoko fauna, we can mention a significant improvement: For example, pupils are more familiar with recognising all the Sulawesi animals based on pictures. The best improvement is about the babirusa (*Babyrousa babyrussa*), as 34% of the pupils wrote the correct name of this animal before the programme (it was more considered as a wild pig), and 75% after.

They also have a better understanding of the protected and endangered status of the crested macaque (Figure 1): 77% of the pupils acknowledged the fact that crested macaques were a protected species and 90% after the programme. Before the programme, 51% acknowledged its endangered status and 69% after the programme.

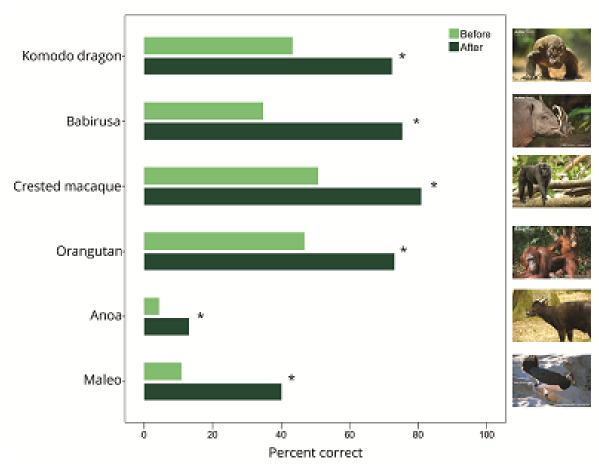


Figure 2: Comparison of the percentage of pupils writing the correct answer before and after the programme to questions about recognising Indonesian and Sulawesi animals $(*P < 0.05, Chi-Square\ test,\ df = 1)$.

The number of appropriate answers given by pupils increased when asked to write the names of animals present in Tangkoko (Figure 3), though they seem to focus more on crested macaques rather than other animals (33% wrote "crested macaque" before the programme, and 70% after).



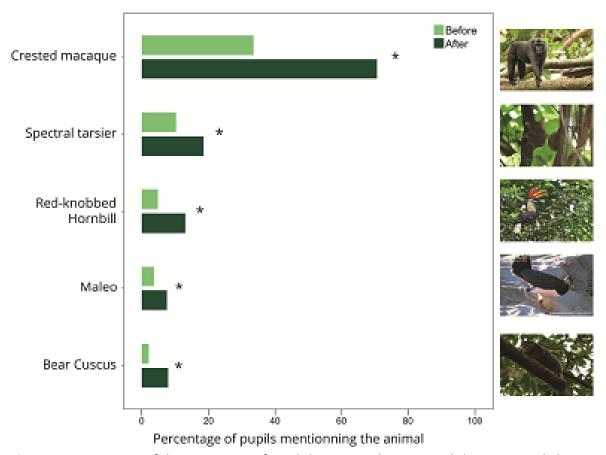


Figure 3: Comparison of the percentage of pupils listing 3 endemic animals living in Tangkoko Nature Reserve before and after the programme. (*P < 0.05, Chi-Square test, df = 1).

Regarding their attitudes towards crested macaques in the forest or in the garden (Figure 4), the results have demonstrated that there is an improvement regarding how they declare to react when encountering crested macaques in their local environment (the forest) or in their gardens. They perform fewer disturbing activities such as approaching or feeding the macaques: 19% of the pupils approach the macaques in the garden before, 9% after; 29% of the pupils approach the macaques in the forest before, 18% after. 15% of the pupils feed the macaques in the garden before, 7% after; 27% of the pupils feed the macaques in the forest before, 7% after. This good result can be explained by our trips to Tangkoko forest where the pupils observe the macaques in their natural environment, and where the local guides and researchers explain them the appropriate behaviour to adopt next to the animals.



When you see the macaques:

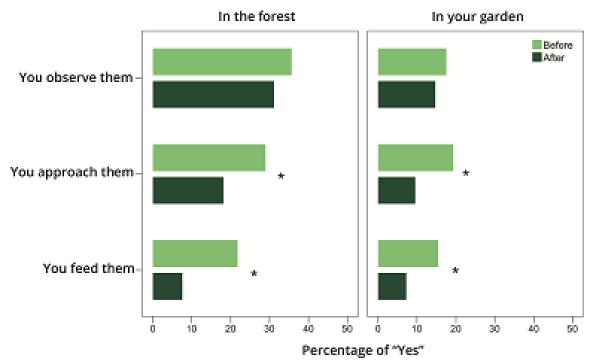


Figure 4: Comparison of the percentage of pupils answering "YES" to question regarding their behaviour before and after the programme when facing the macaques in their garden and in the forest. (*P < 0.05, Chi-Square test, df = 1).

Finally, they overall are interested to be part of our education programme (Figure 1): 72% wrote that they were interested before, and 82% after.

Through these first results, we consider that we still need to pay attention to help the pupils and their family improve their habits (especially regarding eating wildlife and taking wood from the forest). We consider that our project has a positive impact on the pupils' knowledge and attitudes, and they seem to show interest about the topics we teach them. Therefore, we consider that we need to carry on our actions on a regular and long term basis in order to confirm that this project can have a positive effect on the protection of crested macaque and Tangkoko forest through education. More detailed data will be added at a later stage, and published in an assessment article about the education programme in Tangkoko.

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

For this education project, we have asked the help of local people involved in conservation to transfer their knowledge and share their skills and competences with the pupils. Thus we have hired local guides and received the support of local researchers from the Macaca Nigra Project (http://www.uni-goettingen.de/en/185954.html), who have delivered theoretical lessons about Sulawesi fauna and the crested macaque, in the form of miniseminar. The guides and researchers also accompanied the pupils on the field trips to the Tangkoko forest. Furthermore, we have received the support from the local Nature Lovers Club in the Bitung and Airmadidi areas (two nearby towns) during several events (such as Earth Day and Environmental day). The Nature Lover Club of Airmadidi has even created a song for our Project called "Belajar dari



Alam, Berbuat untuk Alam" ("Learn from Nature, Act for Nature" which is our slogan) that we intend to teach to the pupils.

We also wish to increase our help to the local communities in villages where poaching and logging are highly present, such as Pinangunian and Kasawari villages. In 2012, we brought five women from Pinangunian village to the Agricultural Centre of Lotta, near Manado, for a training course on raising livestock. A second workshop with the same training provided has been realised in October 2012 in the village. The aim of this training is to enable the women to produce and sell local preserve to generate income without using the forest's resources (several of the women's husbands are hunters). We are closely following the progress of this project and are currently in contact with hotels, diving centres and other local potential outlets, to offer these preserves for sale to their own clients.

In April 2013, we have started to enhance our presence within the local communities through screening movies about crested macaques and Indonesian fauna more generally. Thanks to donations from a film crew from the TV Series BBC Natural World who came in Tangkoko in 2013, we have received the required material to realise such project: in addition to a documentary which will be shown in UK by autumn 2013 featuring our work in the area of Tangkoko, the BBC team has produced a ten minutes documentary in local language (Bahasa Manado) about the crested macaque, the threats he faces and the conservation actions to implement to protect it. This short documentary was designed for the local population and was kindly offered to us. The first screenings have been realised in Pinangunian and Batu Putih villages, where they have received a warm welcome from many villagers. Through this powerful, accessible and engaging tool, we will be able to pass on our conservation message to local communities living next to the Tangkoko forest and in all north Sulawesi area more efficiently.

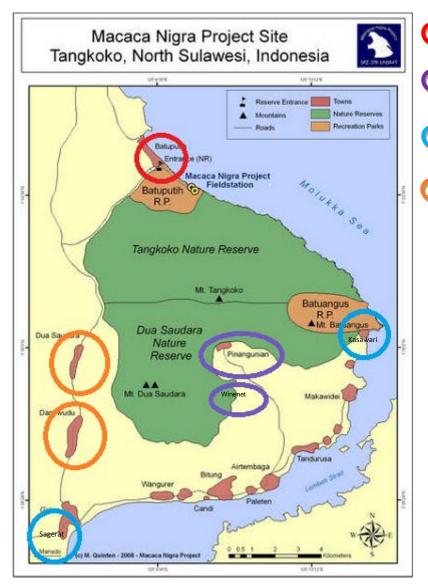
5. Are there any plans to continue this work?

We wish to continue our project. As suggested by our evaluation, the local communities' involvement and interest has increased after being involved in our program. In order to be efficient, we need to continue our efforts in the long run and continue to regularly assess changes in habits, attitudes and knowledge. In addition to the villages we include since 2011, we plan to extend our education activities starting in August 2013 in two more villages surrounding the Tangkoko-Duasudara reserves: Duasudara and Danowudu (see map below), where poaching and logging are highly present.

We also wish to build an education centre in Batu Putih, open after school and during holidays. As well as providing a practical workspace for our staff, this centre is envisaged as an activity centre for the youngsters of Batu Putih (e.g. games, activities, library etc.), plus a meeting point, seminars, and film projection on about conservation for the local community and where all our partners will be invited. Ultimately, we would like to open a centre for local and international volunteers to help develop our education activities.

For 2013-2014, we wish to strengthen our project developing alternative, sustainable sources of income, in partnership with the Lotta Agriculture Centre for the local communities of Pinangunian and Kasawari, who are really motivated to start a small business in preserves. However, we will lack funding after July 2013 and we will probably have to postpone these activities until we find sufficient financial support to fulfil these promising plans.





Villages involved:

2011: Batu Putih

2011-2012: Inclusion of Pinangunian and Winenet

2012-2013: Inclusion of Kasawari and Sagerat

Plan for 2013-2014: Inclusion of Duasudara and Danowudu

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

Since 2011, we organise a final public event at the end of each school year, where pupils present to the local communities their own creations regarding the activities they have done throughout the project and linked to local forest and wildlife conservation: theatre performance, poetry, songs, and drawings. During this celebration, we also present our work and its impact through showing the results of the evaluation questionnaires given to the pupils as well as a movie about our school activities.

Articles about our activities are regularly submitted in local newspapers and we give interviews in local radios in order to give regular news about our education activities.

A film crew from the TV Series BBC Natural World came in Tangkoko from December 2012 to April 2013 to make a movie dedicated to the crested macaques. We have worked in close collaboration with them regarding the education part of the movie. Our work in schools and in the field will be presented in this documentary (planned to be screened in BBC2 channel by autumn 2013).



The project's description, the methods employed, the questionnaires and the results will be submitted in a relevant peer-review journal this year.

We are currently part of the Primate Education Network (PEN: http://www.primateeducationnetwork.org/), a community and collaboration platform for primate educators worldwide. Through this network and website, we plan to share our education resources (power points, booklet and evaluation questionnaires) with other organisations working in the field of primate education.

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

We used the Rufford Small Grant from May 2012 (when we received the grant) until May 2013 (when we have finished our school year). The period we originally planned to use this grant was from January 2012 to June 2013. But as we have received the grant in May 2013, we have used other funding to cover the financial costs before this period. Therefore, we have a decrease of the costs due to these 6 months difference between the two budgets.

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.

The rate used is: $100\ 000\ IDR = 7\ £$

Item	Budgeted	Actual	Difference	Comments
	Amount	Amount		
Coordinators transportation: Car renting and gasoline to go to the surrounding villages	2975	2368*	- 607	Though we have a decrease of these costs due to these 6 months difference between the two budgets, this difference is not so important due to the rise of gasoline's price during this year.
Coordinators' food (when going to villages) and accommodation.	595	728	+ 133	We had extra cost for accommodation, as Elis Tangkudung (2 nd local coordinator) has stayed in Batu Putih and her accommodation was covered during 6 months (she is originally from another village).
Pupils transportation: Field trips to Tangkoko and Tasikoki Centre	2327	1428	- 899	This difference is justified by the fact that only the "new" schools went on a trip to the Tasikoki Wildlife Centre, as the other schools already visited it during the 2011-2012 school year.
Salaries: local coordinators	4375	2520*	- 1855	We have an important difference due to these 6 months difference between the two budgets. We though applied the amount originally planned for salaries.



Local guides' salaries	1190	512	- 678	This budget difference can be explained by the fact that the local guides finally went to the schools which haven't taken part to the project last year (4 schools out of 12). Victor Wodi provided the intervention about Sulawesi fauna to the schools who already took part in the programme.
Field material: Binoculars, audio recorder, field notebooks	311	70	- 241	We didn't buy the binoculars yet, as they were kindly provided by the local guides and researchers during the field trips to the Tangkoko forest.
Pedagogical material: Printer, computer, video projector, photocopies, books, office material	2317	1757*	- 560	The difference is justified by the fact that we received donations during this school year, such as a computer (private donators) and a video projector (BBC).
Promotion material: edition of the information panels, edition of the education booklets	385	1281	+ 896	This significant difference is explained by the fees of the scientific illustrator (Elodie Philippe), as we have received funds to cover this expense during this school year.
Office renting	238	Х	Х	The plan to hire an office during this school year was cancelled.
Total	14713	10664	4049	

The funds received from the Rufford Small Grant Foundation were mainly used for the salaries and transportation of the local coordinators, as well as a part of the pedagogical material for the pupils. This is indicated by * in the table.

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

The most important next step is for our project to urgently find funds in order to support our upcoming activities, even though we will probably have to postpone them. We therefore plan to apply for a second Rufford Small Grant in order to be able to continue this project. Until we receive financial support, the next important step is to edit the educational booklet made of our lessons in order to be able to provide a concrete tool for teachers and train them, so they can start using it even though we are not able to implement the school activities yet.

Furthermore, we plan to continue on showing the movie about crested macaque throughout the summer 2013 and beyond, in order to keep building a strong relationship with the local communities situated around the Tangkoko-Duasudara nature reserves and pass on the conservation message in a friendly way.



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?

We have used the RSG logo in our power point presentations, posters given to schools regarding Tangkoko wildlife and the different ways to protect it on a daily basis. We also have used the logo in our information letter given to the local communities, media and our local and international partners.

During our presentations and other participation in media interviews, we have always mentioned our partners and funding sponsors, including the Rufford Small Grants Foundation.

11. Any other comments?

We are very grateful towards the Rufford Small Grant Foundation for its financial support, which has extremely helped us to implement this education school year.



ANNEX 1: Translation of the evaluation questionnaires for the 2012-2013 school year

TANGKOKO CONSERVATION EDUCATION – QUESTIONNAIRE 2012-2013

Name				Class	5			
School				Villa	ge			
Gender				Age				
	. 1							
Mother's profes								
Father's profess	sion							
	•	angkoko Conserva nother conservati				☐ Yes ☐ Yes		
Do you go to the Do you go :	forest:	□ Never □ Alone	□ Someti □ With fr					
What do you do v	when going t	o the forest?						
		vood from the fore						
Does your family	eat fruits fro	om the forest?			□ Yes	□No		
Does your family If yes, which anin					□ Yes			
Does your family	use forest's	products for tradi	tional medi	icine?	□ Yes	□No		
Does your family If yes, which one		e as pet?			□ Yes	□No		
		nily wish to have o			□No			
WHEN YOU ARE Do you listen to r In the forest, do y	nusic in the f	orest?	□ Each tiı □ Everyw	_		etimes e bin	□ Never	
ABOUT CRESTED	-							
•		ou are in the fores		l Each		☐ Som	etimes \square	Never
If yes, are you ha			□ Yes		□ No		☐ I don't car	_
Do you approach			☐ Each tii			etimes		Never
Do you observe t			☐ Each ti			etimes		Never
Do you feed then			☐ Each tii		⊔ Som	etimes		Never
Are you afraid of	•	hat do you do?	□ Yes □					
n vou uon tiike n	nacauuts, W	uu vuu uu:						



	If yes, do n	ve a garden [°] nacaques co	? □ Yes □ No ome to your garde			Sometimes		Ν	lever	
	If yes, do y	ou approac serve them?		your garden? Each time Each time Each time	☐ Sometim☐ Sometim☐ Sometim☐	nes 🗆		N	lever lever lever	
	Do you see	e about the wildlife in	rubbishes? your house/yard			Yes 🗆 No				
	If yes, expl	ain what do	you do with the	m?						
	Water is o	ne element	important for life	e. Write the two	other eleme	nts:				
			e animals under	•		•	they live □	in Sula	wesi:	
ARKIVE	State Marron / com	ARKIVE.	2 Ned Gerban / r					dve		50
	What is a r	nature reser	ve?							
	The A protecte	crested d species:	macaques □ Yes □ No	of	North Almost exti	Sulawes	i □ Yes	are □ No	:	
	Which anir Mammals		ontains the larges s□ Birds [-	ecies? ibians□ Rep	otiles 🗆				
	Write	3	activities	•		forest	and	wi	ldlife	
	Why is Sula	awesi's biod	liversity different	from the other	Indonesian is	slands?				
	Write the r	name of thr	ee animals which	live in Tangkok	o-Duasudara-	-Batuangus r	nature re	serves:		
Are you	interested	to protect	the nature aroun	d you? (such as	wildlife, plan	nts, trees)		\odot	(2)	\odot
Are you	interested	to be part of	of Tangkoko Cons	ervation Educat	ion programi	me?		\odot	<u>(1)</u>	(Ξ)



ANNEX 2: Evaluation questionnaires tables for the 2012-2013 school year (work in progress)

Table 1: Number and percentage of pupils answering "YES" to question regarding knowledge and habits about wildlife and the forest. Data is given before and after the programme.

	Before (N = 331)	After (N = 292)		
Question	Nb of "Yes"	Percentage of "Yes"	Nb of "Yes"	Percentage of "Yes"	
Does your family take some wood from the forest?	73	22.05	86	29.45	
Does your family eat fruits from the forest?	143	43.20	117	40.07	
Does your family eat wildlife?	48	14.50	47	16.10	
Does your family use forest's products as traditional medicine	44	13.29	31	10.62	
Does your family have wildlife as pet	61	18.43	31	10.62	
If no, would you and your family wish to have one?	80	24.17	30	10.27	
If yes, are you happy to see macaques in the forest?	230	69.49	186	63.70	
Are you afraid of the macaques?	155	46.83	155	53.08	
Are you happy to see macaques next to your garden?	134	40.48	117	40.07	
Do you care about the rubbishes?	266	80.36	250	85.62	
Do you see wildlife in your house/yard	107	32.33	102	34.93	
Are crested macaques a protected species?	258	77.95	264	90.41	
Are crested macaques almost extinct?	170	51.36	204	69.86	
Are you interested to protect the nature around you? (Such as wildlife, plants, trees)	300	90.63	261	89.38	
Are you interested to be part of Tangkoko Conservation Education?	241	72.81	241	82.53	

Table 2: Number and percentage of pupils answering "YES" to question regarding knowledge about Indonesian and Sulawesi animals. Data is given before and after the programme.

Match with picture	Before (N =	331)	After (N = 292)		
Animal	nimal Nb correct Percentage correct		Nb correct	Percentage correct	
Komodo dragon	143	43.20	211	72.26	
Babirusa	115	34.74	220	75.34	
Crested macaque	168	50.76	236	80.82	
Orangutan	155	46.83	213	72.95	
Anoa	14	4.23	38	13.01	
Maleo	36	10.88	117	40.07	



Table 3: Number and percentage of pupils listing endemic animals living in Tangkoko Nature Reserve. Data is given before and after the programme.

Cite 3 animals	l = 331)	After (N = 292)		
Animal	Nb	Percentage	Nb	Percentage
Babirusa	26	7.85	67	22.95
Bear cuscus	7	2.11	23	7.88
Crested macaque	111	33.53	206	70.55
Hornbill	16	4.83	38	13.01
Maleo	12	3.63	22	7.53
Tarsier	34	10.27	54	18.49

Table 4: Number and percentage of pupils answering "YES" to question regarding their behaviour when facing the macaques in their garden and in the forest. Data is given before and after the programme.

	Garden				Forest			
	Before (N = 331)		After (N = 292)		Before (N = 331)		After (N = 292)	
Behaviour	Nb	Percentage	Nb	Percentage	Nb	Percentage	Nb	Percentage
Observe	58	17.52	43	14.73	118	35.65	91	31.16
Approach	64	19.34	28	9.59	96	29.00	53	18.15
Feed	51	15.41	21	7.19	72	21.75	22	7.53