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Annual Report 2015

**Activities of the Wild Chimpanzee Foundation for improved
conservation of chimpanzees and their habitat in West Africa**



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Acronyms

APDRA - Association Pisciculture et Développement Rural en Afrique tropicale humide
BGEEE - Bureau Guinéen d'Etudes et d'Evaluation Environnementale (Guinean office for studies and environmental assessments)
CAEZA – Cooperative Agricole Espoir de Zagné
CASO – Cooperative Agricole Soleil de Taï
CBG – Compagnie des Bauxites de Guinée (Bauxite Company of Guinea)
CCF – Cavally Classified Forest
Club P.A.N. – Club for People, Animals and Nature
COOPAHZ – Coopérative Agricole de Zagné
CPE - Cellule des Projets Environnementaux
CRADD - Centre de recherche et d'action pour le développement durable
CSO - Civil Society Organization
DUBAL – Dubai Aluminium
EEM – Environment Effects Monitoring (a French Canadian consultancy)
EGA – Emirates Global Alumina
ERM – Environmental Resources Management
ERU – Emergency Response Unit
EU – European Union
FDA - Forestry Development Authority
FLAG - Field Legality Advisory Group
FLEGT - Forest Law Enforcement, Governance and Trade
FMC F – Forest Management Contract F
GAC – Guinea Alumina Corporation
GIZ – Deutsche Gesellschaft für Internationale Zusammenarbeit
GKNP – Grebo-Krahn National Park
IFC – International Finance Corporation
IM – Independent Mission
IUCN – International Union for the Conservation of Nature
KFW - Kreditbank für Wiederaufbau
MAP - Multi-Agri-Systems Promoters
MINEF - Ministère des Eaux et Forêt
NGO – Non Gouvernemental Organisation
OGUIPAR – Office Guinéen de Parcs et Réserves (Guinean Office of Parks and Reserves)
OIPR - Office Ivoirien des Parcs et Réserves
PNHB – Parc National de Haut-Bafing
SEIA – Social and Environmental Impact Assessment
SMART - Self Monitoring Analysis and Reporting Technology
SODEFOR - Société pour le Développement des Forêts
STBC – Société de Transformation du Bois du Cavally
TBC – The Biodiversity Consultancy
TGSFC – Taï-Grebo-Sapo Forest Complex (stretching between Liberia and Côte d'Ivoire)
TNP – Taï National Park
UNEP – United Nations Environment Program
UNESCO - United Nations Educational, Scientific and Cultural Organization
WCF – Wild Chimpanzee Foundation
ZIP – Zone Intégralement Protégée (Fully Protected Area)

Strategic Plan of the Wild Chimpanzee Foundation

Goal			<i>Protection of wild chimpanzees and their habitat</i>							
Strategic Objectives	Strengthen support for conservation of chimpanzees and their habitat			Strengthen protection of chimpanzee habitat		Strengthen conservation of chimpanzees and sustainable management of their habitat			Research	
Project Objectives	Raised awareness	Alternative benefits for local people	Increase environmental interest in policy decisions	Follow population trends	Improved park management	Sustainable funding for park management	Sustainable logging practices	Sustainable mining practices	Understand processes affecting population trends	
Activities	Environmental education	Alternative sustainable livelihoods	Advocacy	Monitoring	Law enforcement	Ecotourism	Monitoring logging practices	Monitoring mining practices	Research	
	Theatre	Micro-projects	Lobbying by decision makers	Impact of conservation actions	Creation of new Protected Areas	Entrance fee	Impact of logging practices	Impact of mining practices	Chimpanzee fatal disease studies - zoonose	
	Film / newsletter	Training of locals	Awareness meetings	Impact of human activities (e.g. logging)	Park patrols, ecoguards	Animals habituation	Best practices management plan	Mitigation and offset management plan	New monitoring tools (e.g. SMART)	
	Club P.A.N.	Employment for locals	Consultancy to promote environment issues	Impact of bushmeat hunting	Management plan	Nature trails	Capacity building	Capacity building	New evaluation tools	
	Discussion rounds	Ecotourism			Law application in courts	Local culture	FLEGT process	IFC Standards	Camera trapping	
	Ecomuseum	Certified cocoa program			Social-economic surveys				APE data base	
									Capacity building	

General Conclusion 2015 and Outlook for 2016

By the president of the Wild Chimpanzee Foundation, Christophe Boesch

After 15 years of activity, the Wild Chimpanzee Foundation (WCF) has been able to establish firm and constant conservation partnerships in the **3 West African countries Liberia, Côte d'Ivoire and Guinea**. In doing so, we have been able to push forward the priority activities following our strategic planning agenda based on a regular evaluation of the urgencies and needs in this region. Recent analyses have confirmed that in the long run, officially protected areas are more likely to protect wild animal populations than other areas (Campbell et al. 2008, Tranquilli et al. 2012, 2014). Furthermore, Jessica Junker's recent analysis of the priority conservation areas in Liberia (Junker et al. 2015), laid the basis for our new conservation strategy in Liberia, while the quasi national survey finished in 2012 in Guinea (WCF 2012) guided our priority conservation initiatives in Guinea.

During 2015 the WCF worked in close collaboration with government agencies and the local populations to proceed with the implementation for the new national park of Grebo-Krahn in **Liberia** (initiated in 2014) with the goal of completing the official gazetting process in 2016. High on our priority list for Liberia is the creation of an important animal corridor (cutting through the huge forest concession of Forest Management Contract F), connecting Sapo and Grebo-Krahn National Parks, to ensure the long-time survival of many animal species. Finally, the protection of the still poorly known Gbi Forest close to Sapo National Park, and potentially harbouring one of the largest chimpanzee populations in Liberia, would provide this country with a network of forested protected areas contributing to the national goal of protecting 30% of the remaining forest by 2030.

At the same time, in **Guinea**, the WCF completed a first important step towards the creation of a new protected area in the Haut-Bafing (inhabited by over 5'000 chimpanzees) by obtaining the mandate from the “Ministère de l’Environnement et des Eaux et Forêts” to work with the Ministry toward the creation of the new national park. These activities contribute to the official goal of the Guinean government to place 15% of the terrestrial surfaces under protection by 2020. In close discussion with the government and the mining sectors, the WCF is helping to develop some large biodiversity offset plans and implement some mechanisms in agreement with the international recommendations and the Equator Principles (2003). The growing concerns for the degradation of nature has been a leading concern in implying more the private sector in some conservation activities, but the strategy of how to achieve this goal is still being designed and the WCF's work in Guinea mainly consist in proposing concrete solutions to many of those issues.

The WCF's mission of contributing to the protection of the largest remaining chimpanzee populations and their forest habitat requires a multi-dimensional and multi-partner approach involving not only direct conservation measures, as mentioned above, but as well proposing alternative livelihood measures to decrease pressure on nature and increase the awareness of the local population to conservation issues. These activities have as a rule always accompanied WCF's activities on the ground and 2015 was no exception. Our presence in the three West African countries has also had a leading role in seeding new initiatives, with the **transboundary project Liberia-Côte d'Ivoire** attracting funding from international partners being one of the prime examples. The WCF is committed to pursue the actions it has been developing in the region and is hoping that 2016 will allow to progress decisively in many of the projects and ideas developed during the previous years.

Executive Summary for the Activities in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

Creation of Grebo-Krahn National Park, Liberia

The Grebo-Krahn National Park (formerly called the Grebo Forest National Park), was renamed at the regional consultation meeting in November 2015.

The **consultation process for the gazetttement** of the new park continued in 2015 and led to a final round of **community consultations** under FDA in October and November 2015, whereby the communities showed their approval and support to the creation of the park by signing an approval document. Several communities in Grand Gedeh still have to approve the park, and the same is true for Glaro. Some conflicts prevented locals from signing the agreement. therefore, a **conflict resolution platform** was set up in November 2015 to ease tensions with the community. Two first regional meetings in July in Zwedru and Fishtown were followed by a final regional consultation meeting in November, where regional stakeholders also consented to the creation of the new park. The boundaries of the GKNP were redesigned, using the Dugbe and Cavalla rivers to the east and west the original Grebo National Forest as the boundaries for the new national park. Ground-truthing and flagging of the boundaries is currently being done by a FDA/WCF team of 3 persons with support from local community members. The final boundaries for the park should be ready in January 2016. In the meantime, the gazetttement package is currently being prepared and will be submitted to FDA in early 2016, following a final national consultation meeting.

Biomonitoring and Law Enforcement in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

In November 2015, WCF organised the **3rd Transboundary Taï-Grebo-Sapo Forest Complex Steering Committee meeting** held in Abidjan, Côte d'Ivoire. Lastly, WCF also led a wildlife survey in the identified corridor linking GKNP to Sapo National Park (SNP), showing the corridor to be the home of a vast array of wildlife. A meeting on the importance of conservation was held with the communities from Pennoken who intend to establish a community forest in the corridor area.

A **biomonitoring** survey was completed from February 2015 to July 2015 in GKNP and the forest corridor with SNP. Three teams were trained in February and supervised by Mr. Clement Tweh, the FDA ranger seconded by WCF to run the program. Results are currently being analysed. A **camera trap survey** was done in the natural corridor between GKNP in Liberia and Cavally Classified Forest in Côte d'Ivoire. The most outstanding videos captured images of the Jentink's duiker, buffalo, sooty mangabeys, Ogilby's duiker, and bongo. These results confirm not only the importance of the natural connection between the two forests for the presence of wildlife, but also stresses the importance to ensure this "horn" of Grebo Forest is included in the final GKNP.

The **community eco-guard program** was continued by the two trained teams of community members supervised by FDA rangers/auxiliaries, with one based in the north (Grand Gedeh) and one in the south (River Gee) of Liberia. Data from both the eco-guard and biomonitoring

teams using the SMART (Self Monitoring Analysis and Reporting Technology) software for the first time showed that the GKNP was highly threatened by both habitat degradation and hunting. After discovering a large illegal harvesting of chewing sticks and poaching of elephants, WCF supported FDA and its law enforcement counterparts to lead a **targeted law enforcement** mission. This resulted in the arrest of 19 persons. Law enforcement missions led by FDA in SNP were also supported, and more law enforcement missions are programmed for the end of the year

In 2015, WCF and Office Ivoirien des Parcs et Réserves (OIPR) led the **10th phase of the biomonitoring programs across Taï National Park (TNP) in Côte d'Ivoire**. Results show that the conservation status of TNP has been stabilised, with the abundance of large mammal populations remaining constant, but still at an alarming low density for many emblematic species, such as elephants, pygmy hippopotamus and chimpanzees. Mapping analysis has also shown that there has been some decrease in anthropogenic pressure within TNP since 2011, demonstrating that law enforcement and sensitisation efforts may have an impact. The current population of weaned chimpanzees within TNP is estimated at 540 individuals.

Intense law enforcement activities in priority sites within TNP (chimpanzee research site and the eco-tourism areas) revealed that the illegal human activities that were found over most of the study area in 2012, decreased to only the peripheral areas of the TNP in 2014 and 2015, and do not exceed more than 2 signs/km. Furthermore, animal population densities have increased during the same time interval. These results show that an increase in a positive human presence can have a strong positive impact on wildlife within a short period of time. The next phase of data collection started in October 2015 and will continue into 2016.

Law enforcement with mixed eco-guards patrols (composed by community members, SODEFOR, Société de Transformation du Bois du Cavally, and WCF) have been conducted in Cavally Classified Forest, Côte d'Ivoire. The objective of surveillance missions is to fight against the illegal infiltration, identify illegal activities, destroy crops and discourage people from cultivating and bush-meat hunting within the classified forest. About 112.14 ha of cocoa plantation have been destroyed.

Environmental Education in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

In 2015, environmental education continued throughout WCF priority areas, the Taï-Grebo-Sapo Forest Complex in Côte d'Ivoire and Liberia, focusing our actions on the importance of chimpanzees and conservation of wildlife in the three West African countries, through theatre plays, film presentations, radio broadcasts, Club P.A.N., newsletters, school competitions, environmental days, a school exchange program and awareness and sensitisation campaigns. A **new issue of the newsletter “Forest Wisdom”**, for Liberia, was completed, specifically targeted at the communities close to the new proposed Grebo-Krahn National Park.

Alternative Livelihood and Sustainable Use of Natural Resources in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

In 2015, the WCF maintained alternative livelihood projects in Côte d'Ivoire and Liberia such as **micro-projects connected to schools and to local communities**. In Liberia, the chicken farm in Tempo now has over 40 chickens. For Côte d'Ivoire, out of the 13 farms of 2014, however, only 6 are still operational. The aim is to provide local communities around key sites

with an alternative source of protein compared to bush-meat and another source of income compared to illegal bush-meat hunting and trade, and these projects should be taken over completely by the local population in their own interest.

The two **eco-tourism projects** in Taï National Park, Côte d'Ivoire have successfully continued their habituation programs of monkeys and chimpanzees. **In the village of Taï**, the eco-tourism community-based project “Nature and Culture” restarted after the Ebola crisis. 42 tourists came and spent time at the forest camp and undertook all the proposed activities, like observing the mangabees and the red colobus monkeys, as well as walking the ethnobotanical circuit. In the eco-tourism **project of Djouroutou**, so far 10 chimpanzees are recognized by the eco-guides and can be observed and followed by tourists

WCF works with the project **«greening the cocoa industry»**, a program for cocoa certification in western Côte d'Ivoire under the Rainforest Alliance label. Only two cooperatives are still under certification: Coopérative Agricole de Zagné (COOPAHZ) and Cooperative Agricole Espoir de Zagné (CAEZA). An evaluation of a 2014 pilot project of reforestation of cocoa farms was realized in July 2015. In the same time, the agroforestry program allowed the planting of 2'234 seedlings which are used in 77 plantations. To continue the agroforestry program in 2016, a shade tree nursery with 1'225 seeds has been built in November 2015.

In 2015, the WCF finished the first year of a **FLEGT process** (Forest Law Enforcement Governance and Trade) by mandating an Independent Observation pilot project in Cavally Classified Forest and organizing a closing workshop in Abidjan in May 2015 attended by a large audience. Two independent monitoring reports, revealed malfunctions in the monitoring of procedures and specifications of cutting contracts by the Société pour le Développement des Forêts (SODEFOR) and the forest operator were reported to a large audience at the closing workshop. They were posted on the website of the Minister of Water and Forests and the WCF (www.wildchimps.org/reports). A second phase of the project was supposed to start in November 2015, although SODEFOR has not yet approved the new partnership agreement.

Executive Summary for the Activities in Guinea

Creation of the “Parc National du Haut-Bafing” and the Offset Project

The WCF “Foutah-Djallon office” moved from in 2015 from Dabola to Labé offering more convenience to the implementation of the project, i.e. the **creation of a new national park “Parc National du Haut-Bafing”**. This area is inhabited by a large population of wild chimpanzees and has been recommended as the location for any forthcoming offset projects undertaken by mining corporations for this species. It would contribute to the Guinean government’s target of 15% of land designated as terrestrial protected areas by 2020. Moreover,

A “Fiche de Projet” written by the WCF team outlining the project aims and future actions has been edited and approved by various government departments including OGUIPAR (the government office responsible for parks and reserves) and, thereafter, the Minister for the Environment and Eaux et Forêts mandated the WCF to work with OGUIPAR to create this new national park.

A stratified and comprehensive second phase of biomonitoring is underway in part of the core area (constituted of classified forests and non-protected areas) of the proposed national park and the peripheral ‘buffer zone’ that surrounds the core area. The first mission was successfully completed in December 2015 and all four missions are due to be completed by the end of March 2016. In conjunction with this, a study has been implemented to provide an up-to-date chimpanzee nest degradation rate for the region for the 2015 - 2016 period (to consider the climate change in the country) and will continue for 45 weeks until October 2016. This will allow determining a more accurate assessment of chimpanzee numbers in the area.

Collaboration with the mining companies Guinea Alumina Corporation and Compagnie de Bauxite de Guinée with the aim of mitigation and offset strategies for enhanced chimpanzee conservation

In 2015, the Sangarédi WCF office started its 6th year of collaboration with the mining company GAC (Guinea Alumina Corporation), and established a short-term agreement with CBG (Compagnie de Bauxite de Guinée) in the neighbouring concession in the Préfecture of Boké, Guinea.

Biomonitoring was undertaken in both concessions allowing a wider view of the chimpanzee distribution in the area, as well as the effects of the mining activities already underway in the CBG concession. 254 km of transects in the GAC concession and nearly 140 km of transects in the CBG concession have been walked and provided **data on chimpanzee and other primate density, mammal density and human activity therein**. WCF is now looking to pursue collaboration with the two mining companies to implement rigorous impact avoidance, mitigation and offset strategies based on the chimpanzee abundance and IFC (International Finance Corporation) standards.

Alongside these efforts, the Sangarédi WCF-office implemented **a system of camera trapping in the GAC concession with 52 cameras** placed in the south of the GAC concession. **The “mise-en-défense” programme** (protection of land) has also been developed with Koulouré communities in the GAC concession and **a plant nursery** with over 25,000 plants has been established to rehabilitate protected land around three main water sources. One of the next steps will be to promote the development of sustainable economic activities in the area.

Environmental Education in Guinea

During the 2014-2015 school year of Club P.A.N. in Guinea, we reached 327 children from the villages of Kambaya, Kalinko and Kollet in the Foutah-Djallon region and in addition 497 children from the villages Doubhi, Mobhi, Thiankoun Tioly and Boulleire within the Guinea Alumina Corporation mining concession.

1 Activities in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

1.1 **Creation of Grebo-Krahn National Park, Liberia**

1.1.1 **Community consultations**

The Grebo-Krahn National Park, renamed at the regional consultation meeting in November 2015, has previously been called the Grebo Forest National Park.

Following the process of pre-gazetttement requirements set out in the National Forestry Reform Law (2006), the WCF supported the FDA to lead community consultations around the Grebo-Krahn National Park. A final round of community consultations was led in October and November 2015 with 55 communities and 464 people consulted. With the presence of the County authorities, commissioners and paramount chiefs, the communities signed an approval document to show their consent to the creation of Grebo-Krahn National Park. Copies of all documents are with the FDA Conservation Department.

1.1.2 **Regional consultations**

In July 2015, two regional level meetings were held in Zwedru and Fishtown, to inform county level government representatives and local community leaders of the boundary line for Grebo-Krahn National Park, validated at the FDA level in Monrovia. WCF presented a map of the proposed boundary lines followed by a question and answer session and a request for support for the boundary line from the participants. The meetings were attended by a total of 26 regional government representatives and community leaders, i.e. 12 in Fishtown and 14 in Zwedru. The proposed boundary line was accepted, and there is a great level of motivation from the regional officials and local community leaders to create Grebo-Krahn National Park.

In November 2015, a final regional level consultation meeting was held in Zwedru to consult with regional stakeholders on the creation of the new park with the County Authorities from River Gee and Zwedru (Superintendent and County Inspector), district commissioners, representatives from Ministry of Lands, Mines and Energy, Ministry of Agriculture, Environmental Protection Agency, the Court Magistrate and local NGOs. During the meeting, the results of the work led by WCF, FDA, and the communities over the past two years was presented, followed by a presentation on the steps toward park gazetttement. The regional stakeholders showed their support to the creation of the park by signing a document of consent.

1.1.3 **Validation, ground-truthing and flagging of the boundary line**

In July 2015, the WCF proposed a redesigned boundary line to FDA at a national level consultation meeting held at Royal Hotel in Monrovia. Based on previous agreements with the local communities and data collected during previous monitoring surveys, a new boundary line that follows the original Grebo National Forest boundary line and uses the Dugbe River and Cavalla River as boundaries to the west and east respectively was presented to FDA and other partners (18 participants). In this way, the Grebo-Krahn National Park does not encompass any community land, increases the cover of forest (a total of 106,000 hectares), and protects the natural corridor linkage to Cavally Classified Forest in Côte d'Ivoire.

1.1.4 National consultations

National level consultation occurred in two phases. A first meeting was held in July 2015 in Monrovia to validate the proposed boundary line of the Grebo-Krahn National Park and to develop an action plan toward its creation, in partnership with many key stakeholders (FDA, Environmental Protection Agency, WCF, Conservation International, Society for the Conservation of Nature Liberia, etc). A workshop was held at the Grand Royal Hotel in Monrovia, with 18 participants from government and NGO stakeholders. During the meeting, WCF and FDA presented background information on the Grebo Forest and the management activities executed since December 2013, as well as specific actions led to assess and redefine the boundary line and toward gazettement. A new boundary line for Grebo-Krahn National Park was proposed, based on data collected on local biodiversity and local communities (land-use), and using the original Grebo Forest boundary lines as a basis. All participants agreed to these new boundary lines for the future Grebo-Krahn National Park. A second meeting will be organized in 2016.

1.1.5 Preparation of gazettement package

The WCF has begun to prepare the gazettement package for the Grebo-Krahn National Park. The package summarizes the history of the Protected Area Network, the Grebo-Krahn National Park and the laws and policies that affect the protected area. It also summarizes the pre-gazettement activities (bio-diversity and socio-economic baseline surveys, community, regional and national consultations, etc...). A draft legislation act for the establishment of the park is also being prepared. After final national consultations in 2016, the gazettement package will be completed and submitted to the FDA for validation.

1.2 Biomonitoring and Law Enforcement in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

1.2.1 Steering committee meeting for the Taï-Grebo-Sapo Forest Complex

The **third annual steering committee meeting** for the cross-border Taï-Grebo-Sapo Forest Complex (TGSFC) took place on the 26th and 27th of November 2015 in Abidjan, Côte d'Ivoire. The dates were pushed back to the end of the year so that the consultants hired by the Kreditbank für Wiederaufbau (KfW) and GIZ, two new donors to the TGSFC Transboundary Initiative, could attend and present their projects. The meeting was held at the Ivotel in Abidjan, presided by the Office Ivoirien des Parcs et Réserves (OIPR), and organized by the WCF and United Nations Environment Program - Great Ape Survival Partnership (UNEP-GRASP). Presided by OIPR, represented by the Director General, Col. Adama Tondossama, the meeting brought together key stakeholders in the transboundary collaboration for the TGSFC of Côte d'Ivoire and Liberia. The meeting was led by Dr. Johannes Refisch from UNEP-GRASP, while members of government institutions (OIPR, FDA, SODEFOR, DEPN), international NGOs (WCF, Fauna & Flora International) and technical and financial partners (GIZ, KfW, World Wildlife Fund) were present.



Participants at the third steering committee meeting for the Taï-Grebo-Sapo Forest Complex

Over the two days, members of the steering committee updated partners on the activities led within the context of the TGSFC. This was followed by an update on the urgent actions matrix with some new activities added by the institution responsible for the implementation. In addition to the meeting, baseline work was completed by WCF this year in the corridor areas. With FDA in Liberia, the 3 trained biomonitoring teams led a wildlife survey in the identified corridor area crossing the logging concession of FMC F (Forest Management Contract F) and in the community land linking FMC F to Sapo National Park in Liberia. More than 100 km of transect were walked and data were collected on large mammals and anthropogenic threats. The full analysis is underway, and first results were presented at the meeting in Abidjan.

1.2.2 Biomonitoring in Grebo-Krahn National Park, Liberia

A new phase of biomonitoring started in February 2015. Led by the FDA ranger assigned to WCF, three teams composed of FDA rangers and community members, supervised by WCF, were trained and subsequently completed monthly missions of data collection. In total they walked more than 350 km of transects, collecting data on chimpanzee and other large mammal presence, as well as anthropogenic activities. Results are currently being analyzed, and preliminary results suggest the wildlife population to have remained stable since the previous year.

The targeted corridor between Grebo-Krahn National Park and Sapo National Park homes much wildlife with some encounter rates higher than those found within Grebo-Krahn National Park. For example, the encounter rate for chimpanzees was 2.38 signs of presence/km, in comparison to only 0.91 signs of presence/km in the proposed park. The spatial distribution of large mammals inside the corridor areas confirms the importance of implementing a corridor. The area is also used by local communities, namely for mining and hunting, but little farming or other land-uses. In addition to this, no signs of newly logged trees by Eurologging, the company running the FMC F, were found. A full report is available upon request. Finally, using this data, a corridor boundary will be proposed in collaboration with FDA.

A camera trap survey was carried out in the northern part of the proposed park, in an area that constitutes a natural corridor with the Cavally Classified Forest in Côte d'Ivoire. Videos of an array of important wildlife have been captured, such as the Jentink's duiker, the Ogliby's duiker, sooty mangabey, buffalo etc. These videos highlight the importance of keeping this part of the forest in the new park. A full database is being compiled and will be handed over to FDA shortly.

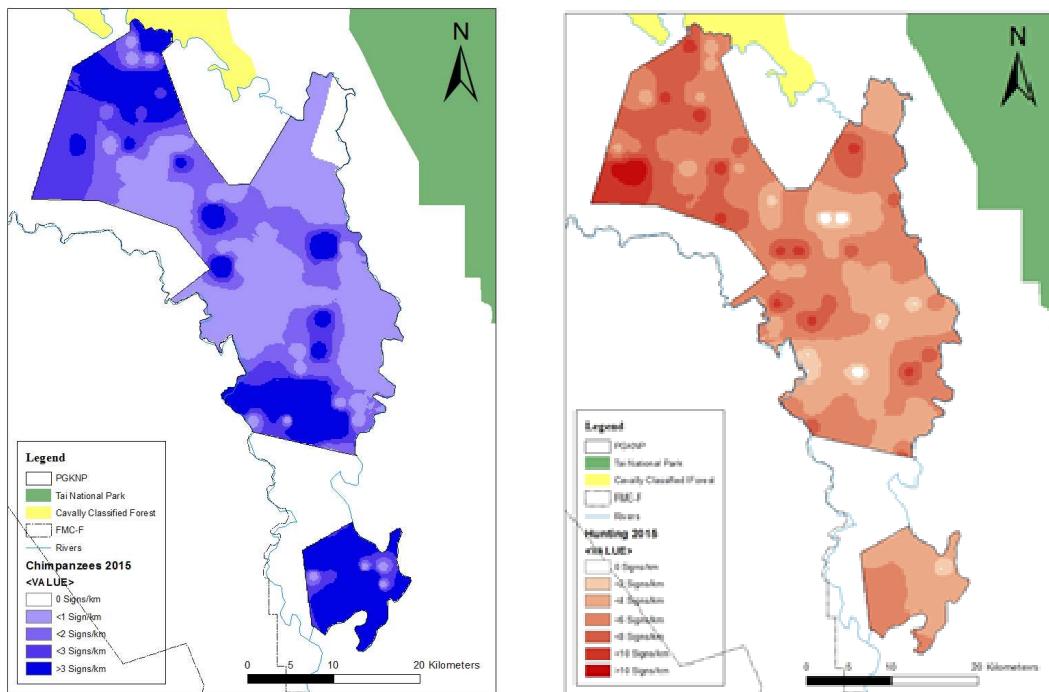


Figure 1: Abundance of chimpanzees (left) and illegal human activities (right) in Grebo-Krahn National Park, 2015

1.2.3 Community eco-guard patrol program for Grebo-Krahn National Park, Liberia

The community eco-guard program continued throughout 2015. Two teams were retrained in February and April 2015, after which the teams, composed of 4 community members, an FDA ranger and a WCF supervisor, **patrolled a total of more than 400 km**. This year missions were targeted in grids which, based on results from 2014, were those most under threat.

A SMART (Self-Monitoring Analysis and Reporting Technology) **database** was set up for the community eco-guard patrols of the Grebo-Krahn National Park. SMART allows for efficient mission planning and reporting. Reports for each mission are available and are with the FDA regional manager and the Chief Park Warden. An FDA auxiliary was trained in data entry and report preparation using SMART. To improve and build on this, the WCF proposed to train the Chief Park Warden, and asked the FDA to assign a law enforcement officer to the program to be fully trained in SMART to be able to lead the program in the future.

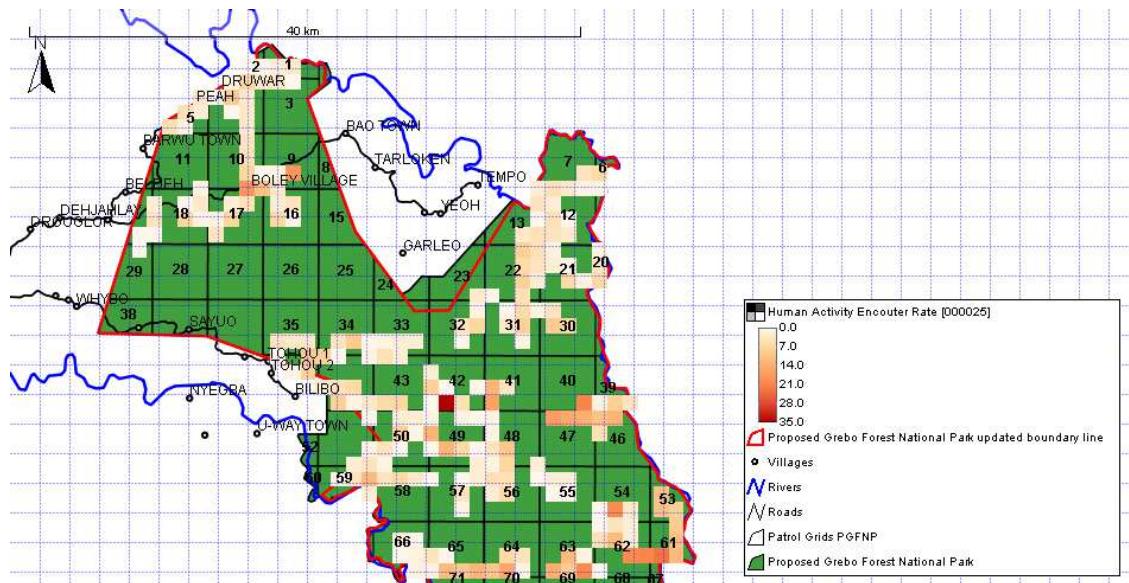


Figure 2: SMART (Self-Monitoring Analysis and Reporting Technology) map with encounter rates of illegal human activities in the northern area of the Grebo-Krahn National Park produced with the data collected by the community eco-guard patrol program in 2015

1.2.4 Law enforcement patrols in Grebo-Krahn National Park and Sapo National Park, Liberia

Data collected by both the monitoring and community eco-guard teams over the past two years have shown the new Grebo-Krahn National Park (GKNP) is under immense threat from habitat degradation and bush-meat hunting. Specifically, an illegal transboundary trade of “chewing sticks” (*Garcinia* spp.), with hundreds of logs being cut each day by illegal settlers (mainly from Ghana) was found in various places along the border with Côte d’Ivoire. Five carcasses of elephants were also found, all without their tusks, something that had never been seen before in four years of data collection. Community members explained to FDA that Ivoirian hunters were coming over to hunt elephants and sell the ivory in Côte d’Ivoire. To counteract the illegal activity, WCF supported FDA-led law enforcement missions accompanied by agents of the Emergency Response Unit. Two missions have been completed, resulting in **28 arrests**.



Eco-guards on patrol in Grebo-Krahn National Park

1.2.5 Technical committee meeting: Conservation Priority Areas, Liberia

In collaboration with the Max Planck Institute of Evolutionary Anthropology in Leipzig, Germany, WCF held a meeting on the 2nd of April 2015, bringing together 22 participants to discuss **Conservation Priority Areas in Liberia**. Dr. J. Junker from the Max Planck Institute presented results of her MARXAN analysis using data of chimpanzee abundance, forest cover, large mammal diversity, presence of threatened large mammals, tree diversity, altitude, and hunting pressure that calculated where Conservation Priority Areas are located across Liberia. Her research demonstrates that, as it stands, the Proposed Protected Area Network of Liberia does not fully overlap with Conservation Priority Areas. It was agreed that the Conservation Priority Areas should thus be taken into account in future conservation actions.

1.2.6 Biomonitoring in Taï National Park, Côte d'Ivoire

WCF collected the **biomonitoring data of phase 10** in Taï National Park (TNP) from November 2014 till May 2015 on 361.78 km transect located throughout the park. The results evaluate the conservation status of TNP during these ten years, including and appreciate the heavy assaults during the period of the last crisis known in Côte d'Ivoire in 2011-12. Direct observations of wildlife in phase 10 are dominated by the Maxwell duiker and the black dorsal band duiker for bovids and Cercopithecus diana and Petaurista for monkeys. Indirect observations are dominated by the red river hog, the pygmy hippopotamus, elephant and chimpanzee. Abundance and density estimation of bovids, monkeys, chimpanzees and elephants of phase 10 and their comparison to the results of previous phases are provided in the following figures:

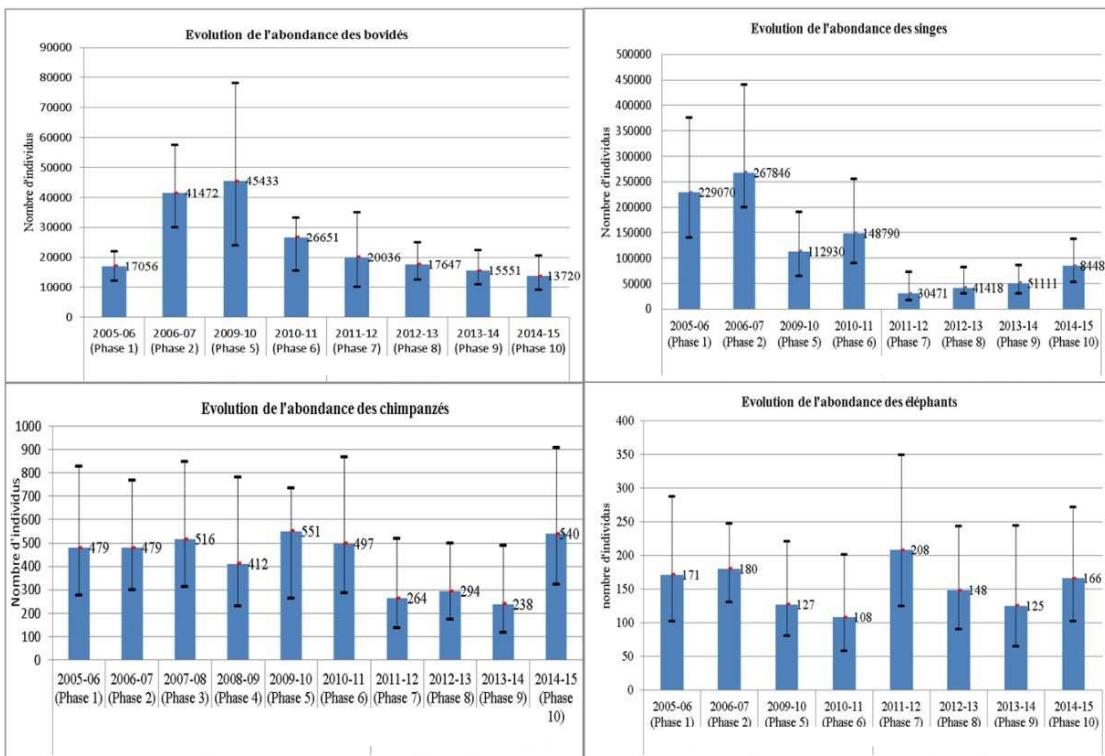


Figure 3: Abundance of bovids (top left), monkeys (top right), chimpanzees (down left) and elephants (down right) in Taï National Park during 10 phases of biomonitoring

Tragic decreases of animal populations in the park were recorded between 2009 and 2011. Since 2012 some stability is noted with a positive trend toward increasing for monkeys and, however, a negative trend for bovids. Significant overlap of confidence intervals between phases 7 and 10 does not allow us to confirm an actual change in one direction or the other. The data pool of the ten ecological monitoring phases was used to estimate the density and abundance of monkey and bovid species. Among the monkeys the most frequently observed are the Red Colobus, the Cercopithecus diana, the Petaurista, the black and white Colobus, and the Campbell's mona monkey; among the bovids the Maxwell duiker, and the black dorsal stripe duiker. Chimpanzees and elephants remained stable with a faint increase in phase 10. Monkeys and bovids are observable in almost the entire Taï National Park, but with wide variations. The east side of the park is much less inhabited by animals. As for chimpanzees and elephants, two favorite areas are to be retained, namely the heart of the park starting from the research station in the Taï area and south from the eco-hotel in the sector of Djouroutou.

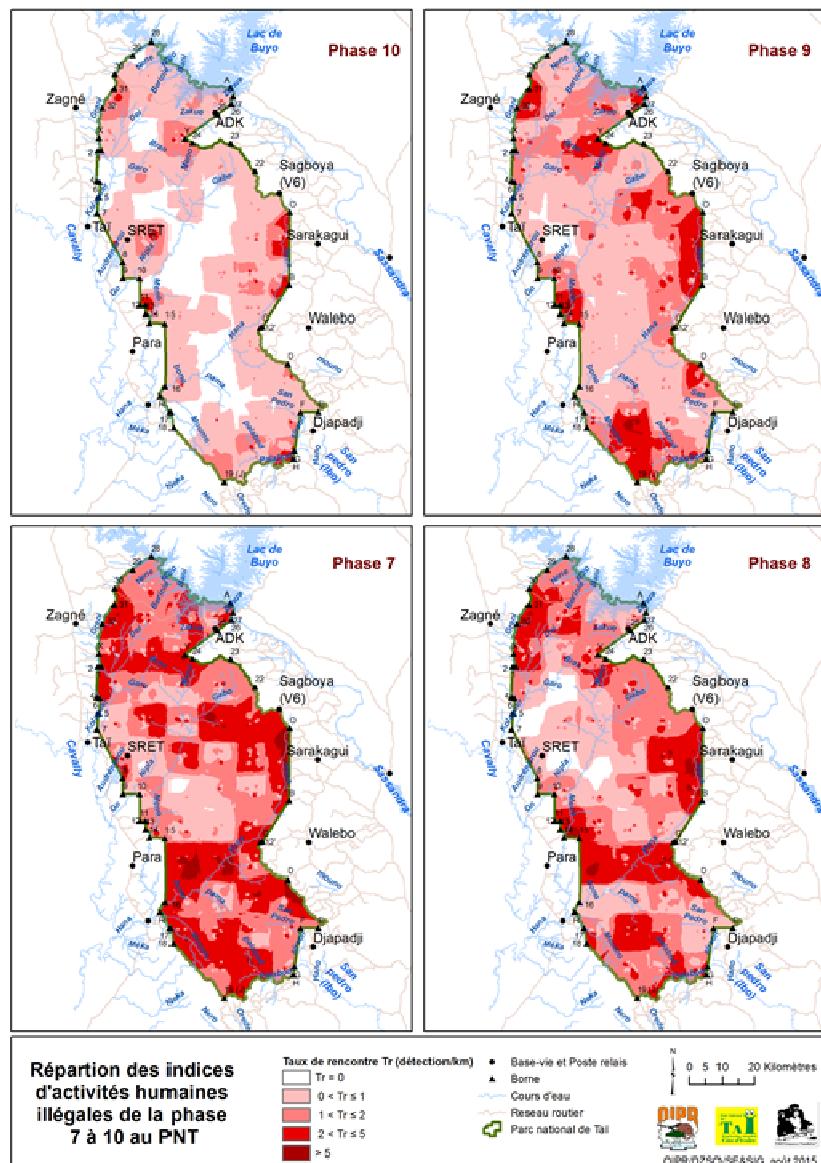


Figure 4: Spatial distribution of illegal human activities in Taï National Park during 4 different phases of biomonitoring (phase 7 to 10)

The indices of illegal human activities within TNP are dominated by acts against wildlife, and the most attacked sectors are Djapadji (with an encounter rate of 0.79 signs of illegal human activities per km) and Soubré (with an encounter rate of 0.68 signs of illegal human activities per km). Illegal human-activity indices remained directed against wildlife. During this phase 10, the encounter rates declined significantly.

The increase or stabilization in wildlife was not only due to careful management, but also due to the fact that people were afraid of potential fatal contacts with diseased animals struck by Ebola, the reason for which banning measures against handling and trade of bush-meat were taken by Côte d'Ivoire. The gold mining activities have been low compared to previous phases and remained localized in the Soubré sector, near the Hana River. This type of aggression remains however a major pressure to TNP and therefore subject to special surveillance.

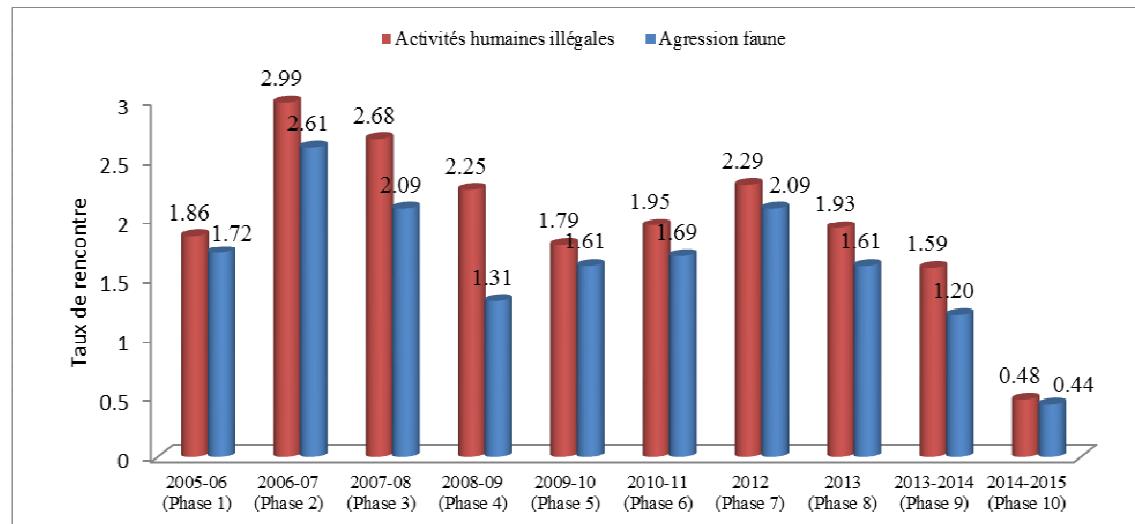


Figure 5: Encounter rate of wildlife aggression activities during the different phases of biomonitoring in the Tai National Park

Of all phases of the biomonitoring program, the 2014-2015 period (phase 10) is the lowest with a 0.48 encounter rate index/km for all human activity indices and index of 0.44/km of those relating to attacks on wildlife.

1.2.7 Biomonitoring in priority sites of Tai National Park, Côte d'Ivoire

The main purpose of the anti-poaching project (initiated in 2008 in the **research area in Tai**, and in 2012 for the **eco-tourism area in Djouroutou**), is to study the positive and permanent human presence in order to increase the protection of animals. The objectives of this project are to maintain a permanent presence of eco-guards in the research area, to follow the evolution of the abundance of animal species and illegal human activities, and finally to determine the factors that influence the distribution of animals. In 2015, on average, 12 patrol days per month were made by OIPR rangers.

For the **research area in Tai**, monitoring data were collected on 191 transects, including the eco-tourism site in Tai and the southern part of the research area. 117 poaching indices were recorded on transects, mainly forest paths and cartridges. The average encounter rate for illegal human activities is of 0.60 signs/km, with a pre-dominance at the tourism site and the

southern part of the research area; for duikers it is of 26.49 signs/km, with a concentration around the research area; for chimpanzees, it is of 1.54 signs/km, with a concentration in the research and tourism areas; for monkeys, it is of 4.61 signs/km, with a concentration in the research area.

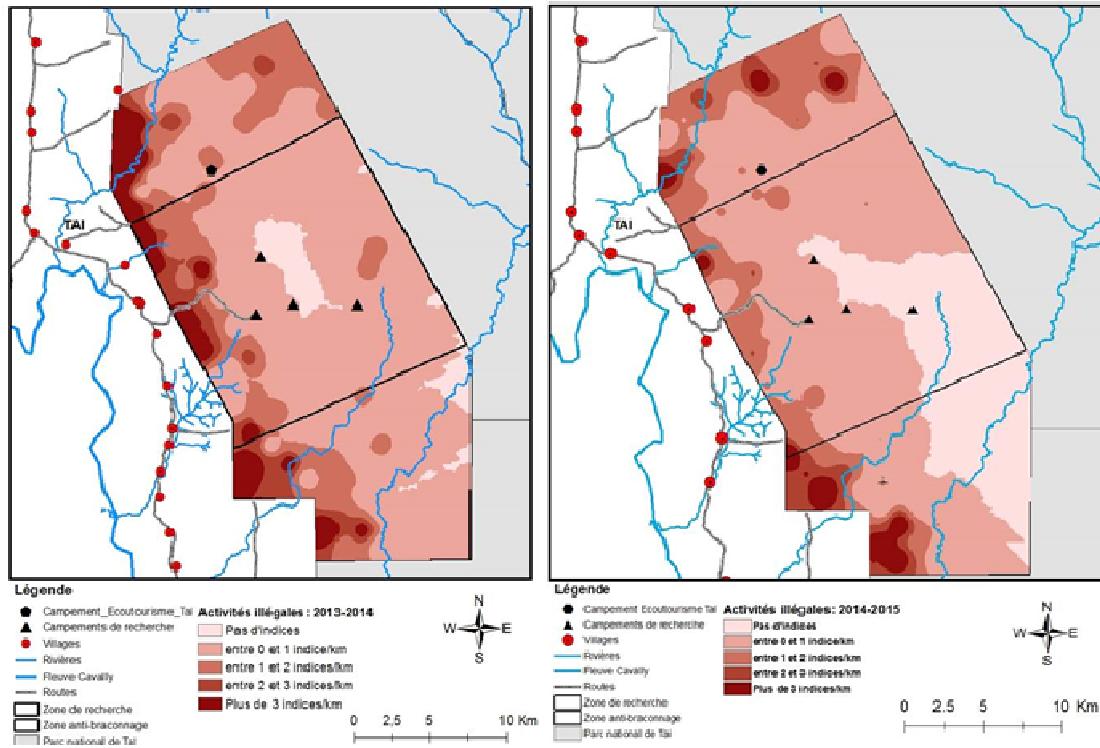


Figure 6: Distribution of illegal human activities in the research area of Tai National Park

Results from the **eco-tourism area in Djouroutou** show that between 2012 and 2014, there is a considerable reduction of 84% in illegal human activities, and of 90% between 2014 and 2015. The populations of monkeys and duikers have increased significantly between 2012 and 2014 and appear to remain constant in 2015. Pygmy hippopotamus population has not varied since 2012. Populations of chimpanzee and elephant have decreased between 2014 and 2015.

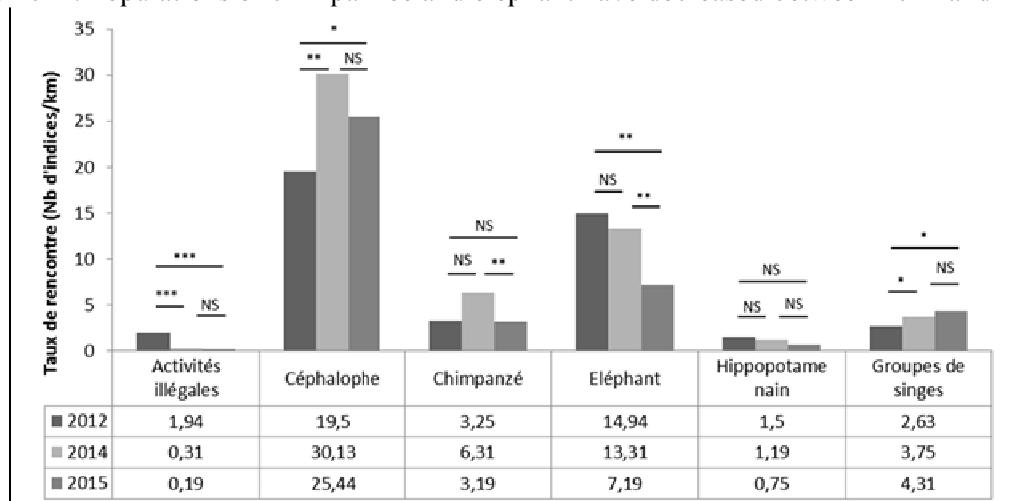


Figure 7: Encounter rates of large mammals in the eco-tourism area of Djouroutou, Tai National Park

1.2.8 Law enforcement patrols in Cavally Classified Forest, Côte d'Ivoire

The SODEFOR/WCF surveillance activities are funded by European Union, United Nations Food and Agriculture Organization (FAO), UK Department for International Development (UK-DFID) and PUMA (United Nations Environment Program). The objective of surveillance missions is to fight against the illegal infiltration, identify illegal activities, and discourage people from cultivating or poaching and destroying crops within the classified forest. During these missions, some indications of wildlife presence are recorded in order to collect data on biodiversity or absence/presence of certain key animal species. The team was composed by 4 SODEFOR agents and 2 WCF staff, 6 local community members who have received the eco-guard training, and 6-10 persons for destroying illegal crop.



Surveillance team for the Cavally Classified Forest

During 2015, the missions were conducted in two major phases: the forest exploration phase and the crop-destruction phase. The first step was to patrol the classified forest to record the human activities (settlements, clearings, plantations etc.), locate the different plantations and locate the wildlife biodiversity areas. In total, some 639 km were covered and 87% of forest areas visited. The results are illustrated by the map below which shows the geographic position of farms and the areas of wildlife biodiversity.

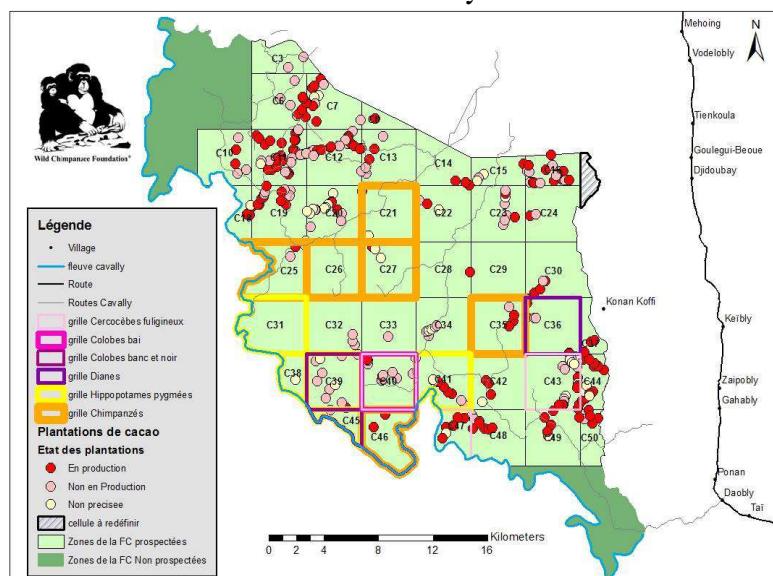


Figure 8: Farms and wildlife areas in Cavally Classified Forest (colored squares represent the areas with wildlife observations, for example: chimpanzees in orange squares)

The second phase concentrated, under SODEFOR's supervision, on destryucting the plantations, thus enabling the regeneration of the natural forest and, by the same, curbing the infiltration of illegal cultivators. The actions carried out are summarized in the following table:

Table 1: Actions taken during surveillance missions in Cavally Classified Forest

Month Year 2015	Number of missions	Forest working days	Area of destroyed farm (ha)	Shelters destroyed	Nurseries destroyed	People arrested	Cartridges found	Traps destroyed
January - February	5	15	24,92	40	9	24	57	37
March - April	2	10	16,38	24	19	17	24	15
October - November	4	11	70,84	10	5	2	1	3
TOTAL	11	36	112,14	74	33	43	82	55

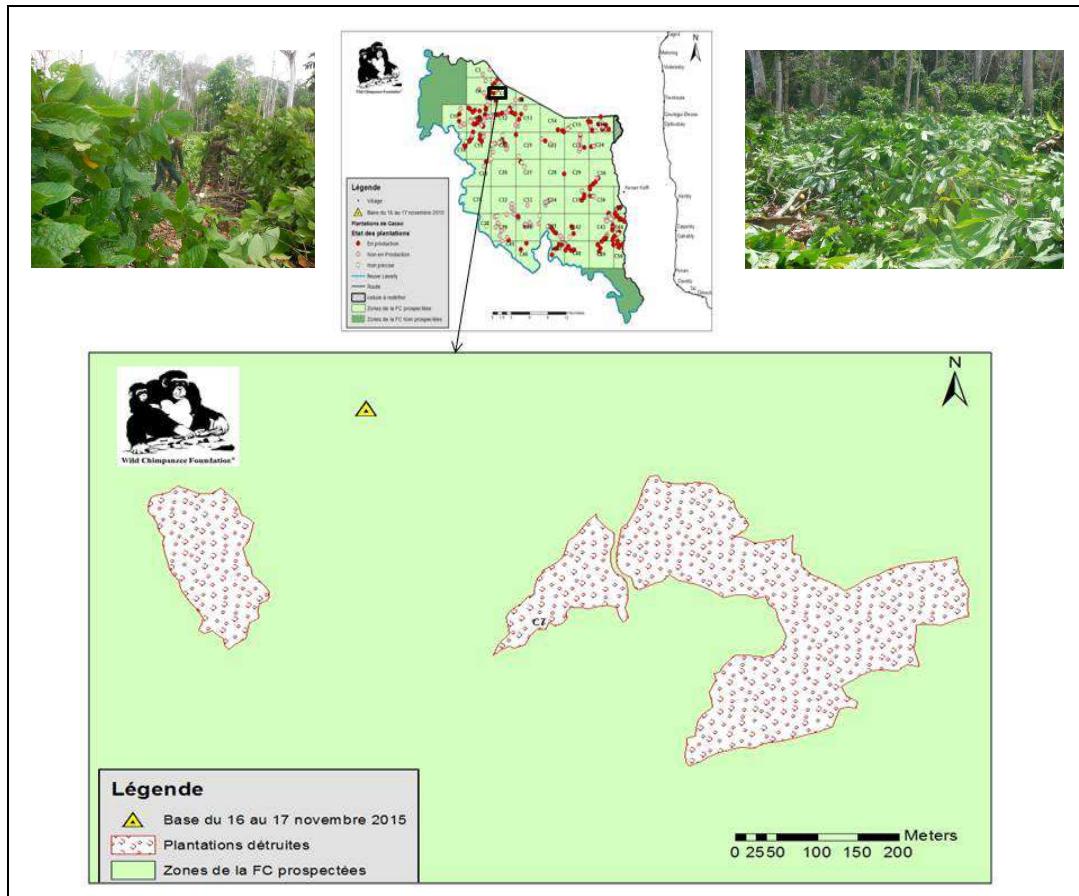


Illustration of plantation plots destroyed in Cavally Classified Forest

Despite the human pressure on the forest, there were signs of wildlife which were recorded during patrols, and animals were filmed by camera traps. Bushnell camera traps were installed near the forest bases and wildlife presence is documented as follows:

- 18 signs of chimpanzee presence (vocalizations, nests, feeding and nut cracking sites, dung)
- 16 signs of pygmy hippopotamus (dung, foot print)
- 18 Diana monkeys seen
- 23 signs of buffalo and signs of bongo
- 1 Yellow backed duiker and Campbell's monkey filmed

Bushnell camera trap photos of wildlife presence within Cavally Classified Forest:



Yellow backed duiker



Campbell's monkey



Nest of Chimpanzee



Pygmy hippopotamus dung

Several endangered large mammal species inhabit the Cavally Classified Forest, including chimpanzees and pygmy hippopotamus. The destruction of the forest and bush-meat hunting threatens the lives of many species such as chimpanzees. This program should continue until complete destruction of all plantations is established.

1.3 Environmental Education in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

1.3.1 Theatre in Côte d'Ivoire

WCF continues to develop several environmental education activities, such as school theatre in collaboration with the “Cellule des Projets Environnementaux (CPE)” of the Ministry of Education in Côte d'Ivoire. From April to June 2015, four theatre tours were conducted around Taï National Park (TNP) in 14 different villages. Three groups of school children from Sakré, Djouroutou and Wonséaly took part in the tours. The subject of the play was **“Protecting chimpanzees, our cousins of the forest and the TNP, their habitat”**. Each tour included a presentation of the theatre piece, followed by screenings of WCF and BBC chimpanzee films, distribution of newsletters and discussion sessions with local communities. An average of nearly 1,400 spectators attended the films following the theatre plays.

Table 2 : Theater tours in Côte d'Ivoire

Date	Theatre group	Localities visited	Number of spectators	
			Theatre	Films
April 2015	Sakré	Gouléako2; Paulé-Oula; Port-Gentil	900	1200
May 2015	Sakré	Tiélo-Oula; Ponan; Daobly	1200	1400
June 2015	Djouroutou	Petit-Grabo; Poutou; Béoué; Djouroutou	1050	1500
June 2015	Wonséaly	Kouamékro; Alexandrekro; Bertinkro; Wonséaly	1300	1400
Total		14 villages	4450	5500

1.3.2 Theatre in Liberia

WCF created a script for an amateur theatre group in collaboration with Eddie Theatre Productions. The drama entitled **“Our Park, Our Future”** tells in short the story of a community in conflict with each other over the creation of a national park. Three scenes show; the conflicts about the right to establish farms in the future park; the observation of fascinating wild chimpanzees makes them realise the closeness to humans; and the chief, in the final scene, calls a meeting and all agree to protect the park. The tour was done in December 2015 in 6 villages, with 14 newly trained actors from Freetown. More than **600 persons**, about 1/3 of the overall population of the area, attended the theatre and film shows.



Theatre tour in Liberia

1.3.3 Radio broadcast in Côte d'Ivoire

In April 2015, "Zagné radio" produced the first public radio program ever made in Ponan. The theme of the broadcast focused on the WCF structure and its contribution to the protection of TNP. A total of **24 students** from two classes were selected to prepare the questions for the guest, Gregoire Nohon (WCF long-term assistant). Two more radio shows were also broadcast this year; one registered during the parental day of Club P.A.N. and broadcast in May for Diéré-Oula; the second was a recording of the theatre piece performed by the school theatre group: "**Protecting chimpanzees, our cousins of the forest and the TNP, their habitat**" performed in Djouroutou in June. This radio show has been incorporated into a WCF-DVD that will be used during future awareness campaigns.

1.3.4 School competition in Côte d'Ivoire

Each school year, an inter-school competition activity is conducted to strengthen eco-citizen values. The 2015 competition "Best Environmental Action" started in March. From April-May 2015, WCF visited the 6 competing schools in order to evaluate their projects. The projects this year were excellent and raise awareness both at the schools and in specific sites in surrounding villages. The winning project was from the primary school **Sioblo-Oula**. The students created an impressive organic garden containing cassava, eggplant, peanuts and corn.



The competition winner school Sioblo-Oula

1.3.5 Environmental days in Côte d'Ivoire

Information, education and communication days were held in Taï on June 5th and -6th. The topic of the 2015 edition was "**community-based eco-tourism in TNP**". The goal of these days is to raise awareness and increase community engagement in the eco-tourism projects and forest protection. The Oubi and Dao canton chiefs had the opportunity to stay one night in the TNP at the eco-tourism camp. They were able to appreciate the improvements made to the camp and the professionalism of eco-guides from the Dao and Oubi communities. They were taking guided tours to observe the mangabeys and red colobus monkeys, and accomplished the ethno-botanical circuit. They then visited the traditional hut completed in December 2014 and attended to the traditional event organized by the people of Gouléako-1. This program gave

participants the chance to experience the full range of eco-tourism activities and facilities that are now established in Taï. All participants, from the canton chiefs to the representative of deputy for Taï, were impressed by the quality of the lodging and the activities. WCF continues to support the populations of Taï and Gouléako-1 in improving the eco-tourism project.



The guests during the traditional evening in Gouléako 1

1.3.6 Club P.A.N. in Côte d'Ivoire

During the school year 2014/2015, the environmental education program "Club P.A.N." continued in **15 schools** around the TNP: Djouroutou, Daobly, Taï, Paule-Oula, Diero-Oula, Sakré, Ziriglo, Para, Karie, Youkou, Amaragui, Petit Tieme, Sarakagui, Adamakro and Kouperou. We reached more than **700 children** and their families. The highlight of this school year was the **new lesson number 12: "Health"**, created by researchers from the Robert Koch-Institute in Berlin. It is a response to the Ebola outbreak in West Africa in 2014 and concentrates on good hygienic practices for preventing the transmission of diseases. The children received new posters, lesson materials, soap and buckets. The Club P.A.N. teacher training in October 2014 was conducted this time at the research station in TNP with the support of OIPR, CPE and Taï Chimpanzee Project. The teachers and principals were able to see the primary tropical rainforest, and part of the training was conducted in the forest during nature walks. This was our most enjoyed and successful teacher training to date. During lesson 11 we had some great conservation projects including a big tree planting and the construction of a new goat farm as a school micro-project.



Club P.A.N. teacher training at the Ecological Research Station in Taï National Park

Due to funding limitations the school year 2015/2016 started in November 2015 in only 5 schools out of the former 15. The selected schools were: Gouléako-2, Sakré, Ziriglo, Adamakro and Petit Tieme. Pre-evaluations are conducted as well as the first lessons. The school year is ongoing.



Club P.A.N. in the village of Sakré

1.3.7 Newsletter

The 13th issue of the WCF newsletter “Forest Wisdom” was prepared, edited and printed in 2015. This issue is focused on Liberia and written partly in Liberian English. One cartoon story discusses the importance of chimpanzees and how they are related to humans, The other one discusses the importance of creating a national park. Articles on the work WCF has completed with the communities and FDA are presented, and the idea of corridors linking protected forests. The issue will be distributed to all communities around the new Grebo-Krahn National Park.

1.3.8 School exchange project between Côte d'Ivoire and Germany

With the help of CPE and the WCF-school exchange project with German schools, such as the Humboldt Gymnasium in Werdau and the Kepler Gymnasium in Leipzig, the school in Adamakro received a **new building with new class rooms, blackboards and school desks**. The 2015/2016 school year of Club P.A.N. received large donations from both German schools, so that their friends in Petit Tieme and Adamakro were able to continue the P.A.N. Club. Thanks to the money German pupils donated to the project to cover school fees and study materials, **6 girls in Côte d'Ivoire are able to attend school this year**.

1.3.9 Proximity awareness in Côte d'Ivoire and Liberia

In 2015, the WCF continued a proximity awareness program in villages in the Taï-Grebo-Sapo Forest Complex (Côte d'Ivoire and Liberia) to improve relationships with the local communities, to inform them about the trans-boundary corridor project, and to raise awareness about the importance of protecting the forest and its wildlife.

In Liberia, this year, during all community consultations led by FDA, WCF and eco-guards (following their missions in the forests), posters, stickers and copies of the WCF newsletter “Forest Wisdom” were distributed. The stickers display messages such as “**Let's protect chimpanzees!**”, “**Say NO to poaching!**”, and the posters show messages about the protected species, the dangers of bush-meat and the impact of deforestation. Hundreds of the

communication materials have been distributed to all the communities around the new Grebo-Krahn National Park. More than 750 people participated in community consultation meetings.

An additional awareness program was conducted in Côte d'Ivoire for cocoa producers in order for them to receive the cocoa certification by Rainforest Alliance. The sensitisation meetings took place in **20 villages** with a total of **711 participants**. These meetings were held throughout the year, in order to regularly disseminate information, as well as to maintain and encourage an ongoing dialogue between WCF and the local communities.



Proximity awareness program in a village in the Taï-Grebo-Sapo Forest Complex

1.4 Alternative Livelihood and Sustainable Use of Natural Resources in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

1.4.1 Eco-tourism in Côte d'Ivoire

1.4.1.1 Eco-museum and eco-tourism in Taï, Côte d'Ivoire

In 2015, WCF inaugurated the first eco-museum about the TNP which aims to showcase the natural and cultural heritage of the region. The eco-museum also includes a reception and information centre to welcome and assist tourists. A total of around **400 people** visited the museum including the permanent exhibition about 33-years of research and conservation of chimpanzees in TNP. The eco-museum also offers nature documentary screenings followed by an open question and debate session for the local population and for the schools of Taï.



Students during their visit to the eco-museum in Taï

The eco-tourism team assigned to work in the forest is composed of six eco-guides and two camp managers. There is equal representation of gender in the eco-guide team with three women and three men, as well as a 50% women representation in the camp manager team.



WCF eco-guides forest team

In November, two new eco-guides joined the project. The team now consists of four women and four men eco-guides, all from villages near the park.



Women eco-guide forest team

July 2015 was the most successful month for the eco-guides in tracking mangabeys, with 31 days of contact. Compared to the mangabeys, the red colobus monkeys are easier to follow because their territory is close to the camp and extends only about 1 km², in contrast to mangabeys, whose territory is 6 km². It is therefore easier to find the red colobus monkeys after an eventual interruption in the habituation process, as it may happen when the guides are understaffed in the forest (the team is composed of eight guides working in rotation, so it is common to have a member of the team ill or absent for family reasons). In this case, priority is given to follow the mangabeys, which are more difficult to find.

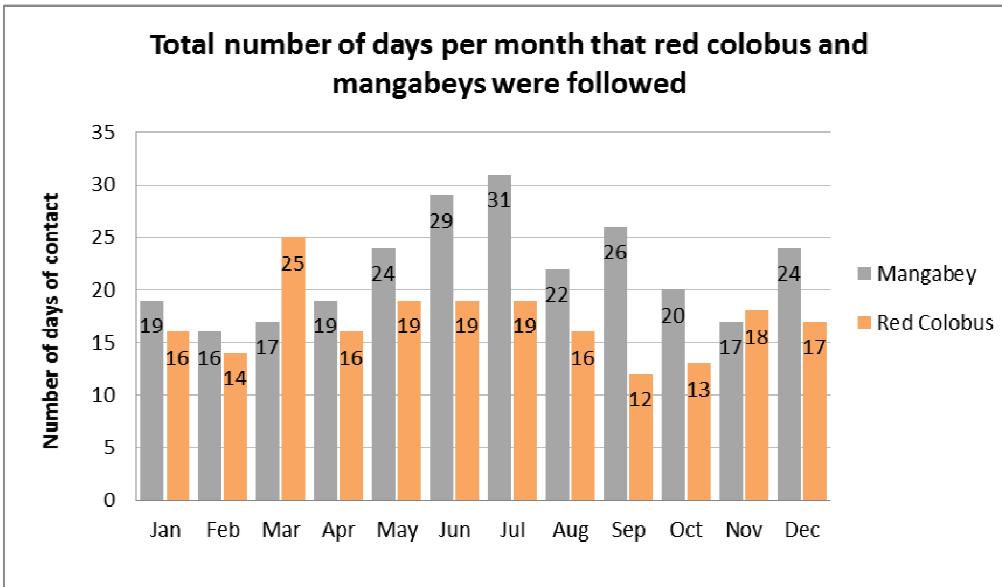


Figure 9: Total number of days per month in 2015 where mangabeys and red colobus monkeys were followed

In June and July, there were over 300 hours/month of contact with mangabeys. The monthly average per year was of more than 200 hours of contact with mangabeys and more than 150 hours with red colobus.

In June 2015, an eco-tourism consultant commissioned by the Swiss embassy came for seven months to develop the community eco-tourism project “**Nature and Culture**” initiated in 2013 by the WCF in TNP. The results of the consultancy are as follows:

- A tour of 12 days including the project “Nature and Culture” in Taï and the eco-tourism project in Djouroutou was designed in collaboration with an Ivoirian travel agency.
- The community aspect of the project was developed with the establishment of a visit to the village of Gouléako-1 and the strengthening of the craft activities and the traditional dances.
- An action plan was proposed to allow for sustained development and viability of the project “Nature and Culture”.

In addition, to increase the capacity of the project, two new ‘Safari’ tents are planned (one at the end of 2015 and the other in 2016) as well as a new traditional hut to be built in the village of Gouléako-1. In 2015, **42 tourists** stayed in the forest, and three traditional evenings were booked.

1.4.1.2 Eco-tourism site of OIPR in Djouroutou, Côte d'Ivoire

During 2015, WCF, in collaboration with OIPR, has been fully involved in the ongoing chimpanzee habituation process at the Djouroutou eco-tourism site in TNP, 60 km south of Taï. During the second half of 2015, the team managed an average of 7 hours/day of contact with the chimpanzees. It was observed that all identified females within the group currently have infants, which is an excellent indication of good health in the group. **10 individuals** have been identified within this community of still unknown total size, and there has been an improvement in the number of contact hours with the chimpanzees.

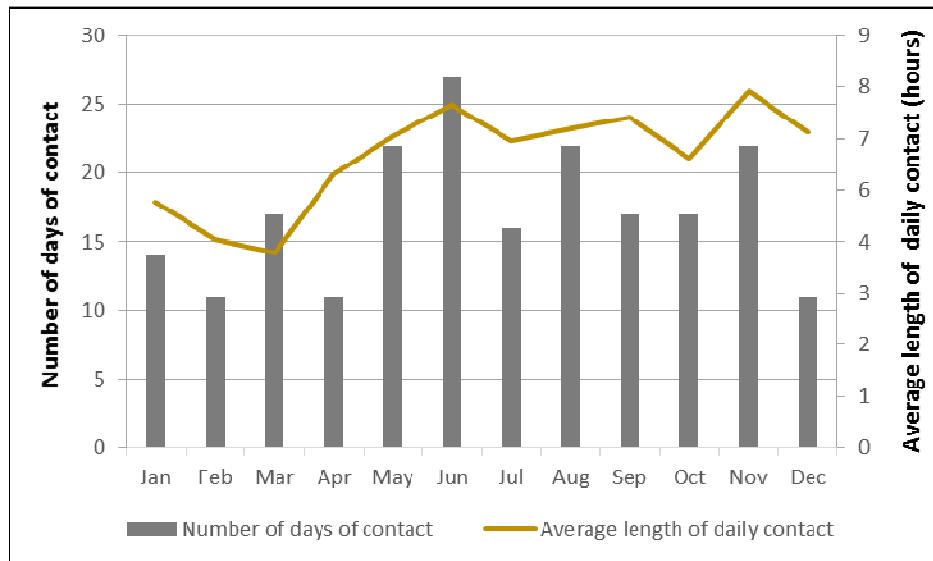


Figure 10: Contact time with chimpanzees in Djouroutou during 2015

1.4.2 Micro-projects in Côte d'Ivoire and Liberia

WCF and FDA provide ongoing support to a **school chicken farm micro-project in Tempo, Liberia**. There are a total of 40 chickens for the farm. Some chickens have been sold and the money is being saved for eventual repairs and additions to the school. WCF hopes to expand the alternative livelihood projects in 2016.

In **Côte d'Ivoire**, the school micro-projects developed in primary schools by WCF in cooperation with CPE help stimulate the consumption of local livestock meat and work to educate children in agriculture as an alternative to bush-meat hunting, consuming and/or selling. A total of 24 monthly monitoring missions were carried out by local coordinators to assess the potential and develop the various micro-projects. There are farms established in various communities in the project area: Petit Tiémé (25 grass-cutter), Adamakro (14 goats), Para (10 goats), Sakré (50 snails), Djouroutou (47 snails) and Ziriglo (63 chickens).



School micro-project chicken farm in Ziriglo

1.4.3 Cocoa certification in Côte d'Ivoire

In 2012, WCF began working with the project ‘**Greening the Cocoa Industry**’, a program for cocoa certification in western Côte d'Ivoire under the Rainforest Alliance label. The cocoa plantations are close to TNP. The project is a huge collaborative enterprise with Rainforest Alliance, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Barry Callebaut, OIPR and five cocoa cooperatives. Currently, only two cooperatives are still in the project: Coopérative Agricole de Zagné (COOPAHZ) and Cooperative Agricole Espoir de Zagné (CAEZA). In 2014, a pilot project of reforestation of cocoa farms along roads, rivers, camps and TNP has been realized. An evaluation process was established in July 2015 to orient the next phase upon lessons learnt from the 2014 pilot project. Trees distributed in the project represent 11.06% of shade-trees found in the plots. We estimate that the trees planted during the project represent in average 1.8 trees/ha in the farmers plantations. Visited plantations have averaged 10.5 to 17.1 species/ha, but only 33.33% to 49.28% of the plantations currently comply with the Rainforest Alliance standard, i.e. have at least 12 different native trees per hectare in the plantation.



Inventory of shade-trees in cocoa farms

The agroforestry program continued in 2015 with the plantation of **2'234 seedlings of shade-trees** around ecosystems (parks, waterways) and roads of 2 villages (Goulegui Béoué and Djidoubaye). 77 plantations have been involved by this planting which has taken place in May, June and July 2015. Moreover, a shade-tree nursery was established in November 2015 in Zaipobly. 1200 Makoré seeds and 25 Dacryodes seeds have been planted in plastic bags.



Makoré seedlings in shade-tree nursery

1.4.4 Sustainable forest management in Côte d'Ivoire

As part of FLEGT (Forest Law for Enforcement, Governance and Trade) and the European Union-FLEGT-FAO program (Food and Agriculture Organization), and funded by European Union, FAO and the UK Department for International Development, WCF advances a project, entitled: "Development of an Independent Observation Strategy of Forest Management in a Classified Forest with Civil Society and Communities" is a pilot study in Cavally Classified Forest, Côte d'Ivoire. It is carried out with the support of FLAG (Field Legality Advisory Group), a Cameroonian NGO, whose members have significant expertise in Central Africa.

Independent Monitoring (IM) in the FLEGT process is carried out by the civil society, and is an approach to gather information from field studies on forest law enforcement and problems specifically related to governance. This information will be used to inform governments (SODEFOR / Ministère des Eaux et Forêt) on the observed violations of the monitoring system and control of forest activities, and to encourage them to take actions against the identified problems, including exceeding operating limits in the concession, felling unauthorized species, or operating without lawful authority.

WCF was mandated by SODEFOR (manager of forest concessions called "classified forests" in Côte d'Ivoire), following the signing of a partnership agreement in 2014, to implement the IM missions in Cavally Classified Forest. These missions continued until early 2015 in order to get an idea of operating procedures by the forest operator and SODEFOR. The investigations enabled the elaboration of two IM reports, which present malfunctions concerning the monitoring of procedures and specifications of cutting contracts by SODEFOR and the forest operator. **At SODEFOR level, malfunctions concern the failure to respect the operating rules in the elaboration of hammering lists, signature, transfer and irregular prorogations of agreement and difference in species identification.** At the STBC level (Société de Transformation du Bois du Cavally), malfunctions are the exceeding of the number of permitted trees (2 in total) as well as the exploitation of unauthorized trees (425 in total) and outside the limits of permitted cutting areas. Thus, it was verified that the exploitation was taking place partly outside licensed blocks, that tagging was sometimes poorly done, that the hammering list was missing on construction sites, a protected species was used, only one monitoring agent was available for the operation of two blocks. **The IM has formulated recommendations to correct the problems** (specific checks and inspections to be performed, means to implement to prevent malfunctioning in the future). These reports were broadcast to a large audience at a workshop (led in May 2015) and were posted on the websites of the Minister of Water and Forests and WCF. The main observations were also presented to the council member from the Department of Water and Forests, the National Technical Committee of the FLEGT and the scientific committee of the forest, wildlife and water General States.

This project allowed us to follow forest management in great transparency by involving the communities in forest management and to raise the current failures of management and monitoring system. The project also included a monitoring component, which helped to support surveillance against illegal infiltration of farmers, a first threat to resources and biodiversity in the forests of Côte d'Ivoire. **The main limitation of the FLEGT process is that it has only a consultative function and effective changes in the management of the classified forest is relying on the good will of the official mandating agency, the SODEFOR.** It is hoped that through discussions and transparent communication of failures, progress may be achieved. To this aim, the WCF is proposing a second phase. In pursuing this objective, the EU FAO FLEGT program has agreed to support a second phase which started in

November 2015 although SODEFOR has not yet approved the new partnership agreement for a two-year period.

2 Activities in Guinea

2.1 Creation of the Haut-Bafing National Park, Guinea

In May 2015, Christophe Boesch and Virginie Vergnes from the WCF travelled to Guinea to begin laying the groundwork to create a new national park in Guinea for increased protection of chimpanzees. A management change in the WCF-Guinean office took place in the same month, with the departure of WCF-Guinea director Vincent Lapeyre and the role being taken up by Virginie Vergnes. In July and August 2015, the search for an **official document regarding the state of the classified forests of the Bafing region** was conducted by two French expatriate volunteers that had arrived to support the project. The first meetings with Office Guinéen de Parcs et Réserves (OGUIPAR) aimed at defining the necessary actions. Other meetings with the stakeholders have been held including: Guinée Ecologie (a local NGO), Organisation de la Mise en Valeur du Fleuve Sénégal (OMVS), Technical advisor of the Minister of Environment, Water and Forest, Projet Régional d'Aménagement Intégré du Massif du Foutah-Djallon (PRAI-MFD), NGO Centre d'action et de recherche pour le développement durable (CRADD) in order to learn about their activities in the area and to present WCF and the joined effort of WCF/OGUIPAR towards the creation of the new park.

In August 2015, the **WCF Dabola office was moved to Labé for the start of activities aimed at the creation of the new Haut-Bafing National Park** overlapping with the two regions of the Foutah Djallon and Haute Guinée. The proposed core area of this new National Park ideally incorporates seven classified forests and the land that separates them in what is referred to as the ZIP (Zone Intégralement Protégée) and the boundary marked ('Limite Parc National'). Following government and IUCN guidelines, there will be a peripheral or 'buffer zone' surrounding the ZIP, called the 'Zone Economique' where only sustainable activities may be developed, and around that, a further zone called the 'Zone de Développement'.

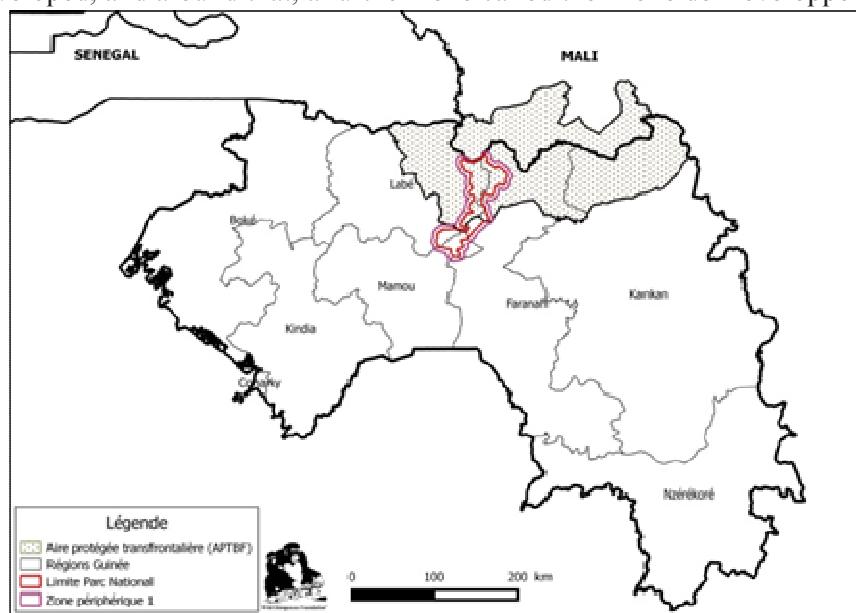


Figure 1 : Map of Guinea with proposed outline of the Haut-Bafing National Park in red

The new “Haut-Bafing National Park” was selected after a nation-wide survey of many protected areas and the whole of the Foutah-Djallon region (also called Moyenne Guinée), was undertaken by WCF and OGUIPAR, which identified the Foutah-Djallon as home to an estimated 17,000 chimpanzees – the largest chimpanzee population in West Africa. To refine the location for the future protected area, we performed an additional and more precise survey in 2014, limited to the eastern part of the Foutah-Djallon and western part of Haute Guinée area, where seven classified forests had already been established. This last survey revealed that 4,717 weaned chimpanzees (or 5,542 chimpanzees of all ages) inhabit an area of about 8,000 km². The ZIP (zone intégralement protégée) has been shaped to create ‘natural animal corridors’ between the classified forests (that will be strategically reforested and regenerated), as well as areas where WCF identified high densities of chimpanzee signs in the 2014 survey. The new Haut-Bafing National Park will bring long-term benefits to Guinea including:

- Contributing to the target of 25% protected areas (15% of terrestrial and 10% of marine protected areas) in Guinea by 2020 (the park covering some 8% of Guinea),
- Contributing to the fight against desertification in the region,
- Contributing to the fight against poverty in the neglected northern part of Guinea,
- Contributing to a network for the conservation of chimpanzees in Guinea and Africa as a whole in accordance with UNESCO, UNEP and IUCN objectives,
- Establishing sustainable financial conditions for protected areas in Guinea,
- Supporting the government’s initiative for equipping protected areas with appropriate staff and equipment,
- Improving capacity building for the staff in protected areas,
- Integrating local people in the management and protection of the protected area.

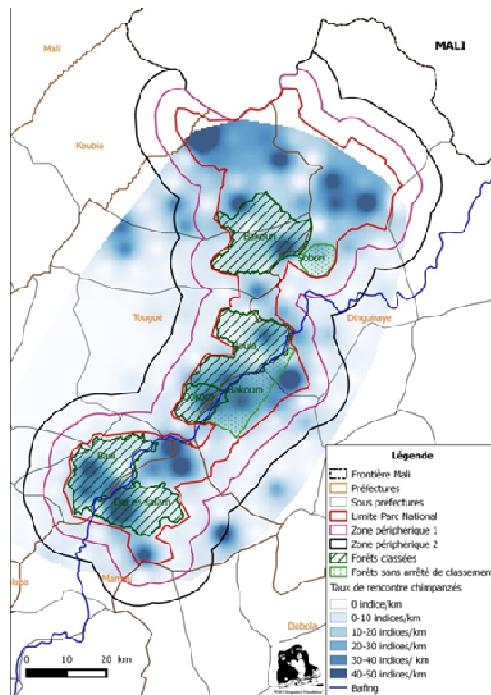


Figure 2: The proposed new Haut-Bafing National Park, with “Zone intégralement protégée” in red and surrounded by two additional zones in orange and dark blue as required by law, superposed on the chimpanzee densities from the 2014 monitoring, in blue shading.

2.1.1 Legal processes involved – the “Fiche de projet”

In November 2015, WCF finalized a document that outlined the steps necessary, to be undertaken over the next four years for the creation of Haut-Bafing National Park. In addition it included the context of the project – its justification with results from the 2014 survey, listed potential partners, confirmed financers, and proposed the aforementioned provisional park design. This was backed by the Director General of OGUILPAR and thereafter formally validated by various directors from the Ministry of “Environnement et Eaux et Forêts”, including the Directors of “Eaux et Forêts”, OGUILPAR and of “Bureau Guinéen Étude d’Evaluation Environnementale. A first “*fiche de projet*” was finalised and presented to **the Minister for the Environment, Hadja Kadiatou N’Diaye, who signed a mandate for the project on the 24th of November 2015.**

2.1.2 Nest degradation study

To **convert the estimates of chimpanzee nest density to estimates of chimpanzee density**, two rates must be estimated: the production (nest construction) rate and the decay or disappearance rate of nests (Laing et al. 2003). **Due to the dramatic climate changes** affecting the various regions of Guinea in different ways, we need an up-to-date figure for the nest decay rate in the proposed area. This will ensure that the variations in climate and regional weather are accounted for in the data analysis. As such, in December 2015, a team went into the forest and identified 60 chimpanzee nests that are currently being monitored and revisited at varying intervals, according to the methods used by Laing et al. (2003), for a period of 45 weeks. In late December, the first revisit was undertaken. This study will continue in 2016.

2.1.3 Biomonitoring in the Haut-Bafing National Park

In December 2015, a comprehensive and stratified monitoring of the proposed Haut-Bafing National Park, including the peripheral zones and the ‘corridors’ between the classified forests, started with three teams walking transects (Figure 3). **Detailed data on vegetation, biodiversity and human impacts in the area** will allow us to decide on a more precise delimitation of the different zones of the proposed park. In conjunction with this, remote sensing techniques to map vegetation (done with satellite data) will be used. This will allow us to identify areas for reforestation in the ‘corridors’ facilitating movement of animals. It will further allow us to monitor the chimpanzee population in the region and assess the efficiency of socio-economic projects aiming to reduce threats on wildlife, as yearly data will be analysed. Between November/December 2015, WCF conducted a one-week training program for 25 field data collectors, including 3 days of theoretical activities and 2 days of training in the field where transects were simulated with all the necessary equipment. Each participant undertook several theoretical and practical evaluations and 20 people were recruited.

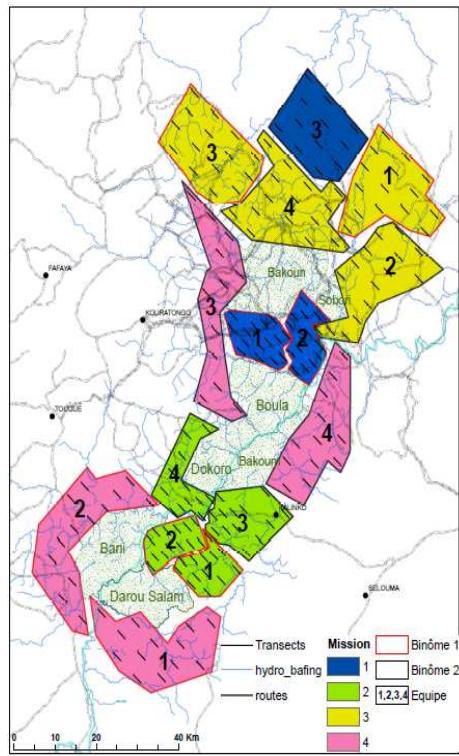


Figure 3: New comprehensive and stratified survey design of the 2015-2016 monitoring transects with different levels of intensity in and around the new Haut-Bafing National Park.

Biomonitoring Mission I started in the blue zones (Figure 13) and within three weeks, by the end of December 2015, all the blue areas 1, 2, and 3 were surveyed. Mission II (green zones) will start in January 2016 with 4 teams. WCF will be able to look at the corridors in some detail at the beginning of February 2016, while the remaining zones will be finished before the new rainy season starts in July 2016.



Our field data collectors and WCF staff – Bafing Biomonitoring 2015

2.2 Collaboration with Guinea Alumina Corporation

In 2013, the mining operator Guinea Alumina Corporation (GAC) resumed its activities after a change of ownership. It is now the property of Emirates Global Alumina (EGA), a joint venture between Dubai Aluminium (DUBAL) and Mubadala Development Company.

In November 2014, GAC signed a USD 5bn agreement with the Republic of Guinea to set out a phased development program for bauxite exploitation between the GAC concession near Sangarédi and a port facility in Kamsar, in the prefecture of Boké.

WCF has been in charge of the continuation of the follow-up of wildlife (6th phase of **bio-monitoring**) and the biodiversity mitigation strategy of the mining project. The **Club P.A.N.** environmental education activities continued, and a project for **water source protection** was set underway.

With an agreement signed between GAC and the Guinean government, the mining operator decided to undertake a Social and Environmental Impact Assessment (SEIA) for the exploitation of the southern half of the concession over the coming years. The mining operations and the development of the port facilities are planned for 2016, while the construction of an alumina refinery within the concession has been postponed to a subsequent phase of the development. **WCF was asked to provide an Impact Assessment for terrestrial mammals and a mammal baseline** to complement the baseline that will be developed by the sustainability consultancy Environmental Resources Management (ERM).

A meeting with Christophe Boesch (WCF), William Morrell (Senior Vice President, Guinea Alumina Operations & CEO of Guinea Alumina Corporation), Rick Smith (GAC General Manager of the mining operations and projects), Stephen Allens (projects and finances control), Vincent Lapeyre, and Florence Vernadat was held on 26th of March 2015, at the GAC pioneer camp. **The aim of this meeting was to talk about the mitigation/offset program**, and to introduce the offset project to William Morrell. WCF emphasized the importance of both these strategies. In April 2015, Jacques Giguere and Rick Smith, explored plateaus 20 and 26 with the WCF-Sangarédi team to clarify some important methodological points raised in the meeting of March 26th. This included habitat use by chimpanzees, even on plateaus, and in particular, important nesting locations that had already been damaged by mining activities. Another meeting was held on June 25th to introduce Virginie Vergnes as the new Director of WCF Guinea and the WCF activities to Mr John Fulton, the new GAC General Manager for Health, Safety, Security, Environment and Community. This meeting consisted in a morning session in the field looking at chimpanzee presence on the plateaus scheduled for mining, and an afternoon session including a formal presentation by WCF of activities being undertaken and a budgetary discussion. In October and November 2015, WCF and GAC held meetings with John Fulton, and Andre Pieters (the new GAC Environmental Superintendent) regarding the mitigation concept and the role of the nature of the continuing WCF-GAC collaboration. **A new Scope of Work will be (re)defined to consider the work to be performed by WCF with GAC.**

2.2.1 Management plan for GAC concession

WCF-Guinea published a new Management Plan for the GAC concession in June 2015 with results obtained from four years of biomonitoring between 2010 and 2014 in the GAC concession. This was undertaken as the 2010 Management Plan was invalidated when the new

GAC management decided to change the proposed area for exploitation from the north to the south-western part of the concession.

Objectives of the Management Plan:

- Determine the biodiversity value and Critical Habitat within the GAC concession,
- Establish a precise and reliable Monitoring and Evaluation Plan to measure GAC's operational impacts,
- Recommend a Biodiversity Management Plan that will include a mitigation hierarchy for the mining activities within the GAC concession,
- Establish an offset strategy to compensate for the residual negative impacts after implementation of the mitigation hierarchy.

(See "Chimpanzee Management Plan for the Guinea Alumina Project Concession, Report 2010-2015")

2.2.2 Mammal baseline and impact assessment

WCF was asked to take part in the Social and Environmental Impact Assessments (SEIA) addendum led by Environmental Resources Management (ERM) for GAC in order to contribute to the two objectives: an ecological terrestrial baseline, aimed at in particular, the endangered western chimpanzee (*Pan troglodytes verus*), as the GAC concession contains Critical Habitat for this species according to the IFC Performance Standard 6 (IFC PS6 2012) and the determination of the level of bush-meat hunting and firewood collection within the concession. This document contains all the information obtained using various methodologies, between 2010 and 2014, on chimpanzees, their habitat and their dynamics, the red colobus monkeys, and large and medium-sized mammals. In the same study, WCF was asked to do the Impact Assessment of the GAC mining activities on large and medium-sized mammals. These two documents were added in May 2015 to the ERM SEIA Addendum report.

2.2.3 Biomonitoring of the GAC concession

Based on the IUCN guidelines (Kuehl et al. 2008), the 2015 monitoring followed 127 line transects of 2 km each, representing a total effort of 254 km. Changes in the systematic design were implemented to add a focus to the areas due to be exploited by GAC in the first phase of mining operations. Moreover, given that the boundaries of the concession do not affect chimpanzee movement, transects were placed in order to cover the area of the concession and the area immediately surrounding it.

2.2.3.1 Methodology

For each observation made, details such as geographic coordinates, distance from the start of the transect, habitat types, and the perpendicular distance from the transect to the observations were recorded. All direct and indirect signs of presence of large fauna, including chimpanzees, and human activities were recorded. The distribution of these perpendicular distances allowed us to determine the optimal distance of detection from the transect, where all the observations are visible and counted (a factor dependent in particular, on the density of the vegetation). By combining this "optimal detection area" with the average production and decay rates of chimpanzee nests, the chimpanzee density was calculated. Using this density and the total surface of the study area, the estimated number of weaned chimpanzees living on the site was calculated (Kuehl et al. 2008). Taking into consideration that an estimated 17.5% of the

chimpanzee group members are infants sleeping in the nest with their mothers and who do not therefore build nests (Plumptre and Reynolds 1996), a total number of chimpanzees was then estimated.

To estimate chimpanzee density within the study area, we combined the data related to the perpendicular distances of nests relative to the transects with their average degradation time - estimated at 194 days (Brugiére-Fleury et al. 2010) - as well as a production rate of 1.14 nest per weaned individual per day (Kouakou et al. 2009).

In early March 2015, a refresher course of a few days was provided for the team of local field data collectors who had undertaken the same work for the WCF in the previous year. The data were collected between March and June 2015, in the 1012 km² large area by two teams of five Guinean field assistants, one cook and one supervisor.

2.2.3.2 Results

Data entry was completed in August 2015, and the analyses were run in September 2015. 960 nests have been observed along 252 km walked. The estimation of chimpanzee population is calculated with Distance software. The first results allowed us to calculate a mean density of 0.33 individual/km² and a total population of **266 chimpanzees all individuals** (CI 95% - CV 27 %) if using a nest decay rate of 194 days (Fleury-Brugiére et al, 2010) or a total of **252 chimpanzees all individuals** considering a nest decay rate of 208 days (Foutah nest decay study of 2012).

Table 3: Estimated chimpanzee population within the GAC concession – Biomonitoring 2015

Nest decay rate	194 days	208 days
Density (weaned individuals/km²)	0.33	0.31
Mean Number of weaned individuals for GAC*	226	212
Mean Number of all individuals for GAC**	266	252
Mean Number of weaned individuals for surveyed area***	337	314
Min number of all individuals for GAC	159	147
Max number of all individuals for GAC	453	423
Coefficient of variation (%)	27	27

685 km² density,

** In natural population of chimpanzees, 17.5 % of the individuals are unweaned, meaning infants still sleeping in the nest of their mothers. This value needs to be added to the weaned individuals constructing nests.

*** 1012 km²

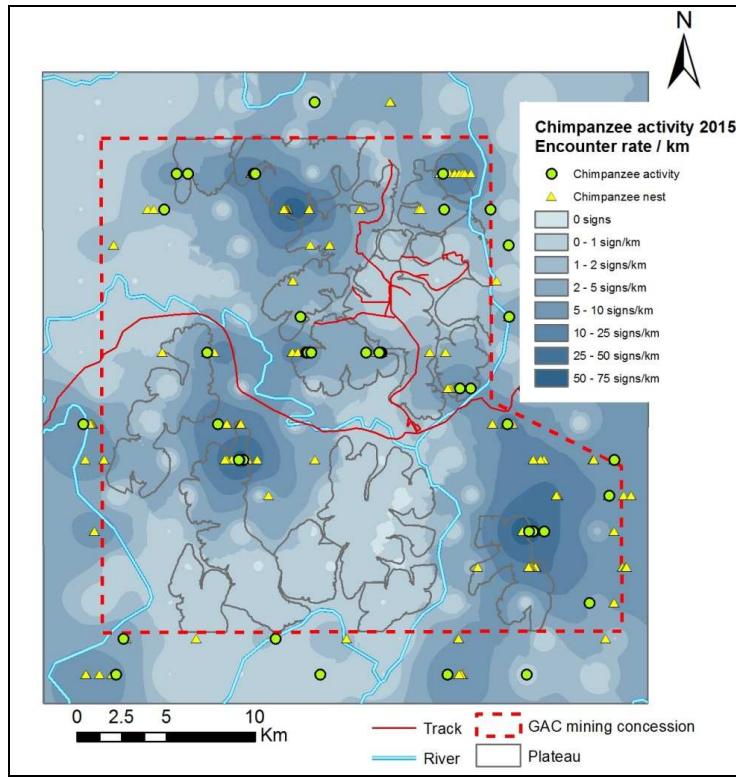


Figure 14: Distribution of chimpanzee encounter rates in GAC concession in 2015

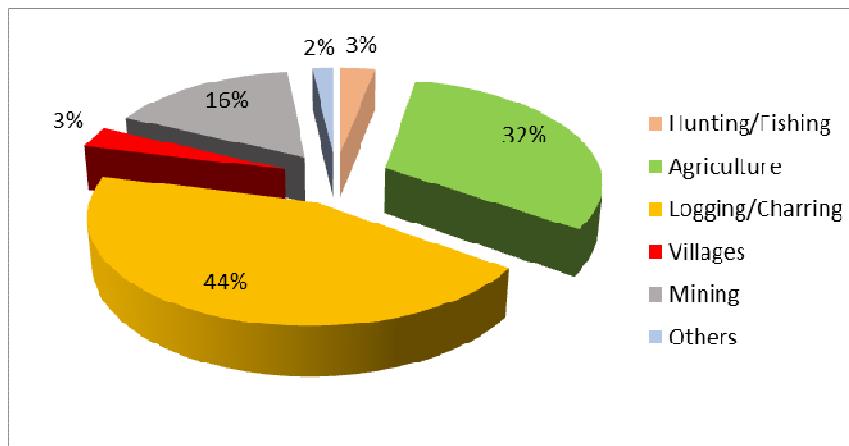


Figure 15: Human signs in GAC concession in 2015

This biomonitoring allows us to continue to follow the status of chimpanzee populations in the GAC concession, and to assess, year after year, their abundance, and to adjust the efforts required in terms of mitigation and offset. The complete report is still undergoing edits, due to the need for some adjustments regarding data such as weather conditions, upon which the rate of degradation of chimpanzee nests depends.

2.2.4 Camera trapping

In combination with the data being collected by monitoring teams, we are using camera traps in the southern half of the GAC concession. Information collected by camera traps can provide, for example, an indication of chimpanzee group structure, individual chimpanzee recognition, and the home range of chimpanzee groups. It can also be used to collect general information about the wildlife in the area and it can even have a deterrent effect on illegal activities (poachers, for instance, may be more worried if they know they may be filmed during bush-meat hunting). It is a non-invasive method, very useful for cryptic, nocturnal and/or elusive species. It allowed us, for instance, to record a species that is listed as endangered by the IUCN red list: the Temminck's red colobus (*Procolobus badius temminckii*). Thus, we were able to confirm its presence in the area after years of doubt. We propose to start a program of identification of specific chimpanzee individuals in the concession that will allow us to track their movements and gain an insight into how they react to GACs mining activities.

Since March 2015, 52 cameras have been placed in the field, with maintenance undertaken every 6/8 weeks. The analysis of the videos is a long process, but many species have been identified including some unexpected individuals such as Jackals and a Serval. Groups of chimpanzees have a large presence and injured animals, like a female Bushbuck with a missing leg, and a chimpanzee with a badly injured hand, as well as bush-meat hunters and live-stock have been observed.



Photos captured by camera traps in 2015

In September 2015, the WCF team began to withdraw some non-essential cameras with a view to placing them near the area of first GAC mining activities for a better idea of chimpanzee movements in the area. This move is pending in view of the renewal of the contract with GAC.

2.2.5 Water source protection

Spring/river water as a resource was identified by WCF as a priority in need of mitigation **strategies against the potential negative impacts of GAC mining operations** (WCF Chimpanzee Management Plan 2010 and 2015). After field investigations, a water source in the northern part of the concession was identified that impacted on three human communities: Kouloré, Lopé and Parawi. The villages concerned were consulted in 2014 and their representatives suggested to donate land (a total of 87 hectares) towards a water protection project, as they recognised the long-term benefits of this action.

In January 2015, to protect this area from fires, a WCF team together with villagers from the communities, cut a firebreak. Moreover, to prepare for future delimitation of the area, we manufactured some boundary markers, which are ready to be implemented.

In March 2015, WCF conducted polls in the three villages. The final aim of these surveys was to find the principle economic activities undertaken by the villagers and support them with profitable and sustainable activities. Financial viability will encourage them to go on with the protection of this area. During the monitoring in 2015, a targeted sampling of local and ecologically important seeds was undertaken (seeds of 6 plant species). In August, a plant nursery was set up with a full-time overseer, and over 25,000 plants were potted and cultivated. In September, WCF organised a visit of the tree nursery with the environment superintendent of GAC, Mr Giguere Jacques. These plants are scheduled to be planted in April 2016.



Tree nursery – “Mise-en-défense”/ watershed protection

Once the process is completed, we expect the protected area to be favourable to both local communities and wildlife, especially chimpanzees and riparian vegetation. WCF/GAC wants to develop, soon after and thanks to the enhanced functionality of the water head, an improved area to sustain food security for the local people. The agricultural conversion of the downstream wetlands, for instance, would provide the community with more food and supplementary income, and encourage them to protect the water source they are depending on.

In September 2015, the GAC environmental superintendent, Mr Giguere Jacques, left his post - his successor took up the role in November. By the end of 2015, we were still waiting to renew the agreement with GAC in order to complete this process (the technical model of “mise-en-défense” was already updated and validated during a workshop in Conakry in June 2014). The last official step will be the organisation of a workshop in Boké, to present our monitoring analyses, our future projects, sign the “mise-en-défense” agreement with GAC and the three communities, and start the implementation of sustainable economic activities.

2.2.6 Bush-meat and firewood collection

Bush-meat hunting and firewood collection are uncontrolled and non-sustainable. But they are of great importance for local human communities, both in terms of customs, habits, and in term of income for their families' needs. They have, nevertheless, a deep impact on wildlife and the environment.



Timber and charcoal in the GAC concession – Bush-meat and firewood collection 2015

To complete the mammal baseline monitoring data, the WCF led a study between July and September 2014 in 63 nearby villages, hamlets and settlements within the GAC concession and in several cities, such as Sangarédi, Boké, Kamsar, and Conakry. The final report prepared between the end of 2014 and the beginning of 2015 was added to the Mammal Baseline, section of the SEIA, in May 2015.

2.3 Collaboration with Compagnie des Bauxites de Guinée

In 2015, WCF began to work with CBG (Compagnie des Bauxites de Guinée) – a mining company owned jointly by the Government of Guinea and Halco Mining (Alcoa, Rio Tinto Alcan and Dadco), with a concession that neighbours the GAC concession and incorporates the town of Sangarédi. This collaboration aimed to complete the Social and Environmental Impact Assessment (SEIA) studies, conducted by EEM (a French Canadian consultancy) in 2013-2014 for the extension of the mining activities in the CBG Halco concession. Indeed, for this extension project, CBG must ensure that its activities will have the least possible negative impact, by following, most notably, the social and environmental sustainability performance standards 6 of the International Finance Corporation (IFC 2012), which is a potential lender.

Thus, WCF undertook a rapid assessment of the concession in September/October 2015 to produce **a report on the abundance of primates and an estimation of the potential impact of a mitigation hierarchy on the endangered primate species in the concession** (see **Primates Complementary Study, CBG Extension Project Part 2 2015**). **Working in this concession has the benefit of allowing us a greater idea about the chimpanzee movements in the neighbouring GAC concession.** Three teams, each composed of six Guinean field data collectors (previously employed for the GAC monitoring) walked 70 transects, with a total effort of 140 km, using the same methodology as with GAC. The analyses were finished in November 2015, and this first rapid assessment provides an estimated chimpanzee population of 118 individuals (mean= 62 individuals, Confidence Interval (95%: min= 33, max= 118 chimpanzees), representing the baseline biological value of the concession. A gradient of densities seems to be present in the concession, with less chimpanzee signs observed closer to the

areas with active CBG mining sites and the city of Sangarédi, suggesting that part of the chimpanzee population in the concession had already been negatively impacted by mining activities. According to the IFC Standard 6 (2012), the whole CBG-Halco concession is considered Critical Habitat for chimpanzees under criterion 1. However, based on the fact that more than 17,000 chimpanzees are still present in Guinea (WCF 2012), the whole CBG concession falls within the Tier 2 sub-criteria (see IFC Guidance Note 75 2012b).

WCF suggests a mitigation hierarchy to be implemented before, during and after mining activities. However, even if this is helpful for other primate species and mammals within the concession, the residual negative impacts would remain at 50% for the original chimpanzee population estimated as 118 individuals (maximum of the estimation) due to the highly sensitive nature of this species to any human interference. In other words, **the residual negative impact value is 59 chimpanzees that need to be compensated for with an offset project.** For an offset to achieve the IFC objective of “no-net loss” or better, the “net-gain” requirement, the objective would be to gain 177 chimpanzees (value of lost chimpanzees multiplied by an “offset ratio” of 3 to account for the uncertainties of the mitigation impacts and the offset establishment).

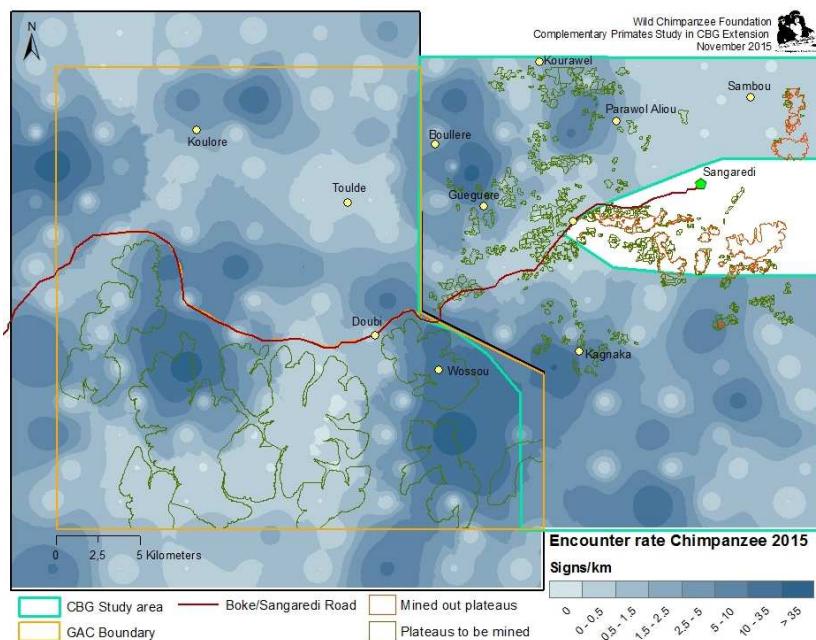


Figure 4: Spatial distribution of chimpanzee signs in the GAC (February to June 2015) and the CBG-Halco concessions (September to October 2015).

WCF wishes to extend its collaboration with CBG (robust chimpanzee monitoring and mitigation) and also **bring this partner on-board with the offset project.** Discussions are on-going with CBG and TBC (The Biodiversity Consultancy: a small consultancy specialized in quantifying biodiversity and in practical approaches to managing complex biodiversity issues and in International Finance Corporation (IFC) Performance Standard 6, custom-built quantitative ecological impact assessment approaches, and design of biodiversity offset and monitoring programs) about the methodology, the estimated number of impacted chimpanzees, the offset ratio, etc...; The final report will be published on the IFC website by the end of January 2016.

2.4 Environmental Education in Guinea

During the 2014-2015 school year of Club P.A.N. in Guinea, we reached **327 children** from the villages of Kambaya, Kalinko and Kollet in the **Foutah-Djallon Bafing** region and in addition **497 children** from the villages Doubhi, Mobhi, Thiankoun Tioly and Boulleire within the **Guinea Alumina Corporation mining concession**. The children participated in an extra-curricular environmental education program of 12 sessions, under the supervision of teachers trained by WCF staff. The evaluation results from the children were once again pleasing (87% participation of children and 94% success in the final evaluations) and show the importance of this project.

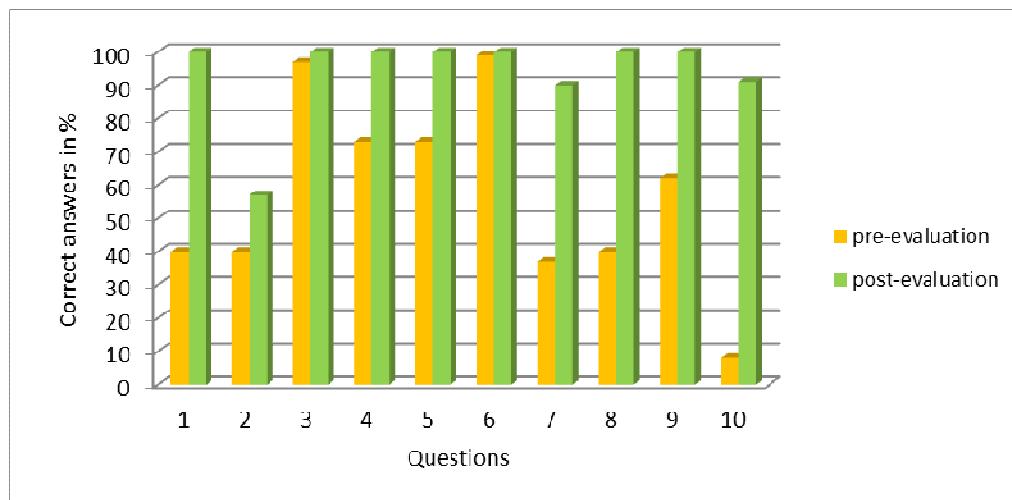


Figure 5: Knowledge gain by Club P.A.N. children from pre- and post-evaluations for the school year 2014/2015

The first five questions are about national parks: what are their functions, which animals are living there, the importance of their protection, and what rules/duties and threats concern national parks? The definition of a national park, not known to the children at the beginning of the project, is fully integrated by the children at the end of the program (question 1). We observe the same knowledge gain for the other questions. Question 10 shows that before the lessons started, most of the children cannot cite important roles of animals for our environment. But after the 12 lessons of Club P.A.N., 91% of them are able to answer something correct like “spreading seeds or pollen” or “stimulating the germination”.



Parents' day in Mobhi – Club P.A.N. 2014/2015

The ongoing 2015-2016 school year of Club P.A.N. started in November 2015 with the teacher training and followed by the pre-evaluation of the children from 4 schools in the Foutah-Djallon region (Koune, Kela, Kalinko and Kollet). These schools have been selected according to their location close to the new Haut-Bafing National Park.



Club P.A.N. teacher training in November 2015

60 children were evaluated in total – 15 from each of the 4 schools. The program started in all 4 schools with 12 Club P.A.N. sessions and will finish in February 2016 with a parents' day. In total 486 children will be trained during this school year in the basics of environmental education and nature conservation.

One of the objectives of Club P.A.N. Guinea is to forward necessary arguments to the Ministry of Pre-University Education and Civic Education, to be able to incorporate environmental education in the Guinean education system. Environmental education is a tool for development and conservation of protected areas and areas of high biodiversity in Guinea.

3 Organisational chart



4 Acknowledgements

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