

# **Final report of Club P.A.N.'s activities during the first school year (2007/2008)**

**Rufford Ref: 18.07.07**  
**Ilka Herbinger**  
**Wild Chimpanzee Foundation**  
**CSRS, 01 BP 1303, Abidjan 01**  
**Côte d'Ivoire**

## **1. Introduction**

Conservation education is seen as a priority action for the conservation of chimpanzees and other wildlife (Kormos et al., 2003). Awareness raising campaigns of the Wild Chimpanzee Foundation (WCF) in the past have conveyed the need to conserve chimpanzees through interactive theaters, discussion rounds, films and newsletters. This has happened both at a local scale around Taï NP and internationally. These campaigns are often targeted at adults whereas long-term approaches oriented towards the next generation have only rarely been employed thus far. Therefore, the WCF expanded last year in September 2007 its education activities to include the local schools around the park.

Ten nature clubs called "Club P.A.N." (Personnes, Animaux et Nature / People, Animals, & Nature) were created in ten primary schools around Taï NP (four schools in Soubré and one in Petit Tiémé, Taï, Diéro-oula, Paulé-oula, Sakré and Ziriglo). These nature clubs were modeled after "Club Ebobo", which has been operating since 1998 around the Nouabalé-Ndoki National Park in northern Congo. The aim of "Club Ebobo" is to increase forest-awareness among the local children of the area (Breuer, personal observation). There is an intense collaboration and exchange of working materials between the organizers of the two nature clubs (WCF; WCS and the Primate Conservation Group of the Max Planck Institute for Evolutionary Anthropology).

The creation of Club P.A.N. was only possible because of a long term collaboration between the WCF and the primary school inspection of the region of Soubré (including 270 schools with some 70,000 pupils) and especially their programme CPE "Cellule des Projets Environnementaux" (Environmental Projects Course). The coordinator of the CPE program, Hilaire Guiloahou, introduced environmental education in nearly 200 schools east of the Taï National Park and is also the coordinator of Club P.A.N.. Together with Dabila Ouattara, he is leading and supervising all of the directors and teachers that are participating in Club P.A.N..



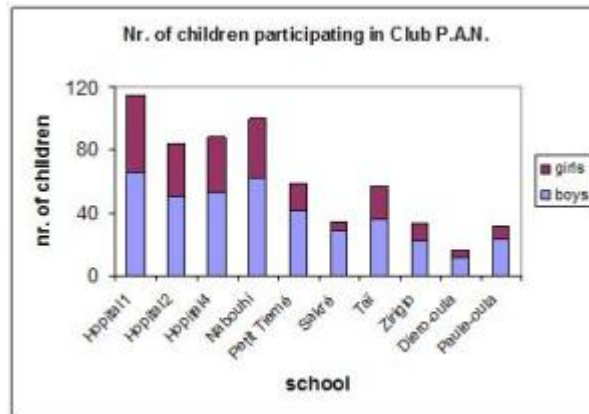
## 2. Club P.A.N. formulated the following conservation goals (Table 1)

	#1	#2	#3	#4
<b>Objectives</b>	Teach children about the local flora and fauna, so that they appreciate the biodiversity that exists in their region.	Teach basic knowledge on environmental issues in order to promote care and awareness towards nature conservation.	Discourage the trade in illegal bushmeat by reducing the likelihood that the current generation of children will consume or trade bushmeat in the future.	Promote the conservation and research activities undertaken within the Tai NP.
<b>Activities</b>	Five lessons emphasize the flora and fauna of the region's ecosystems: (lesson topics: "tropical rainforests", "biodiversity", "chimpanzees", "the food chain" and "the Tai National Park").	During the "environment" and "the animals and their habitats" lessons, students are taught the fundamental principals of biology, ecology and conservation.	The "human and animal conflict" lesson focuses on the illegal bushmeat trade. Information is presented to the students regarding the threats to plants and animals, discussion rounds and a play about the illegal bushmeat trade sensitizes the students and are used to convey the destructive effect of these practices.	The "protected areas" lesson conveys the importance of national parks and what humans are allowed to do or not to do in these areas. During the "Tai NP" lesson, researchers from the Tai NP and the WCF visited the students and explained their work and conservation activities to each class.
	<ul style="list-style-type: none"> <li>• All lessons are interactive with games, songs, movies, nature walks and clean up actions.</li> <li>• Teachers are intensively trained in biology and environmental sciences</li> <li>• Parents are actively involved in the club as well on "parents' day" when the children from each class present what they have learnt in form of summaries, plays and songs.</li> </ul>			
<b>Results</b> (as determined by pre-and post evaluations)	Increased knowledge regarding the local flora and fauna.	Increased knowledge regarding environmental issues.	Students are able to identify the conflicts between humans and animals. Changed attitudes regarding the consumption and trade of bushmeat.	Knowledge and support of the conservation and research activities undertaken within the Tai NP.
<b>Results achieved?</b>	√ (see evaluation results for more details)	√ (see evaluation results for more details)	√ Students are able to name the conflicts. But so far we do not know if they changed attitudes, we will address this point intensively during our second year with a bushmeat market survey and a more detailed evaluation on attitudes.	√ (see evaluation results for more details)

### 3. Achievement of conservation goals during Club P.A.N. lessons in the first year of the program

In total, 617 school children that live around the Taï National Park (see figure 1 below for details) were enrolled and attended Club P.A.N. lessons about the flora and fauna of the region’s ecosystems (goal #1).

**Figure 1:** Total number of school children participating in Club P.A.N. for each school



Five lessons emphasized the local environment: lesson 2 (tropical rainforests), lesson 4 (biodiversity), lesson 6 (chimpanzees), lesson 7 (the role of animals in nature) and lesson 10 (the Taï National Park). In all of these lessons, local flora and fauna were presented with pictures and detailed descriptions. Games were also used to explain, for example, the interactions between plants and animals, the different parts of a tree and the different levels of a tropical rainforest.

Lesson 8 (the human and animal conflict) was very concentrated on Club P.A.N. goal #3, to discourage the trade in illegal bushmeat. Presentations of different threats to plants and animals, along with descriptions of hunting and logging techniques, discussion rounds and a short theatre play about the illegal bushmeat trade meant to sensitize the pupils were used to convey the destructive effect of these practices.

Lesson 9 (protected areas) informed the students as to what protected areas are, why they are important and what humans are allowed to do or not to do in national parks. Lesson 9 also presented several protected areas around the world, in order to show the pupils that this is not a special case in Ivory Coast but that there are several initiatives all over the world to save animals and their habitats. During lesson 10 (the Taï National Park), pupils were visited by researchers and conservators from the Taï National Park’s headquarters, the Taï monkey project and the Taï chimpanzee project who explained their work and conservation actions in the park. With this lesson, Club P.A.N. was able to promote the conservation and research activities undertaken within the Taï NP, to pupils that would otherwise have very little contact with the protected area (goal #4).

During lesson 1 (the environment) and 3 (animals and their habitats), the students received background information on biology, environmental issues and conservation in order to promote care and awareness towards nature conservation and its significance (goal #2). All formulated goals were achieved during the Club P.A.N. lessons (see table 2 below with an overview of goals and lessons).



**Table 2:** Summary of the ten Club P.A.N. lessons

Lesson	Topic	Friend	Summary	Activities	Goal
1	Environment	Water drop	Importance of the environment and the problem of pollution	candle experiment, clean up village tasks	teach basic knowledge on environmental issues
2	Tropical rainforest	Tree	Importance of tropical rainforest and threats to forests	parts of a tree, levels of a tropical rainforest, labyrinth	teach about local flora and fauna
3	Animals and their habitats	Penguin	Explanation of major biomes with specific flora and fauna	prepare a globe and visit the different habitats and animals	teach basic knowledge on environmental issues
4	Biodiversity	Butterfly	Biodiversity and necessity to conserve it	bird mobile, insect body part game, puzzle, spot the difference	teach about local flora and fauna
5	Endangered species	Elephant	Presentation of endangered species and threats to them	elephant body part game, trip to some endangered species	teach about local flora and fauna
6	Chimpanzees	Chimpanzee	Chimpanzee behaviour and threats to their survival	climbing chimpanzee, chimpanzee puppet	teach about local flora and fauna
7	The role of animals	Leopard	Importance of animals for seed dispersal and explanation of food chains	food chain games, growing of a seed, crossword	teach about local flora and fauna
8	Animal and human conflict	Poacher	Threats to flora and fauna with focus on hunting and logging	theater play, cartoons with questions	discourage the trade in illegal bushmeat
9	Protected areas	Ranger	Description of protected areas and their importance	visit national parks on the globe all over the world, developing a logo for a NP	promote conservation and research activities
10	Tai National Park	All friends together	Flora and fauna of Tai National Park	visit the park, talk to researches, bird observations	teach about local flora and fauna, promote conservation and research activities

**Evaluation results:**

To analyze the effectiveness of our work, we carried out an analysis to compare the pre- and post-Club P.A.N. evaluations from the pupils who participated in the environmental education program in 2007-2008. In these evaluations, we attempted to quantify the amount of knowledge gained by Club P.A.N. participants with regard to basic biological facts, the local flora and fauna and conservation in general. We were also interested in determining if children enjoyed Club P.A.N. and if they wanted the project to continue in 2008-2009 (these questions were only asked in the post-evaluation questionnaires). Of the 616 children that participated in Club P.A.N., we received several evaluation sheets without names, and some children completed only one of the two evaluations. Nevertheless, we were able to evaluate 300 of the children, where we had matched pre- and post-evaluation sheets.

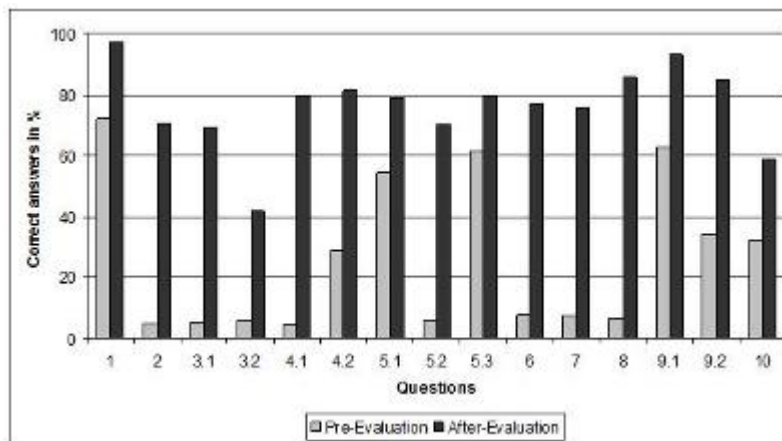
The percentage and percentage increase in correct responses given by children before and after attending the 10 Club P.A.N. lessons is summarized in the table and in the figure below. Overall, there is a significant knowledge gain after the 10 Club P.A.N. lessons (Wilcoxon Exact test,

T<sup>+</sup>=120, N=15, P<0.001 (2-tailed), N=300). All questions were open-ended, except question #8 which was a 5-choice multiple-choice question.

**Table 3:** Summary of the evaluation results

#	Question	% correct answers		Knowledge increase (%)
		Pre-Evaluation	Post-Evaluation	
1	Which animal is the closest living relative to humans?	72	97	25
2	Name an endangered species that is facing extinction?	5	71	66
3.1	What are the characteristics of mammals?	5	69	64
3.2	What are the characteristics of mammals?	6	42	36
4.1	Soil is one element of the biosphere, name the other two elements	5	80	75
4.2	Soil is one element of the biosphere, name the other two elements	29	81	53
5.1	Name the different parts of a tree	54	79	24
5.2	Name the different parts of a tree	6	70	64
5.3	Name the different parts of a tree	61	80	19
6	What is the word for all plant life occurring in an area?	8	77	69
7	What is the word for all animal life occurring in an area?	8	76	68
8	Which animal group contains the largest number of species?	7	86	79
9.1	Name an endangered species that lives in Ivory Coast?	63	93	30
9.2	Name an endangered species that lives somewhere else in the world?	34	85	51
10	Why are the animals and plants in Tai NP in danger?	32	59	27
<b>Average</b>		<b>26</b>	<b>76</b>	<b>50</b>

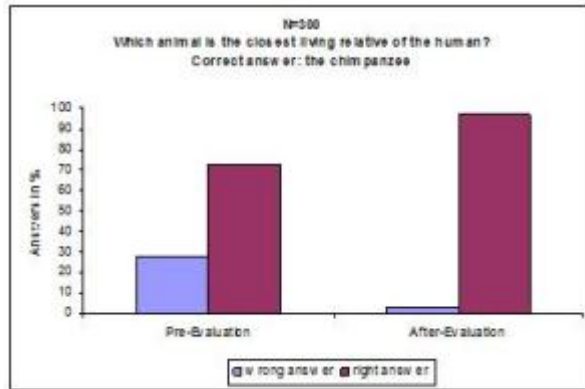
**Figure 2:** Percentage of correct answers for each question in the pre- and post-evaluation. All comparisons were highly significant (McNemar tests below, all p>0.001).



**Detailed summary of some evaluation results:**

**Question 1. Which animal is the closest living relative to humans?**

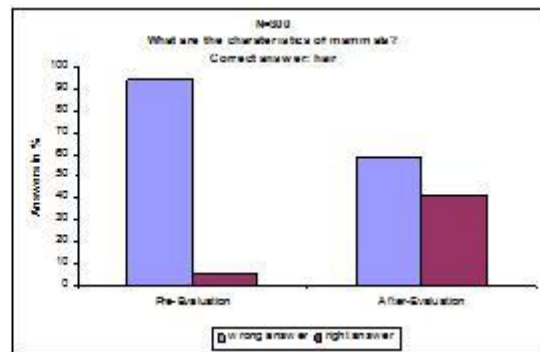
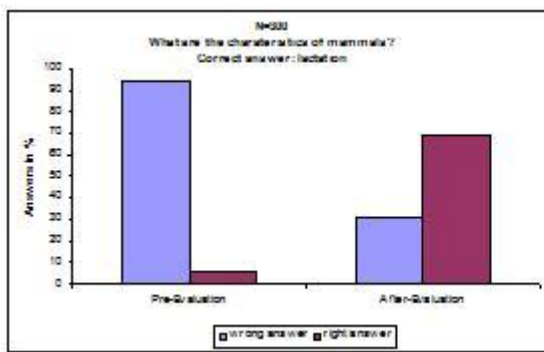
Before the Club P.A.N. lessons started 72% of the children correctly answered this question. The correct response rate to this question is most probably due to the intensive sensitization work the Wild Chimpanzee Foundation has been undertaking for years around the Tai National Park with their theater troupe and movie presentations about chimpanzees. Nevertheless, after the Club P.A.N. lessons 97% of children correctly answered the question, a statistically significant 25% increase (McNemar test: N<sub>r/w</sub>=1, N<sub>w/r</sub>=75, P<0.001).



**Question 3. What are the characteristics of mammals?**

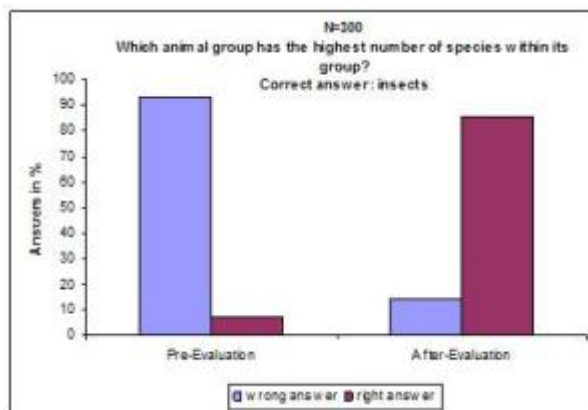
**Correct answers: 3.1: Lactation 3.2: Hair**

Before attending Club P.A.N., only 5% of children could name “lactation”, and only 6% could name “hair”, as one of the characteristics of mammals. However, after attending the 10 lessons, 69% of students answered “lactation” and 42% answered “hair” to question #3, significant 64% and 36% increases in correct responses respectively (McNemar test<sub>lactation</sub>:  $N_{r/w}=2$ ,  $N_{w/r}=194$ ,  $P<0.001$ ; McNemar test<sub>hair</sub>:  $N_{r/w}=13$ ,  $N_{w/r}=121$ ,  $P<0.001$ )



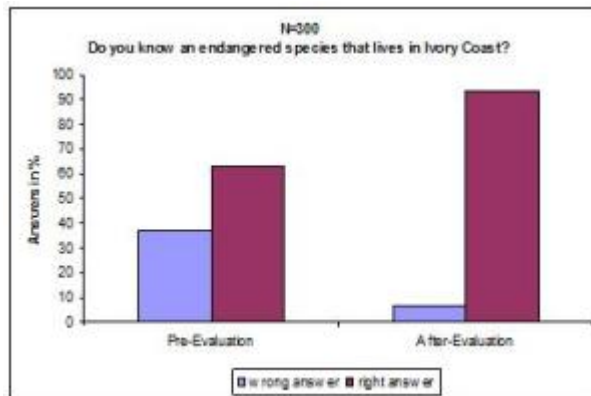
**Question 8. Which animal group contains the largest number of species?**

Question #8 was a multiple choice question; the choices given were a) insects b) amphibians c) reptiles d) birds e) mammals. Before attending Club P.A.N., only 7% of children selected “insects” in response to this question. After attending the lessons however, 86% of students gave the correct answer, a significant increase in correct responses of 79% (McNemar test:  $N_{r/w}=0$ ,  $N_{w/r}=236$ ,  $P<0.001$ ).



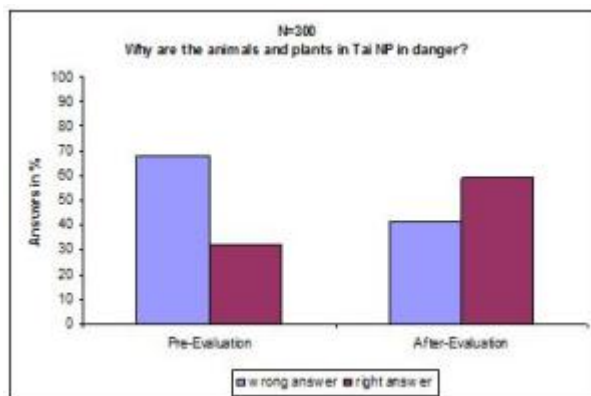
**Question 9.1 Name an endangered species that lives in Ivory Coast?**

Before attending Club P.A.N., 63% of the children were able to name at least one Ivorian endangered species, most answering with “elephant” and/or “chimpanzee”. After completing the 10 Club P.A.N. lessons however, 93% of children were able to give a correct response to question 9.1. Most students still answered “elephant” and/or “chimpanzee”, but “leopard”, “duiker” and “hippo” appeared more frequently in the post-Club P.A.N. evaluation questionnaires. These results reflect a knowledge increase of 30% (McNemar test:  $N_{r/w}=9$ ,  $N_{w/r}=100$ ,  $P<0.001$ ).



**Question 10. Why are the animals and plants in Tai National Park in danger?**

Before attending Club P.A.N., 32% of children were able to name at least one source of conflict between humans and the national park, most answering “hunting” and/or “logging”. After attending the lessons however, 59% were able to name at least one source of conflict. Most children still answered “hunting” and/or “logging”, but new answers appeared on the questionnaires such as, “humans take wild animals as pets to the village” and “humans are polluting the air, earth and soil”. These results reflect a knowledge increase of 27% (McNemar test:  $N_{r/w}=31$ ,  $N_{w/r}=111$ ,  $P<0.001$ ).



**Did children enjoy participating in Club P.A.N.?**

Of the 319 children that were asked whether or not they enjoyed participating in Club P.A.N., 314 children (98.5%) answered that they “greatly enjoyed” Club P.A.N.. The remaining 5 children (1.5%) said that they did not like participating in the Club. Of the 309 children that were asked whether they would like to participate in a nature club again in the following year, 93% answered “yes” and 7% with “no”. Thus, pupils not only learnt about biology and conservation but they also enjoyed doing so and would like to continue to do so in the year to come.



### **Summary of the evaluation results**

Using these evaluation results, we show that Club P.A.N. was able to increase the knowledge of the children, not only about the local flora and fauna, but also about biological facts and global environmental issues. Furthermore, we were successful in creating a fun and dynamic learning environment that the children enjoyed and that they hope to continue with in the year to come.





## 4. Staff

The program is coordinated by Hilaire Guiloahoux and Dabila Ouattara from the “Cellule des Projets Environnementaux” (CPE) in Soubré, Ivory Coast.

**Picture 1:** The two coordinators Mr. Guilahoux and Mr. Ouattara and their impressions about Club P.A.N..



**Hilaire Guiloahoux**  
Education Advisor - CPE-PNT Soubré 1

*Our resolve in Club P.A.N. is unwavering, and we will achieve our goal of creating the “eco-citizens” of tomorrow. We hope that the CPE will have the optimal means to ensure smooth operations on the ground.*



**Dabila Ouattara**  
Coordinator - CPE-PNT Soubré 1

*Club P.A.N. interests many students, teachers and parents. It is therefore important to find the means and the teaching materials necessary so that this project continues for years to come. Club P.A.N. will help conserve biodiversity.*

They lead and guide all of the principals and teachers involved with the schools in which Club P.A.N. takes place. They also organized the workshops and training sessions for the teachers, as well as the parents’ days that took place. They have also written reports, distributed the materials necessary for the Club P.A.N. lessons, and aided with the budgets and evaluations. Mr. Ouattara participates in every lesson and helps the teachers during the class. He also takes the attendance data of the pupils. Ten teachers and principals belong to the staff of Club P.A.N.. So far only the teachers but not the principals get financial support for making each Club P.A.N. lesson possible. The Club P.A.N. lessons are on school-free days (Wednesdays and Saturdays). Because the teachers are coming into the school on their days-off, they have requested that Club P.A.N. supports them more next year by increasing their salaries. We should also like to give a small bonus to the principals as they support the club in each of their schools and take part in parents’ days, trainings and workshops. Four of the ten teachers have been employed by the WCF for several years already (teachers of Sakré, Ziriglo, Diéro-oula, Paulè-oula). They teach the school curricula every day and do additional activities along with the WCF. These four teaches received their salaries this year completely from the Club P.A.N. budget and this is planned for the next year as well.

## 5. Overview of the Club P.A.N. program in the first year (2007/2008)

### 5.1 Creation of the lesson book:

The conservation group prepared together with two comic and a book designer ten lessons for Club P.A.N.. All pictures and texts are developed by this team. One lesson has around 25 pages and is filled with theoretical background and facts about the topic and also with a lot of different activities like comics, songs, games, puzzles, labyrinths, spot the difference pictures, experiments and suggestions for nature walks. The lessons are in French. There is always a teacher's guide to each lesson where the answers are filled in and there are additional recommendations for the teachers. The conservation group would soon like to make this education book public, so that other conservation education programs can use this prepared material.

These ten lessons were used during the first Club P.A.N. year and they will be used for the second year again.

### 5.2 Workshop:

Club P.A.N. began with a workshop for all teachers and directors in Soubré in October 2007. The workshop aimed to introduce and provide information to the teachers about Club P.A.N.'s conservation education project and to plan the Club P.A.N. teaching schedule around the existing curriculum.

**Picture 2:** Participants of the workshop in Soubré (all teachers and directors from the ten schools, the two coordinators, Ilka Herbingner from the WCF, Cristina Gomes from the conservation group and Chloe Cipolletta from the WWF)



Mr. Ouattara presented lesson 1 (the environment) to the workshop participants and afterwards they discussed and criticized the presentation. The following link provides a short video from the workshop. In the video you will see the teachers acting as if they are students learning the lessons: <http://www.youtube.com/watch?v=a4Y5gt052kc> .

### 5.3 Club P.A.N. lessons:

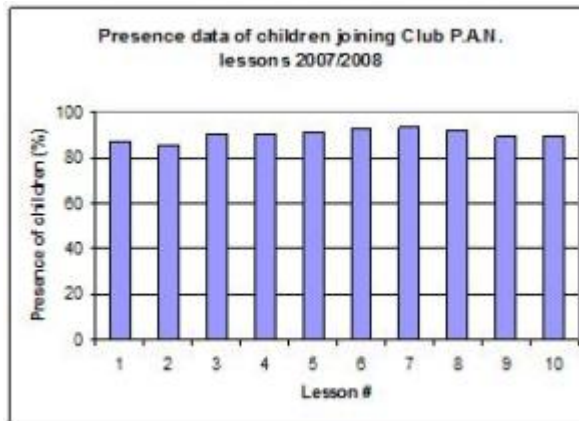
The lessons of Club P.A.N. began in November, 2007, in the five east schools (Hopital 1, Hopital 2, Hopital 4 and Nabouhi in Soubré and Petit Tiémé) and in December, 2007, in the five west schools (Sakré, Ziriglo, Diéro-oula, Paulè-oula and Tai). As of May, 2008, the east schools have gone through all ten of the Club P.A.N. lessons, but the west schools continued with the program until June, 2008.

**Table 4:** Time table of all Club P.A.N. activities during the first school year 2007/2008

Club P.A.N. Event / Time	10/07	11/07	12/07	01/08	02/08	03/08	04/08	05/08	06/08
Workshop and teacher training	together								
Pre-Evaluation		east	west						
Lesson 1-5		east	west	west					
Lesson 6-10					east	east	west	west	
After-Evaluation						east		west	
Parent day						east		west	
Workshop and teacher training									together

The lessons have been very successful. The attendance lists were always full, and it has been extremely clear that not only the children, but also the teachers and principals, love Club P.A.N..

**Figure 9:** Results of the presence data pooled for all schools presented in percent for all lessons



Most remarkably, even other adults and children from the village have been attending the Club P.A.N. lessons. In the case of absences - the reasons why children miss Club P.A.N. lessons are also recorded - we know that in the majority of these cases it is due to the child being sick or a funeral in the village. Mr. Ouattara is doing a great job helping with any problems the teachers may come across during the lessons and has also been helping them with lesson preparation. He is always encouraging the teachers to make Club P.A.N. lessons as different as possible from normal school lessons. One of the ideas that has come from this, has been to look for areas where the lessons can take place outdoors to make Club P.A.N. different from school lessons and to actually bring them into the environment they are learning about.

**Picture 3 and 4:** Nature class room of Club P.A.N. in Sakré



This approach allows the children to see what they are learning about and to further highlight the animals and plants they are reading about that are all around them. The coordinator also introduced songs and a song competition into the Club P.A.N. animations. Songs, games and role-playing activities make the animations more interactive. Children can learn whilst playing and singing. Puppets, games, songs and the prepared Club P.A.N. lessons are used together successfully during the animations.

**Picture 5, 6, 7 and 8:** Club P.A.N. lessons



The following links show two examples of the songs and activities of club P.A.N.:

Club P.A.N. Sakré: [http://www.youtube.com/watch?v=6I\\_4M16u9ns](http://www.youtube.com/watch?v=6I_4M16u9ns)

Club P.A.N. Petit Tiémé: <http://www.youtube.com/watch?v=10xaBlaKbyo>

Mr. Guiloahoux and Mr. Ouattara, the two coordinators of Club P.A.N., have both been doing a phenomenal job. Not only have they been conducting the evaluations of Club P.A.N., but are also highly involved in coordinating and motivating all involved participants. Their continual promotion of the project is excellent. They always inform all the higher authorities and invite them to meetings and activities for Club P.A.N. In addition, they never miss a chance to promote Club P.A.N. to the local media such as the radio and press. They both work well with their laptops and have been writing reports and doing analyses on their own. It is also important to note that they really enjoy their jobs and are highly motivated to make Club P.A.N. as successful as possible. Thanks to the excellent work of the two coordinators, many prominent people support Club P.A.N. (for example: the director of Taï NP, the manager of the WWF Taï and the Sub-prefect of Taï). The cooperation between the principals, teachers and the Club P.A.N. coordinators is working very well.

We have also created a Club P.A.N. website, <http://www.wildchimps.org/wcf/english/pan/>, and blog, <http://clubpan.blogspot.com/>, which are updated regularly to highlight how fun and successful



Club P.A.N. has been. All of the above video links and much more information are available on the blog and the website.

#### **5.4 Educational day:**

There was one educational day in Taï in February, 2008. All Club P.A.N. teachers and principals of the five west schools were present, as well as the school children of Club P.A.N., the sub-prefect of Taï, the mayor of Taï, and the chief ranger of the Taï National Park, Mr. Guiloahoux and Mr. Ouattara. From this event, we can confidently say that everybody thinks Club P.A.N. is a great initiative to save the Taï NP and to sensitize the population around it. As such, all the participants would like Club P.A.N. to continue their work for the next school year. For the location of the meeting we chose the nature classroom of the Club P.A.N. in Taï, close to the Cavalry River, with the intention of getting all participants in the mood for conservation education. All the participants were impressed by the nice location and the presentation of lesson 2 (tropical rainforest) by Kouadio Andrien Kouakou. Everyone was able to actively participate as real examples were available to illustrate the theory being taught (e.g. the different parts of a tree and the different levels of a tropical rainforest). The presentation was combined with songs and a little game on the blackboard. Afterwards all the children were sent home, so that the directors and animators could have discussions in working groups. The aim of the working groups was to discuss the day's lesson, and to collect both positive and negative critiques about the presentation and make proposals as to what could have been done better. It was a very successful and productive day, with many good suggestions made for future presentations of Club P.A.N.. This was also an important opportunity for the teachers and principals to exchange ideas and discuss their teaching methods.

**Picture 9 and 10:** Educational day in Taï



A second educational day was organized in Soubré (June, 2008) at the end of the first Club P.A.N. year. All teachers and principals from the 10 schools worked together for 2 days. Authorities such as the education advisor of Taï, the director of Taï National Park and the primary school inspector of Soubré participated in this event as well. The participants were working in groups to create a teachers guide for the Club P.A.N. lessons as well as a school book for primary schools about environmental education. Together they prepared a summary of the animations and collected impressions from all participants about the first Club P.A.N. year.

#### **5.5 Parents day:**

During the first presentations of Club P.A.N. we had the feeling that the parents do not necessarily get sensitized just because their children attend the club. The children may or may not be talking about Club P.A.N. at home. We were also unsure if the children would attempt to discuss the themes they learned about with their parents, as the high level of parental authority in most Ivorian

families might prevent the children from talking to their parents about the problems we are attempting to address. In order to have a greater effect, it was decided that parents need to be better involved in Club P.A.N.. To do so, we decided to create a parents' day. During these parents' days the children will present what they have learnt during the ten lessons. The children themselves will present the Club P.A.N. activities in the form of songs, theaters, games, dialogs and poems.

During the first Club P.A.N. year we were unable to hold a parents' day for each village because of time constraints (summer school holidays started) so we combined multiple schools and villages, and we had four parents' days in total during the first school year. We had one event in one day for all four schools in Soubré, so that all pupils and parents from Soubré could join the presentations. In total, there were more than 600 visitors. Petit Tiémé had his own successful parents' day, with all villagers coming. In the west, Taï, Diéro-oula and Paulé-oula had a joint parents' day, with over 750 visitors. Finally, one event was held for Sakré and Ziriglo. The people liked the presentations a great deal and the message was clearly understood by the population as a whole.

**Picture 11 and 12:** Parent's day in Sakré



**Picture 13 and 14:** Traditional dance during the parent's days in Sakré and Soubré



**5.6 Training of teachers:**

We have found that the ten teachers are not well educated in Biology and sometimes do not know what to teach. The problem lies in the fact that they have no biology books or other literature. Also, we did not carry out a training session for the teachers this year. Initially, we held a workshop in October, 2007, in which all the teachers and principals participated, but only lesson 1 was presented by Mr. Ouattara and the topic was more focused on how to do the animations of Club P.A.N. and not the facts and theoretical background of the lessons. We will look for literature and books for



next year to help the teachers with their general Biology knowledge. Furthermore, we have planned two training sessions for the 2008-2009 Club P.A.N. sessions. In June, and October, 2008, two biology-degree holding members of the conservation group (Julia Riedel and Claudia Borchers, respectively) will travel to Ivory Coast to host training sessions for the teachers. These training sessions will last for at least 3 days and will include all 10 participating teachers. There will be theoretical power point presentations with biological definitions and facts combined with games, songs, role-plays, movies, poems and histories. The first teachers' training happened already in June, 2008. The teachers were motivated to learn more about biology and ecology. They had a lot of different questions, such as, "What are the similarities between humans and great apes?". There were also several intense discussions about, for example, the human/ animal conflict and if we can call it a conflict and what are the conflicts. They liked the nature movies and the picture-shows. They also greatly enjoyed the games and the experiments which they promised to now use during the animations.

**Picture 15:** Participants of the teachers training in Taï together with Julia Riedel



**Picture 16 and 17:** Participants during the teachers training in Soubré enjoying a Club P.A.N. game



The idea is that during each animation they will teach some major facts that we reviewed together and then they will choose at least one game or experiment to make Club P.A.N. not only a school-like lesson, but also an interactive animation.

The second Club P.A.N. year started already with a teachers training in Soubré (October 2008) held by Claudia Borchers.



**Picture 18:** Claudia Borchers during an excursion with the teachers in Soubré. This excursion was about soil, air and water pollution. Here the participants discuss how the oil from the truck is polluting the soil. The teachers will do this same excursions with the Club P.A.N. students.







## 6. Final budget report from the grant received from Rufford Small Grants for the first Club P.A.N. school year (2007/2008)

A big part of the grant was used to pay the salaries of the two local coordinators which both do a great job. Also their daily travel to the schools was financed by the Rufford Grant. If they went to the villages in the west of the national park they had no house and family there and we financed their lodging with the Rufford Grant. Also we supported them with equipment like bags that were financed by the Rufford Grant. Some of the grant went into the materials like the printing costs for the Club P.A.N. books and the T-shirts for the children. A part went also into the salaries for the 10 teachers and into the organization of the successful parents' days

**Table 5:** Final small budget report how the Rufford Small Grant was used during the first Club P.A.N. school year (2007/2008)

Description	FCFA	US\$
Club P.A.N. T-shirts for teachers and students	665000	1480
Club P.A.N. books printing costs	1074455	2470
Salary, lodging and travel of the two coordinators	1717300	4010
Parents day Club P.A.N.	371000	875
Salary 10 teachers	150000	365
<b>Total</b>		<b>9200</b>

**Table 6:** Final detailed budget report how the Rufford Small Grant was used during the first Club P.A.N. school year (2007/2008)

Date	Nr	Description	FCFA	US\$
		<b>Club P.A.N. T-shirts for teachers and students</b>		
29/11/07	5-147/11	facture de confection de Tee Shirt / 1er avance CLUB PAN	300000	670.69
29/11/07	5-5/12	reglement de la facture de DAP S.A / confection de T-SHIRTS / Club PAN	365000	809.98
			<b>665000</b>	<b>1,481</b>
		<b>Club P.A.N. books printing costs</b>		
16/11/07	3-10/11	impression de documents / support pedagogique	115500	258.22
05/01/08	3-11/1	impression de documents / support pedagogique	147000	325.62
05/01/08	3-12/1	impression de documents / support pedagogique	59500	131.80
15/01/08	3-14/1	impression de documents / support pedagogique	59500	131.80
19/01/08	3-19/1	impression de documents / support pedagogique	126000	279.10
31/01/08	3-21/1	impression de documents / support pedagogique	95000	210.43
26/03/08	3-18/3	impression de documents / support pedagogique	92800	223.59
05/03/08	4-8/3	impression de documents / support pedagogique	28000	62.64
08/04/08	3-3/4	impression de documents / support pedagogique	170000	409.59
18/04/08	3-5/4	impression de documents / support pedagogique	150700	363.09
01/05/08	3-2/5	impression de documents / support pedagogique	4125	10.04
02/05/08	4-3/5	achat de R. des classes , carnet et R des classes	8330	20.28
05/05/08	4-4/5	achat de 25 blocs de direction , 25 stylos à bic et 01 carnet de reçu	16500	40.17

16/05/08	4-28/5	achat de 05 carnet de reçu / Univers Graphique	1500	3.55
			<b>1074455</b>	<b>2,470</b>
		<b>Salary, logging and travel of the two coordinators</b>		
13/12/07	5-62/12	transport d'equipement	83000	184.19
15/12/07	5-81/12	transport d'equipement	30000	66.57
04/01/08	5-7/1	transport de coordonnateur1	26000	57.59
12/02/08	5-18/2	salaire coordonnateur1 / Projet Mars 2008	60000	132.91
12/02/08	5-19/2	logement coordonnateur1 / Projet Mars 2008	40000	88.60
12/02/08	5-20/2	salaire coordonnateur1 / Projet Fevrier 2008	60000	132.91
12/02/08	5-16/2	transport d'equipement	50000	110.75
12/02/08	5-22/2	transport d'equipement	28000	62.02
06/03/08	5-23/03	salaire coordonnateur2 / Mars 2008	30000	67.11
06/03/08	5-24/03	salaire coordonnateur2 / Projet Fevrier 2008	30000	67.11
06/03/08	5-25/03	transport de coordonnateur2	34000	76.06
06/03/08	5-26/03	transport d'equipement	78000	174.48
06/03/08	5-27/03	transport de coordonnateur1	58000	129.75
06/03/08	5-29/03	salaire coordonnateur2 / Janvier 2008	30000	67.11
26/03/08	5-76/03	transport de coordonnateur1	30000	72.28
27/03/08	5-81/03	transport de coordonnateur2	36000	86.74
27/03/08	5-82/03	logement coordonnateur1 / Avril 2008	40000	96.37
27/03/08	5-83/03	logement coordonnateur2 / Avril 2009	60000	144.56
21/04/08	2-20/4	transport de coordonnateur1	31000	74.69
21/04/08	5-25/4	transport d'equipement	30000	72.28
30/04/08	1-2/5	transport d'equipement	32500	79.12
03/05/08	1-7/5	transport d'equipement	13000	31.65
03/05/08	1-8/5	transport d'equipement	20500	49.90
13/05/08	1-31/5	transport d'equipement	70000	170.40
30/05/08	1-44/5	transport d'equipement	71300	168.61
08/05/08	2-21/5	transport d'equipement	71500	174.05
22/05/08	2-53/5	transport d'equipement	10000	23.65
23/05/08	2-54/5	transport d'equipement	10000	23.65
23/05/08	2-55/5	transport d'equipement	10000	23.65
09/05/08	3-17/5	transport d'equipement	5000	12.17
17/05/08	3-32/5	transport d'equipement	3500	8.28
17/05/08	3-33/5	transport d'equipement	5000	11.82
18/05/08	3-34/5	transport d'equipement	2500	5.91
08/05/08	5-46/5	transport d'equipement	30000	73.03
08/05/08	5-48/5	salaire et logement coordonnateur1 / Mai 2008	150000	365.15
21/05/08	5-100/5	transport de coordonnateur1	168500	398.47
31/05/08	5-141/5	transport d'equipement	15000	35.47
31/05/08	5-142/5	transport d'equipement	165000	390.19
			<b>1717300</b>	<b>4,009</b>
		<b>Parents day Club P.A.N.</b>		
04/01/08	5-5/1	Activités / JANVIER 2008	132500	293.50
08/05/08	5-44/5	Journée de parents	200000	486.87
08/05/08	5-47/5	Sejour à Tai	38500	93.72
			<b>371000</b>	<b>874</b>
		<b>Salary 10 teachers</b>		
08/05/08	5-45/5	Salaire / Animateurs / Club Pan / 10 enseignants	<b>150000</b>	<b>365.15</b>
		<b>Total</b>	<b>3977755</b>	<b>9199.06</b>



## 7. Future outlook

We already started the second school year in October 2008 with the teacher training. Also the pre-evaluation and the first five lessons were held in the 5 eastern schools. The Club P.A.N. team is now (January 2009) moving to the western side to start with the pre-evaluation and the first five lessons there. We were able to find the financial support for the second year (October 2008 – June 2009) but are in the process to look for the financial support for the third year which starts already in October 2009. A budget for this third school year with nature clubs in the same ten schools and with the same Ivorian teachers and coordinators participating has already been prepared. The WCF and the conservation group is currently in the process of applying for grants to fund the third year of the project.

**Table 7:** New Budget for Club P.A.N 2009/2010 during a third school year in the same 10 Ivorian schools with the same coordinators, teachers and directors that participated last years

Description	Item	Units cost (US\$)	# Units	Total (US\$)
Salary and lodging coordinator and assistant coordinator	salary coordinator	122	10	1220
	salary assistant coordinator	147	10	1470
	lodging assistant coordinator	98	10	980
National travel and per diem coordinator and assistant coordinator	Tai transport coordinator	98	3	294
	Tai lodging coordinator (7 days)	86	3	258
	Tai per diem coordinator (7days)	86	3	258
	Tai transport assistant coordinator (30 days)	183	3	549
	Tai per diem assistant coordinator (30 days)	122	3	366
	Transport in Soubre assistant coordinator	86	3	258
	Transport to Abidjan coordinator & a. coordinator	98	3	294
	Abidjan lodging coordinator & a. coordinator	74	3	222
	Abidjan per diem coordinator & a. coordinator	110	3	330
Salaries teachers	4 teachers	422	10	4220
Allowance for animation of lessons	Teachers (10)	122	10	1220
	School directors (10)	37	10	370
Workshop and training of teachers	Lodging (12 educators for 2 nights)	366	1	366
	Per diem (12 educators for 3 days)	488	1	488
	Material	122	1	122
	Transport (12 educators)	488	1	488
Educational day	Tai	488	1	488
	Soubre	488	1	488
Parent day	Food and drinks	366	2	732
Material for lessons	Transport (petrol, driver, car reparations)	305	1	305
	Photocopies (pupils : 10 lessons, 28 pages, 625 pupils)	4,269	1	4269
	Photocopies (teachers)	205	1	205



Equipment	Scanner	183	1	183
	Printer	196	1	196
	Cartridge	74	4	296
	Paper	7	10	70
	Pencils	147	1	147
	Scissors	366	1	366
	Camera	366	1	366
	Nature class rooms	37	10	370
T-Shirts	Teachers, directors, pupils	1,708	1	1708
Communication	Telephone and e-mail	61	10	610
Salary WCF education officer		1,220	3	3660
Bureau WCF Abidjan	Contribution of the rent	122	12	1464
Administration WCF	12%	3,558	1	3558
				<b>33254</b>



## 8. References

- Breuer, Thomas, personal observations of Club Ebobo around the Nouabalé-Ndoki National Park (Congo)
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