



Wild Chimpanzee Foundation®

WCF Siège & Secrétariat
69 chemin de Planta,
1223 Cologny, Switzerland

WCF Head Office
c/o Max Planck Institute for
Evolutionary Anthropology
Deutscher Platz 6,
04103 Leipzig, Germany

Internet: www.wildchimps.org

Email: wcf@wildchimps.org

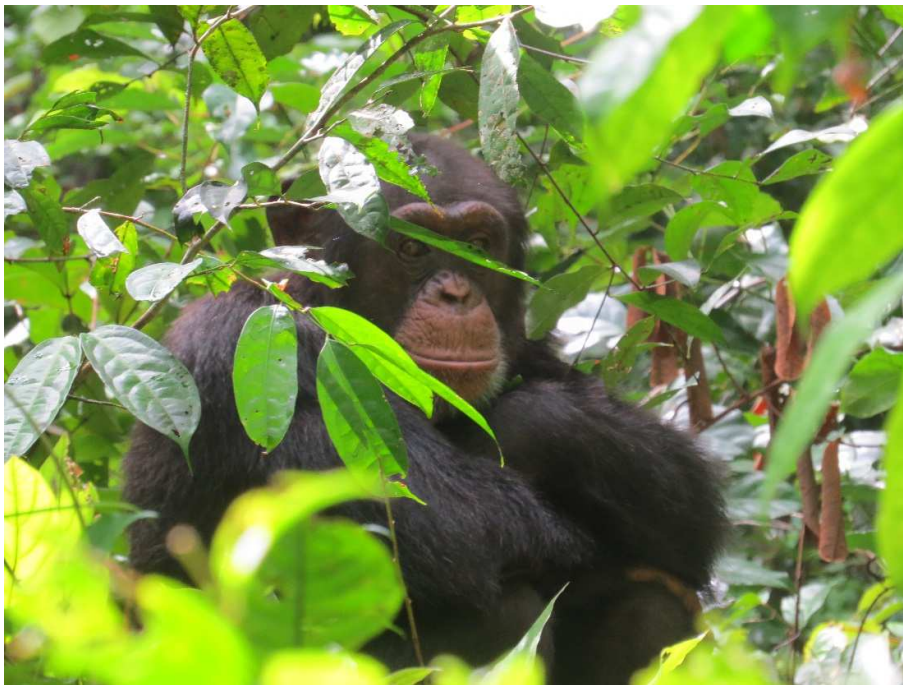
WCF West Africa Office
23 BP 238,
Abidjan 23, Côte d'Ivoire

WCF Guinea Office
BP 1487P
Conakry, Guinea

WCF Liberia Office
Opposite German Embassy,
Congo Town, Monrovia, Liberia

Annual Report 2018

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



January 2019

Table of contents

Strategic Plan of the Wild Chimpanzee Foundation	6
General Conclusions 2018 and Outlook for 2019	7
Executive Summary for the Activities in Liberia and Côte d'Ivoire	8
Executive Summary of the Activities in Guinea	10
1 Activities in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire	11
1.1 Biomonitoring and law enforcement in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire	11
1.1.1 <i>Coordination of Biomonitoring and Law Enforcement Sub-Committees of the Liberia National Species Working Group</i>	11
1.1.2 <i>Biomonitoring at priority sites in the Taï National Park, Côte d'Ivoire</i>	12
1.1.3 <i>Development of a new biomonitoring method using camera traps in Taï National Park</i>	13
1.1.4 <i>Monitoring in the Cavally Classified Forest, Côte d'Ivoire</i>	14
1.1.5 <i>Community Eco-guard program at Grebo-Krahn National Park</i>	15
1.1.6 <i>Community Watch Teams at Sapo National Park</i>	16
1.1.7 <i>Transboundary law enforcement technical committee</i>	17
1.1.8 <i>Independent Forest Monitoring in Côte d'Ivoire</i>	18
1.2 Awareness raising in the Taï-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire	19
1.2.1 <i>Theater around Grebo-Krahn and Sapo National Parks</i>	19
1.2.2 <i>Theater around the Cavally Classified Forest in Côte d'Ivoire</i>	20
1.2.3 <i>Radio in Côte d'Ivoire</i>	20
1.2.4 <i>Environmental education in Taï</i>	21
1.2.5 <i>Proximity awareness in the Taï region</i>	21
1.2.6 <i>Transboundary exchange for sharing experience between Côte d'Ivoire and Liberia</i>	22
1.2.7 <i>Raising awareness about the use of rainforest-friendly cocoa varieties</i>	22
1.2.8 <i>Consultations for the establishment of a multi-stakeholder body</i>	22
1.2.9 <i>Awareness-raising around Grebo-Krahn National Park</i>	23
1.3 Creation of protected areas and corridors in the Taï-Grebo-Sapo Forest Complex	23
1.3.1 <i>Support following the creation of the Grebo-Krahn National Park</i>	23
1.3.2 <i>Feasibility study for Krahn-Bassa Proposed Protected Area</i>	24
1.3.3 <i>Demographic survey in the corridor between Grebo-Krahn & Sapo National Parks</i>	24
1.4 Alternative livelihood and capacity building	24
1.4.1 <i>Ecotourism in Taï National Park</i>	24
1.4.1.1 <i>Ecotourism Nature and Culture, Taï</i>	24
1.4.1.2 <i>Ecotel Touraco / Hana river Lodge, Djouroutou</i>	26
1.4.1.3 <i>Promoting ecotourism in the Taï National Park</i>	26
1.4.2 <i>Eco-tourism initiatives around Taï National Park</i>	27
1.4.3 <i>Alternative livelihoods around Grebo-Krahn National Park</i>	29
1.4.4 <i>Alternative livelihoods between Taï National Park and Cavally Classified Forest</i>	30
1.4.5 <i>Capacity building</i>	31
1.4.5.1 <i>Capacity building of Ivorian civil society organizations</i>	31
1.4.5.2 <i>Building organizational capacity of local NGOs</i>	31
1.4.5.3 <i>Capacity building of law enforcement officers</i>	32
1.4.5.4 <i>Validation of a SODEFOR forest control procedures manual</i>	32
2 Activities in Guinea	33
2.1 <i>Inter-ministerial commission meetings</i>	33

2.2	<i>Socio-economic study</i>	33
2.3	<i>Community consultations</i>	34
2.4	<i>Law enforcement monitoring system</i>	36
2.5	<i>Re-establish forest cover and ecosystem function</i>	36
2.6	<i>Agro-ecological development strategy</i>	37
2.7	<i>Farmer Management Natural Regeneration</i>	37
2.8	<i>Biomonitoring</i>	38
2.9	<i>Floristic inventory</i>	40
2.10	<i>Remote sensing analysis to identify vegetation types</i>	41
2.11	<i>Monitoring of environmental parameters</i>	41
2.12	<i>Ornithological monitoring</i>	41
2.13	<i>Bushfire study</i>	41
2.14	<i>Awareness raising</i>	42
2.15	<i>Theater tour</i>	42
2.16	<i>Environmental education - Club P.A.N.</i>	42
3	Organisational chart	44
4	Acknowledgements	45

Acronyms

CBG –	Compagnie des Bauxites de Guinée (Bauxite Company of Guinea)
CCF –	Cavally Classified Forest
CCP –	Cadre de Consultation Communautaire de Proximité
CF –	Classified Forest
Club P.A.N. –	Nature Club for People, Animals and Nature
CSO –	Civil Society Organization
CWT –	Community Watch Teams
EU –	European Union
FDA –	Forestry Development Authority
FLEGT –	Forest Law Enforcement, Governance and Trade
FMC F –	Forest Management Contract F
FMNR –	Farmer Managed Natural Regeneration
GAC –	Guinea Alumina Corporation
GIZ –	Deutsche Gesellschaft für Internationale Zusammenarbeit
GKNP –	Grebo-Krahn National Park
IDEF –	Initiatives pour le Développement Communautaire et la Conservation de la Forêt
IFC –	International Finance Corporation
IFM –	Independent Forest Monitoring
INSUCO –	International Social Science and Engineering Office
IO –	Independent Observation
IUCN –	International Union for the Conservation of Nature
IVS –	Inland Valley Swamp
KFW –	Kreditbank für Wiederaufbau
KBPPA –	Krahn-Bassa Proposed Protected Area
LDP –	Local Development Plans
LSED –	Local Socio-Economic Diagnoses
MAP –	Multi-Agri-Systems Promoters
MINEF –	Ministère des Eaux et Forêt
MBNP –	Moyen-Bafing National Park
NGO –	Non Gouvernemental Organisation
NP –	National Park
NOFNA –	Notre Forêt Notre Avenir
OCA –	Organisation Capacity Assessment
OGUIPAR –	Office Guinéen de Parcs et Réserves
OIPR –	Office Ivoirien des Parcs et Réserves
OPRFT –	Observation pour la Protection et la Reconstitution de la Faune et de la Flore Tropicale
SCNL –	Society for the Conservation of Nature of Liberia
SEIA –	Social and Environmental Impact Assessment
SECR –	Spatially Explicit Capture-Recapture
SMART –	Self Monitoring Analysis and Reporting Technology
SNP –	Sapo National Park
SODEFOR –	Société pour le Développement des Forêts
STBC –	Société de Transformation du Bois du Cavally
SWOT –	Strengths Weaknesses Opportunities and Threats
TBC –	The Biodiversity Consultancy

TCP – Taï Chimpanzees Project
TGSFC – Taï-Grebo-Sapo Forest Complex (stretching between Liberia and Côte d'Ivoire)
TNP – Taï National Park
UK – United Kingdom
UNEP – United Nations Environment Program
UNESCO – United Nations Educational, Scientific and Cultural Organization
UOF – Universal Outreach Fondation
USAID – American Agency for International Development
US – United States of America
VPA- Voluntary Partnership Agreement
WABICC – West African Biodiversity and Climate Change
WCF – Wild Chimpanzee Foundation
ZIP – Zone Intégralement Protégée (Fully Protected Area)

Strategic Plan of the Wild Chimpanzee Foundation

Goal	Protection of wild chimpanzees and their habitats								
Strategic Objectives	Strengthen support for conservation of chimpanzees and their habitat			Strengthen protection of chimpanzee habitat		Strengthen sustainable management of chimpanzees and habitat			Research
Project Objectives	Raised awareness	Alternative benefits for local communities	Increase environmental interest in policy decisions	Follow wild 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 monitoring	Ecotourism	Monitoring logging practices	Monitoring mining practices	Research
	Theatre	Community projects (honey, fishfarm, eco-agriculture)	Lobbying decision makers	Impact of conservation actions	Creation of new protected areas	Entrance fee	Impact of logging practices	Impact of mining practices	Developing new monitoring methods
	Film / Newsletter	Training of locals	Awareness meetings	Impact of logging	Protected area patrols	Animals habituation	Best practices management plan	Mitigation and offset mangement plan	Evaluating impacts
	Club PAN	Local employment (ecoguards, ecoguides, watch teams)	Consultancy to promote environment issues	Impact of bushmeat hunting	Management plan	Nature trails	Mandated independent observation	Capacity building	Chimpanzee mortality study - zoonose
	Discussion rounds	Ecotourism			Law application in courts		FLEGT process	IFC Standards	

General Conclusions 2018 and Outlook for 2019

By the president of the Wild Chimpanzee Foundation, Christophe Boesch

The upgrading of the West African chimpanzees as ‘critically endangered’ by the IUCN in September 2016 was a turning moment in our fight for the conservation of this sub-species, because the international community recognized the dire situation in West Africa. This spurred our motivation and, thanks to increased funding, facilitated efforts to create protected areas for the remaining chimpanzee populations.

In 2018, WCF could build up on the preparative work accomplished in 2017. We finalized the creation of the Grebo-Krahn National Park in Liberia and are developing compensatory activities with the nearby local communities. Similarly, in Guinea, activities around and within the new Moyen-Bafing National Park were developing at full speed, and the cooperation with Guinean authorities and the local communities were deepened by convincing them about the need for habitat conservation and restoration. The Moyen-Bafing model with important and sustainable private funding and a transparent and efficient park direction, in collaboration with the International Finance Corporation, is attracting much international attention. It might become a successful model not yet developed anywhere else in the world.

Among the successes achieved in 2018, I wish to emphasize the Community Watch Teams in Liberia around the Sapo National Park, comprising one hundred community members. Their activities convinced most of the illegal miners present in the park to clear off, so that by the end of 2018, Sapo National Park is in a state of being able to regenerate from years of illegal mining. In the Grebo-Krahn National Park, the WCF eco-guard presence was tripled. Globally, the efforts to include more local people to oversee the management and monitoring of protected areas led to a significant improvement of our activities and motivated communities to support conservation. In Côte d’Ivoire, our collaboration with local NGOs has greatly improved monitoring in the Cavally Classified Forest, initiated the development of many livelihood projects, and noticeably increased the number of tourists visiting the Taï National Park. In Guinea, we are in the process of recruiting community members to participate in monitoring and habitat regeneration activities as well. The expansion of the WCF operations and teams carries along new obligations and challenges.

In 2019, we will expand the network of collaborators to achieve our objectives and improve the results on the ground. Local expertise is precious when it comes to sensitize local communities towards nature conservation and regeneration, as well as for introducing sustainable practices for the benefit of nature and people. To that end, WCF will continue developing and supporting new partnerships and their engagement with local communities, wherever WCF engages in establishing protected areas. WCF will lead a large consortium of NGOs in Liberia to improve the fight against illegal wildlife traffic. In Guinea, the WCF has invited some expert organizations to join and implement activities requiring agro-ecological know-how. In Côte d’Ivoire, WCF will maintain the continuously required efforts to protect the remaining natural habitat with its chimpanzees and other threatened wildlife. Since a high protection status remains one of the key factors for ensuring long-term survival of chimpanzee populations, WCF will continue its strive after protecting new areas known to host important chimpanzee populations and that are not yet under a legal conservation status.

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

Biomonitoring and law enforcement in the Tai-Grebo-Sapo Forest Complex

In 2018, we developed a new method of **biomonitoring for the Tai National Park (TNP)** in Côte d'Ivoire, based on the pilot studies of the previous year. One of the studies, carried out in the research area of the park, is presently under analyses and produced first results: the 200 cameras set up on 200 km² from October 2016 to August 2017 produced 41290 videos. They reveal 77 animal species, 47 mammalian, 29 avian and one reptile species. Preliminary results confirmed the presence of 129 chimpanzees and, for the first time, an abundant presence of pangolins (10 individuals), pygmy hippos (66), and leopards (9) could be calculated. Camera trap monitoring will be extended to the whole Tai National Park in 2019. To complete these data, we changed the protocol of the line-transects of the anti-poaching program in order to collect data, notably monkey observations and signs of illegal human activities, that cannot be obtained by camera trapping.

We raised the number of **community eco-guards** in the **Cavally Classified Forest (CCF)** and the **Grebo-Krahn National Park (GKNP)** to 20 guards including one woman, and 28 including six women respectively. We support **10 community watch teams** (10 persons each) in the **Sapo National Park (SNP)**. The successful collaboration between the communities, their watch team, the Forestry Development Authority (FDA) and partners incited the departure of illegal miners and reinforced the protection of SNP. In GKNP, where illegal activities are still ongoing, 15 patrol missions were conducted to increase surveillance of mining and hunting, especially along the Cavalla River. In the **Cavally Classified Forest**, 12,846 ha, representing 19% of the forest, were monitored. The results show an increase in abandoned cocoa farms and a reduction in new clearings. Our efforts are thus slowing-down forest destruction, but more work will be needed in 2019 to definitely stop the conversion of this forest into a cocoa plantation.

2018 was the 4th year of the **independent forest monitoring program in Côte d'Ivoire**. We published four reports on the Cavally and Yaya Classified Forests and trained 18 persons from 12 NGOs in independent forest monitoring to enable them to carry out the program in other forests.

Awareness raising campaigns in the Tai-Grebo-Sapo Forest Complex

In 2018, about **17,861 persons** were sensitized by the WCF awareness activities in the **Tai-Grebo-Sapo Forest Complex**, namely 7,688 persons in Liberia and 10,173 in Côte d'Ivoire. A theatre tour around Grebo-Krahn National Park attracted 4,270 persons, 2,246 around the Sapo National Park, and 8,582 around Cavally Classified Forest. The eco-guards continued their sensitization of the population around GKNP, reaching 1,172 persons. In Côte d'Ivoire, local animators reached 1,042 persons, and the Tai eco-museum attracted 549 visitors.

Other actions included a transboundary exchange of eco-guards and NGOs for sharing experiences between Côte d'Ivoire and Liberia. A workshop was held on the use of forest-friendly farming practices, and consultations with the communities of the Cavally Classified Forest were organized.

Creation of new protected areas and corridors in the Tai-Grebo-Sapo Forest Complex

In 2018, the **official launch of the Grebo-Krahn National Park (GKNP)** was done at the regional and national level in Zwedru and Monrovia, Liberia. Demarcation of the GKNP started to be implemented in close collaboration with local communities, offering direct financial benefits to those directly affected by the demarcation of the boundary.

In view of the creation of the **Krahn-Bassa Proposed Protected Area (KBPPA)** in Liberia, rapid biodiversity assessment surveys were conducted for plants, butterflies, moths and beetles, birds, amphibians and reptiles. Results indicated the occurrence of many threatened, endemic species and several species new to science.

In order to evaluate the feasibility of a **conservation corridor between the Grebo-Krahn National Park (GKNP) and Sapo National Park (SNP)**, three surveys are planned, one demographic- (done in 2018), one socio-economic- and a more extensive biodiversity study.

Alternative Livelihood and capacity building in the Tai-Grebo-Sapo Forest Complex

The **ecotourism program** has progressed in 2018, with 281 tourists visiting the nature and culture site located in the Tai region (154) or the chimpanzees and the Mount Nienokoué in Djouroutou (127). Visits to our website (www.ecotourismetai.com) increased, thanks to the use of keywords, by 223% compared to the same period in 2017. Since April 2018, the ecotel Touraco and the site of Djouroutou are managed by Louis Diakité, owner of the N'Ze river lodge. WCF will continue working with him in 2019. Tourists appreciated the Tai community project by giving an average score of 9.03 out of 10, based on satisfaction questionnaires.

Connected to ecotourism in Côte d'Ivoire, we defined three initiatives to support **alternative livelihood** for the communities neighbouring the ecotourism sites: production of Makoré butter, honey and chocolate. Results are expected in 2019.

Throughout 2018, WCF Liberia has provided continuous support and training to **14 fish-farmers exploiting 17 fish-ponds**. In addition, around the GKNP, 120 farmers were trained in **bee-keeping** by the Universal Outreach Foundation (UOF). In November, 61 bee-hives have been colonized, and a first honey harvest is expected for 2019.

20 community-based projects have been identified in Liberia and Côte d'Ivoire around GKNP, and between the Tai National Park and the Cavally Classified Forest. Five have been developed in 2018 and the rest will be launched in 2019. The Ivorian NGO "Notre Forêt Notre Avenir" (NOFNA) developed with WCF the following 5 projects: pig and chicken farms, a cassava production and transformation site, a frozen food selling shop, and a dry-fish store.

WCF has invested much effort in **capacity building of Ivorian NGOs and local populations** concerning forest management and independent forest monitoring around classified forests. We also trained two community-based NGOs in Tai and Zagné to increase their organizational capacities. In addition, 32 agents of the "Société pour le Développement des Forêts" (SODEFOR) were trained in the revised forest control procedures. 22 judicial police officers and 6 judicial police agents were trained in procedures related to forest offences and the transboundary regulation of natural resources management in Côte d'Ivoire.

Finally, WCF staff members and local NGOs have received continuous training in the development and use of the Environmental Mitigation, Monitoring Plan and Organizational Capacity Assessments and Communication Strategy.

Executive Summary of the Activities in Guinea

In 2018, an **inter-ministerial meeting** was held to discuss the impact of mining and hydraulic projects in the Moyen-Bafing National Park (MBNP) area, the cohabitation between MBNP and the Koukoutamba dam project, the well-being of the local communities, and possible solutions to mitigate and compensate the damage caused by the construction of the dam in the park.

A strategy for the **law enforcement monitoring system** of the MBNP is being developed with the “Office Guinéen de Parcs et Réserves” (OGUIPAR).

In April 2018, **400 camera traps for monitoring** large and medium wildlife were installed in the northwest and central part of the MBNP. Of the 180,000 videos recorded, 57,412 have been viewed to date, including 16,567 takes on which animals were seen. 590 individual chimpanzee videos have been obtained, and 16 adult males have already been identified.

A **floristic inventory of MBNP** has been carried out and preliminary results list 206 plant species, of which fourteen are threatened according to IUCN criteria.

The **ornithological monitoring study in MBNP** revealed the presence of three priority bird species for conservation: *Necrosyrtes monachus* (Scavenger Vulture), *Gyps africanus* (African Vulture) and *Gyps rueppellii* (Rüppell Vulture) that are fully protected and since 2017 placed on the IUCN Red List (CR, Critically Endangered).

The third round of **consultations of communities, regional and local authorities** took place as required by the ministerial decree for the process of MBNP creation. During the consultations we discussed the temporary park boundaries, the location of each village within three zones of the park, the idea of development projects for the communities, and the steps to be taken towards the creation of the park.

In January 2018, a first phase of **community outreach consultations** started to collect information about the participation of local communities in the process of park creation.

The **tree nursery** in Laafa village was consolidated by placing fences to prevent domestic and wild animals to prey on the plants. Approximately 12,690 plants and more than 40,000 native tree seeds have been stored. Teams of ten members each, nominated by the villages, have been set up to accompany the **reforestation and forest regeneration process** inside the MBNP. Community mobilization and sensitization missions were organized to negotiate and sign agreements aiming at defending and restoring landscapes within the MBNP, as well as preserving spring heads to secure water supply for wildlife as well as humans. From 2014-2018, WCF collected monthly information regarding burned areas within MBNP to determine the regions most susceptible to bushfires. A specific strategy is going to be finalized and validated. Specific activities have already been launched to protect the 12 selected reforestation sites.

During the school year 2017/2018 our **environmental education project Club P.A.N.** was active in six schools in the MBNP region and over 500 children participated. Eleven participants including coordinators, teachers and principals were trained and 10 conservation education sessions were held in each school. Pre- and post-evaluations of the children showed a significant increase in knowledge.

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

1.1 Biomonitoring and law enforcement in the Tai-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

1.1.1 Coordination of Biomonitoring and Law Enforcement Sub-Committees of the Liberia National Species Working Group

WCF is coordinating the **Biomonitoring and Law Enforcement Sub-Committees of the Liberia National Species Working Group**, hosted by the Forestry Development Authority (FDA). Besides the FDA, the two sub-committees comprise all international and national conservation NGOs and other relevant institutions active in the field of biomonitoring and law enforcement. WCF is organizing regular meetings and supporting the coordination of activities of these sub-committees. The sub-committee was in continuous contact with the Global Biodiversity Information Facility of FDA, University of Liberia and University of Kansas, and with Fauna & Flora International, focusing on the establishment of a central biodiversity database for Liberia which will be hosted by FDA. The law enforcement sub-committee implemented several activities in line with the comprehensive work plan, focusing on the review and amendment of the “National Wildlife Conservation and Protected Area Management Law”, the development of regulations for the law, capacity building, and awareness raising activities, such as the organization of the first World Chimpanzee Day on 14 July 2018. A close collaboration with the Paynesville City Corporation led to the establishment of the new Wildlife Confiscation Unit at FDA, focusing on the correct implementation of the law, and thus fighting against illegal hunting, consumption and trade of protected species such as the West African chimpanzee.



Hon. C. Mike Doryen, Managing Director of FDA, and partners in the Law Enforcement Sub-Committee marching on World Chimpanzee Day to raise awareness about this Critically Endangered and protected species.

1.1.2 Biomonitoring at priority sites in the Taï National Park, Côte d'Ivoire

Since 2008, WCF has carried out the "anti-poaching project" in the Taï research and ecotourism area. It aims at quantifying mammal abundance and illegal human activities, and to support the “Office Ivoirien des Parcs et Réserves” (OIPR) in strengthening surveillance in this area. The 11th phase of biomonitoring and ecological data collection began in December 2017 and ended in November 2018. In 2018, the anti-poaching team employed a different method, supervised by Carole Colin and 4 assistants of the Taï Chimpanzee Project.



Piliocolobus badius and anti-poaching team in 2018

For phase 11, protocol and design aimed at testing a simplified method to accompany camera trapping during the next phase of 2018 - 2019. The data collected concerned indices for illegal human activity and signs for monkeys and chimpanzees. The study area was surveyed once in the dry season and again in the rainy season. The first mission took place from January to June 2018, the second from June to November 2018. 1394 data were collected on monkeys with 214 monkey groups observed directly. **Over the entire 11th phase, patrol effort amounted to 360.7 km traveled.** Among the observations of monkeys, *Cercopithecus diana* were the most frequent (35%,) followed by *Piliocolobus badius* (31%). As many as 227 indices of illegal human activities were collected. About 70% of trails are still used by poachers. Five poacher camps were discovered on- and seven off transects. Compared to the results obtained during the previous phase, we note **a slight increase in illegal activities (Figure 1), and a slight decrease in monkeys.**

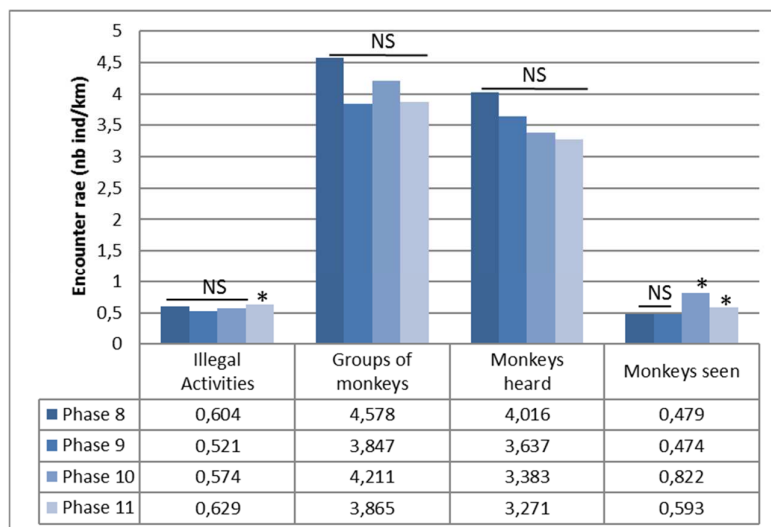
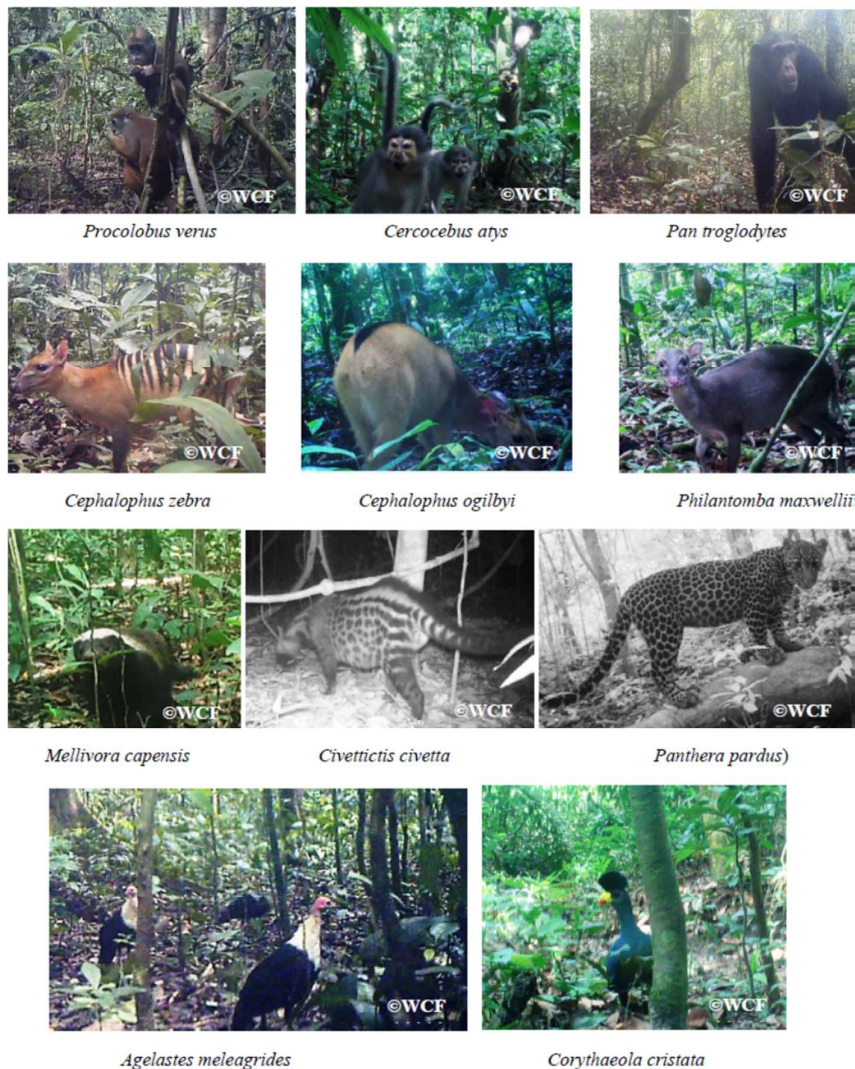


Figure 1: Comparison of illegal human activities and monkey groups observed or heard between the phase 8 (2015) to 11 (2018) in the Taï research and ecotourism area

1.1.3 Development of a new biomonitoring method using camera traps in Taï National Park

The line transect method may be rather imprecise and limited when direct or indirect observations (nests, dung) are insufficient to confirm precise variations and abundance. In collaboration with the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, WCF recruited two students to develop a new method based on camera traps. Unlike the currently used method, the new approach allows estimating the population size of many wildlife species, even of particularly discrete ones. 200 cameras were installed within 200km² of the Taï National Park from October 2016 to August 2017. 45,869 video sequences with animals have been counted and animals could be identified on 41,290 of them. **77 different species were recorded, including 47 mammalian (68%), 29 avian (38%) and one reptile (1%) species.** The data are analyzed by the two PhD students and results should be available by 2019. The abundance of a few species has already been determined, and for some of these are the first estimates ever established (*Table 1*). Based on this pilot study, a new round of camera trap biomonitoring in the entire Taï National Park has been designed and will be launched in 2019.



Photos obtained with the camera trap program in Taï National Park

Table 1 : Abundance and density of some mammalian species determined with the camera trap method in Tai National Park, Côte d'Ivoire

Species	Nb of videos	Density (nb ind/km)	Confidence interval	Abundance (N)	Confidence interval	CV (%)
Leopard	282	0,044	0,027-0,069	9	5-14	23
Chimpanzee	343	0,649	0,452-0,831	129	91-184	17,9
Maxwell duiker	19,891	20,063	15,965-25,1611	4,013	3,193-5,032	11,3
Zebra duiker	323	0,19	0,097-0,368	38	19-74	34
Giant pangolin	53	0,051	0,031-0,082	10	6-16	25
Pygmy hippopotamus	184	0,328	0,228-0,472	66	46-95	18,6

1.1.4 Monitoring in the Cavally Classified Forest, Côte d'Ivoire

In collaboration with “Société pour le développement des forêts” (SODEFOR), WCF initiated a monitoring program in the Cavally Classified Forest (CCF) that ran throughout 2018. It involves young people from the surrounding villages called “eco-guards” and allows to collect information on the natural resources and the state of degradation of the forest. Each year, the guards are trained for data collection in the field and the use of GPS, compass, and maps. In 2018, **WCF organized two training sessions** in Zagné, the first from 09 to 13 April, involving the training of 17 new eco-guards, and the second from 17 to 18 April, allowing the updating of 11 eco-guards that already had participated in the program. An evaluation of data collection was organized from 24 to 25 November 2018 at the WCF office in Zagné. During this workshop, evaluation mistakes were pointed out and discussed, and better practice methods suggested. The eco-guards were also trained in the use of walkie-talkies and the procedure rules for the monitoring missions were repeated.



Theoretical and practical trainings of eco-guards to monitor Cavally Classified Forest in Côte d'Ivoire

In 2018, 11 monitoring missions were carried out in the high conservation-value area located in the south of the CCF. **Eight missions were regular patrols** (10-15 persons), **and three were mixed patrols comprising** many agents from different structures (50-100 persons). Eco-guards recorded cleared plots, cultivated crops, abandoned crops and forest, as well as evidence for illegal human activities and the presence of mammals. During mixed patrols, to ensure forest recovery, **SODEFOR agents destroyed 3850 ha of young plantations.**

Of the 12,846 ha (19%) of the forest monitored, 48.89% were intact forest, 43.88% plantations, 7.07% abandoned plantations (against 1.45% in 2017) and 0.16% new clearings (against 0.59% in 2017). Thus, more plots were abandoned, and less forest was cleared than during the period before. Numerous signs indicate the presence of endangered animals such as western chimpanzees, red colobus, pygmy hippos, and Jentink's duiker in the Cavally Classified Forest. This will be analyzed in the final monitoring report, available early in 2019. The monitoring results help guide the mixed-patrol missions carried out by SODEFOR and WCF. Thanks to this monitoring program, WCF and SODEFOR are slowing down the destruction of the forest, but greater efforts are needed in 2019 to completely stop the conversion of this forest into a cocoa plantation.

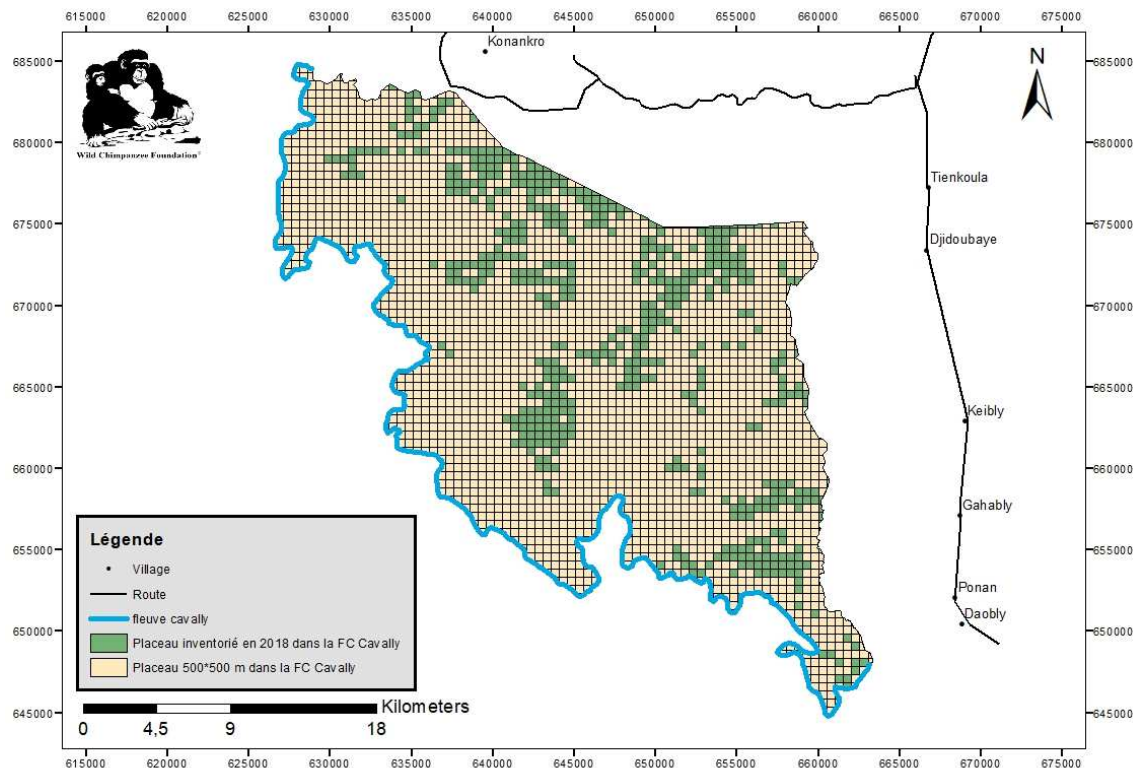


Figure 2 : Boundary of the Cavally Classified Forest with the green squares showing the areas of the forest that were fully monitored by the ecoguards in 2018

1.1.5 Community Eco-guard program at Grebo-Krahn National Park

In 2018, two trainings for new Community Eco-guards were conducted in April in Ziah Town (Grand Gedeh) and in September in River Gbeh (River Gee), in close collaboration with FDA. In both trainings together, 50 community members selected by their home communities were trained and tested, including 22 women. After the first training, a new Community Eco-guard team was established in Grand Gedeh. Likewise, a new team was established after a training in River Gee. Among the newly selected team members, six are women. In November, funding for three additional teams (two in Grand Gedeh and one in River Gee) was secured and community team members and FDA team leaders for these three new teams were selected from the previously trained groups in concert with the Chief Park Warden. In 2018, the number of Community Eco-guard teams thus increased from two to

seven, with now four teams in Grand Gedeh and three teams in River Gee. **The regular stipends to 28 community members and seven team leaders from FDA (auxiliaries and rangers) provide direct financial benefits to the community.** All seven teams will be patrolling on a regular basis starting January 2019. The remaining trained community members who are not part of the current teams will be hired for future awareness raising activities.

During the first quarter of 2018, the Community Eco-guard teams focused on awareness-raising activities linked to the creation of the Grebo-Krahn National Park (GKNP) and the GKNP Multi-Stakeholder conference. Regular patrolling started in March 2018. **15 patrol missions were conducted** until November, ten in Grand Gedeh and five in River Gee **covering 441.52 km.** We recorded 2,172 indices of illegal activities (4.92 indices/km) and 4,684 illegal hunting activities, representing (10.60 indices/km).

In the absence of regular ranger patrols, illegal activities inside the GKNP were increasing, in particular mining and hunting along the Cavalla River. Nevertheless, signs of several threatened species such as of western chimpanzees, leopards, forest elephants and Golden cats were still found.

1.1.6 Community Watch Teams at Sapo National Park

Throughout 2018, **WCF has supported 10 Community Watch Teams (CWT) comprising 100 community members from the area around the Sapo National Park (SNP).** In May, two members of each team as well as FDA team leaders and staff (in total 44 persons) were trained in the use of equipment (GPS, compass, camera), patrolling, data sheets, species identification and awareness-raising. Besides the equipment, which also included a laptop and a motorbike for the FDA Chief Park Warden at SNP, WCF provided monthly stipends and food rations, as well as funds for transportation and communication for FDA. Since June, the CWT teams are regularly patrolling, supporting the FDA rangers. In December 2018, a ceremony was held with all 100 CWT members, FDA and partners, acknowledging the successful contribution of communities in supporting the management of the SNP, as well as the **successful collaboration among communities, FDA and partners, leading to the departure of illegal miners and contributing to the effective protection of the SNP.**



Training of Community Watch Teams and FDA at FDA headquarters of Sapo National Park in Jallay Town, Sinoe County, in May 2018

1.1.7 Transboundary law enforcement technical committee for the Tai-Grebo-Sapo Forest Complex

The first meeting of this committee for law enforcement in the Tai-Grebo-Sapo Forest Complex (TGSFC), between Liberia and Côte d'Ivoire took place in Abidjan, Côte d'Ivoire, at the Palm Club Hotel from November 6 to 7, 2018. The objective of this organism is **to create a framework for consultation, collaboration and exchange to ensure the effective application of laws** related to the preservation of natural resources in the TGSFC. Threats and illegal activities in the TGSFC were presented and **common objectives were defined:**

- Make available to members of the committee the legal texts of the two countries governing natural resources management and trade;
- Clarify and harmonize the differences existing between the countries in legal procedures regarding the exploitation of natural resources and legality of hunting;
- Identify gaps in the laws of both countries that would need improvement;
- Facilitate communication between the representatives of Liberia and Côte d'Ivoire;
- Create a framework for collaboration between the two countries, facilitating cooperation in the preservation of natural resources and law enforcement;
- Coordinate activities aiming at preserving natural resources of the TGSFC in both countries, including joint border patrol operations;
- Facilitate the sharing of information, knowledge and technology related to natural resources protection between Liberian and Ivoirian law enforcement authorities.

The main results of this first session was the mutual confirmation that bush-meat, gold-mining and chewing stick traffic at the border was and is illegal. No authorisation was given from either side, and that it was a lack of law enforcement if this traffic was still going on.



Members of the law enforcement transboundary technical committee meeting in Abidjan, Côte d'Ivoire

1.1.8 Independent Forest Monitoring in Côte d'Ivoire

The “Société pour le développement des forêts” (SODEFOR), has commissioned WCF since 2014 to conduct independent forest monitoring (IFM) in three classified forests. This monitoring aims at strengthening the legality and sustainability of exploited forest resources and a good governance in forestry to ensure the protection of chimpanzee habitats. In 2018, WCF conducted 4 autonomous IFM missions in the presence of community members, civil society organizations, and SODEFOR. WCF analyzes all documents related to the management and exploitation of wood in the classified forests of Cavally, Yaya and Besso. Documents and missions are compiled and analyzed in order to identify any dysfunctions or violations of the regulations. Members of Ivorian civil society organizations, trained in IFM and forest management in 2017, participated in this task. In July 2018, WCF published **an assessment report (2014-2018)**, as well as **three independent forest-monitoring reports**.



Team member recording deforestation during independent forest monitoring mission

Following the 2017 study on the **revision of forestry- and timber-harvesting rules**, SODEFOR wished to continue the reflection on certain points of the document, in particular those relating to the thresholds requiring an intervention. A new expert opinion was requested and resulted in the exchange of forestry and exploitation rules, and in a validation meeting on July 13, 2018. This document was presented by SODEFOR on July 31, 2018 to their partners actually managing the classified forests

WCF supports civil society as a **resource person in the context of a multi-stakeholder Voluntary Partnership Agreement (VPA/FLEGT) Forest Law Enforcement, Governance and Trade negotiation**, as well as in the forest code review process. WCF participates in civil society meetings and consultations on the national forest governance program. Likewise, WCF participated in a meeting aiming at formalizing and **improving the timber traceability system** in Côte d'Ivoire, in particular for wood from classified forests. Solid traceability involves strengthening the control on the legality of timber and better detection of forest offenses. To this end, WCF supported working sessions and a stakeholder consultation workshop on the wood traceability system which took place on July 27, 2018.

An external Independent Observation report on a case of corruption of the Ministry of Water and Forest agents in the classified forests of Cavally and Goin Débé was established based on observations by the local NGO partner “Notre Forêt, Notre Avenir” (NOFNA). Information revealed that an illicit taxation system had been put in place by state agents against populations farming illegally in the classified forests or buying cocoa. Previously, this information was sent to the Ministry of Water and Forest who reacted immediately. Its reaction was related in the last report.

1.2 Awareness raising in the Tai-Grebo-Sapo Forest Complex, Liberia and Côte d'Ivoire

1.2.1 Theater around Grebo-Krahn and Sapo National Parks

In 2018, WCF has worked with two professional theatre companies "Eddie Theater Production" and "Alma Production" to sensitize communities, children, and governments for the issue of deforestation and wildlife protection in Liberia and Côte d'Ivoire.

For Liberia, two new theater plays were created in 2018, one about the GKNP creation and one about the current issues at the Sapo National Park (SNP). Between March and May 2018, the GKNP play was performed in 17 communities around GKNP, in Zwedru and Monrovia, reaching a total of **4,270 people**. A radio version of the GKNP play was produced.



Performance of “Wahala over Grebo-Krahn” in March 2018 in Ziah Town, Grand Gedeh County

In December 2018, a **first performance of the SNP play** was organized, followed by eight performances around the SNP, as well as in Greenville, Sinoe County, reaching a total of **2,246 people**. The second part of the tour is planned for January 2019.



First performance of the new theater play “Let’s find common ground for Sapo National Park” at the FDA headquarters of Sapo National Park in Jallay Town, Sinoe County, in December 2018

1.2.2 Theater around the Cavally Classified Forest in Côte d'Ivoire

WCF Côte d'Ivoire and "Alma Production" signed a contract under the West African Biodiversity and Climate Change project (WA BiCC) to organize 15 theater performances around the Taï National Park. The research phase for the plot of the new play was based on the success of the 2017 performances: The communities had estimated that, at the beginning of the year 2017, 10,000 people were farming in the Cavally Classified Forest (CCF). Following the theater tour by WCF and law enforcement by SODEFOR, 7,000 people left the forest during 2017. However, the abandoned cocoa farms attracted the desire of fraudulent local organizations who started selling abandoned farms to new farmers arriving in the region. The investigations of NOFNA revealed irregular actions carried out by some agents of the Ministry of Water and Forests around, and in the CCF by collecting important forced payments from cooperatives and individuals sourcing cocoa there, threatening those refusing to pay. In fact, illegal farmers or cocoa buyers assumed to be on the legal side when paying fees to government agents. Such actions represent serious offenses, contrary to the forestry strategy implementation decided by the Ivorian government.

When, in April 2018, Alma Production created a new theater play, the main message was to **urge people to report the fraud and corruption** around-the CCF as well as to stop selling abandoned farms in the protected forest. The new play is entitled "Save the Cavally, What's up again?". The first tour took place from April 28 to May 11 in the CCF area, including 15 performances. **8582 people attended the various shows, compared to 5,300 people in 2017.** A modern sound system was used during the whole tour, and a local radio broadcast is planned. Partners such as SODEFOR and the local NGOs NOFNA and "Observation pour la protection et la reconstitution de la faune et flore tropicale" (OPRFT) were present. The tour was supported by the youth of the Taï department and the Dao canton, and after this tour, we never heard again about the fraudulent local organization and their illegal activities.



Performance of the play "Save the Cavally, What's up again?"

1.2.3 Radio in Côte d'Ivoire

Radio interviews of local authorities were conducted to assess their perception on the protection of CCF after the theatre tour, and to raise the awareness on a large scale. WCF has entrusted Zagné radio with a set of programs. One of these was about "Reactions of Authorities and Populations" through interviews on the following questions: "What are the effects of the theatre in your village? What are your feelings after the theater?". These interviews were organized with 31 persons having seen the theater in 2018. According to the statements made, many illegal cocoa farmers had decided to leave the forest. Some

interviewees declared that they were ready to denounce recalcitrant members of the community who persisted in staying in, or returning to the forest.



Interviews of the president of the women's associations of the sub-prefecture of Zagné (Left) and the president of the woman in Djidoubaye (Right)

Another radio program with Radio Zagné was recorded dealing with forest management and Independent Mandated Observation (IMO) for communities bordering CCF. Local residents, community and Civil Society Organizations (CSO) participated in the radio program.

1.2.4 Environmental education in Taï

The Taï eco-museum offers awareness activities to residents of the village, especially to students and high school students of the area. There is a poster exposition on 40-years of research on Taï chimpanzees, and different nature-documentaries are presented, followed by “question and answer” sessions overseen by a WCF animator. A reading corner offers books to consult on site for free. On Friday morning, market day in Taï, the WCF ecoguides and a WCF animator offer a visit to the ecomuseum and answer questions concerning the Taï National Park and its fauna. From January to December 2018, **549 people have participated in one of the ecomuseum's awareness activities, 30% men and 70% women.**



Awareness sessions with children in the Taï eco-museum

1.2.5 Proximity awareness in the Taï region

In 2018, **41 proximity awareness sessions were held in the Taï region, attended by 1042 persons.** The outreach officer targeted one of the foreign communities living on the outskirts of Taï National Park or Cavally Classified Forest (CCF). The sessions are useful for collecting information on poaching, security, development needs, and the perception of the park. A recurrent topic was that communities wished the clearing of CCF from illegal occupants.

1.2.6 Transboundary exchange for sharing experience between Côte d'Ivoire and Liberia

Through the creation of **transboundary experience-sharing workshops**, WCF wants to empower non-governmental local actors to become active stewards of the natural resources that underpin their livelihoods. The purpose of these workshops is to familiarize Liberian and Ivorian community eco-guards, local NGOs and women leaders with each other's work, to discuss common conservation-related issues, and to share best practices based on their respective experience. In November, WCF (Liberia and Côte d'Ivoire) organized the community eco-guard and local NGO workshops. Each workshop included field visits to enrich the exchange between participants. The NGO participants discovered the benefits of conservation in Taï National Park through ecotourism activities, and eco-guards spent a day in the Cavally Classified Forest to compare highly damaged and restored areas. The participants underlined their interest in learning about their counterparts' work and showed enthusiasm for transboundary cooperation at the local level. Indeed, there are strong cultural ties between communities of both countries, and the use of the local languages in some of the discussions between the NGOs emphasized this sense of proximity and their shared feeling of a common forest heritage to be protected.

1.2.7 Raising awareness about the use of forest-friendly farming practices and of rainforest-friendly cocoa varieties

In July 2018, in close collaboration with the Society for the Conservation of Nature of Liberia (SCNL), the Royal Society for the Protection of Birds (RSPB), FDA and the Ministry of Agriculture, **WCF organized the "Green Liberia Cocoa" workshop**, raising awareness about the use of forest-friendly farming practices and of rainforest-friendly cocoa varieties. During this workshop, a work plan for the promotion of Green Liberia Cocoa was developed, ensuring that the new concept of rainforest-friendly cocoa becomes part of the National Liberia Cocoa Strategy. The use of rainforest-friendly cocoa is especially important in locations close to protected areas, such as the WCF project in south-eastern Liberia, or in the neighborhood of forests and planned corridors. The use of common, non-shade grown cocoa varieties would put the integrity of GKNP and SNP at risk by destroying crucial habitat for chimpanzees and other protected species.

1.2.8 Consultations for the establishment of a multi-stakeholder body for the management of Cavally Classified Forest

Several working sessions were held at the beginning of 2018 with the stakeholders (forest administration, neighboring populations, local NGOs, forestry operators) in order to advance the multi-stakeholder consultation framework and to determine the stages of setting up and functioning of such an organ. A workshop bringing together the representatives of the local populations of the Cavally Classified Forest (canton chief, village chief, representative of the departmental youth), SODEFOR, NOFNA and WCF was held in Zagné on December 13, 2018. WCF presented the Independent Observation project, and CCF's annual development plan. During this meeting, representatives of the local population asked for the establishment of forest commissions in 2019 to improve the consultation process, in particular concerning local development activities, financed by the forestry operator active in CCF.

1.2.9 Awareness-raising around Grebo-Krahn National Park

In total, **46 awareness-raising meetings were conducted by the Community Eco-guards** in towns surrounding Grebo-Krahn National Park (GKNP), reaching some **1,172 community members**: 28 meetings in Grand Gedeh (747 participants) and 18 meetings in River Gee (425 participants). These awareness-raising activities included quizzes, soccer games but also community meetings, for example on the creation of GKNP, the GKNP Multiple Stakeholder Conference, observed illegal activities in side GKNP, and on the GKNP demarcation.



Awareness-raising activity of Community Eco-guards in community close to Grebo-Krahn National Park in February 2018

1.3 Creation of protected areas and corridors in the Tai-Grebo-Sapo Forest Complex

1.3.1 Support following the creation of the Grebo-Krahn National Park

In April 2018, WCF was the leading institution in organizing the **regional and national launches of the new Grebo-Krahn National Park (GKNP)** and in supporting the FDA. There were two major events in Zwedru and Monrovia further fostering the good collaboration between FDA, local communities and partners, and raising Liberia's international profile.

WCF is giving financial and logistic support to FDA in planning and implementing, together with the other partners, i.e. Ambero/GIZ, AHT, and the World Bank, the awareness program concerning the ongoing demarcation of the park boundaries. The demarcation process is being implemented in close collaboration with local communities, creating direct financial benefits for those directly involved in the clearing of the boundary.

1.3.2 Feasibility study for Krahn-Bassa Proposed Protected Area

After the successful completion of initial demographic, socio-economic, biodiversity and threat surveys, with additional funding from the FDA through the Liberia Forest Sector Project, an additional biodiversity rapid assessment survey was conducted during 2018 in the Krahn-Bassa Proposed Protected Area (KBPPA) in Sinoe, Grand Gedeh and Rivercess Counties. These surveys were done with the support of international experts and in collaboration with the Society for the Conservation of Nature of Liberia (SCNL) for the following taxonomic groups: butterflies, moths and beetles, birds, amphibians, reptiles, and plants. These surveys revealed the presence of many threatened and endemic species, as well as several species new to science. The feasibility study also includes a desktop survey to reveal potential land-use conflicts, which revealed serious overlap of the KBPPA with Community Forest Applications.

1.3.3 Demographic survey in the corridor between Grebo-Krahn & Sapo National Parks

In order to evaluate the feasibility of a future conservation corridor between the Grebo-Krahn National Park (GKNP) and the Sapo National Park (SNP), three surveys are planned, building on an initial biodiversity survey conducted in 2015: a demographic, a socio-economic and a more extensive biodiversity survey. From September to October 2018, the demographic survey was conducted with four main objectives:

- identify detailed and reliable demographic information concerning the population of the villages and towns in the Grebo-Sapo Corridor,
- provide detailed and reliable information about the roads, tracks and their use,
- give a first description of land use and natural resources use, and
- provide data in support of a socio-economic survey to be carried out in March 2019 in the same region.

The data collection was done by specifically trained enumerators using tablets and the software Kobo Tool Box. Data analysis is in progress.

1.4 Alternative livelihood and capacity building

1.4.1 Ecotourism in Tai National Park

Two ecotourism sites are open to visit Tai National Park. One is located next to the city of Tai and the second one, 80 km to the south of Tai, near Djouroutou. WCF is developing the first site in collaboration with OIPR and is supporting OIPR to manage the second one, notably by habituating chimpanzees to the presence of humans. This year the second site has been given in concession to Hana River Lodge, and we are in discussion to continue working with them and OIPR to minimize the impact of ecotourism on chimpanzee well-being.

1.4.1.1 Ecotourism Nature and Culture, Tai

A team of 8 eco-guides (4 women and 4 men) and 2 camp stewards (1 woman and 1 man) works on the habituation of red colobus, sooty mangabeys, and chimpanzees in the Tai ecotourism zone. From January to December 2018, the eco-guides of the Nature and Culture project were responsible for tracking primates in the forest. They spent an average of 17.64 days per month in the forest. The group of sooty mangabeys (*Cercocebus atys atys*) already habituated for ecotourism currently comprises 40 individuals (29 adults and 11 juveniles). The

average contact time per day with mangabeys is 10 hours and 42 minutes (in 2017 the average was 10 hours and 43 minutes). For red colobus monkeys (*Ptilinopus badius badius*) also habituated to human presence, the average contact time for the year 2018 is 9 hours 05 minutes. The search for a group of chimpanzees in the ecotourism zone continues. Since January 2018, the research is concentrated mainly in the south, southwest and southeast area of the ecotourism camp to determine the boundary between the territories of 2 groups: the chimpanzees habituated by the Taï Chimpanzee Project in the research area (TCP) and a group of un-habituated chimpanzees, which could potentially be habituated to human presence for the ecotourism project. For 2018 the average search time for chimpanzees per month was 9 hours and each month there were on average 1,5 direct observations of chimpanzees with an average of 31 minutes for each direct observation.



Habituated mangabeys in Taï National Park

In 2018, Taï eco-tourism has **welcomed 154 tourists**, an important increase compared to 60 visitors in 2017. Moreover, in 2018, the visitors came to Taï during the dry- as well as during the rainy season. They generated 187 nights at the forest camp in the park, 128 nights in hotels in Taï, and 51 nights in the village of Gouléako in the traditional huts managed by a group of women. We welcomed the French Ambassador, Delegate for the Environment, and the Senator of the Loire-Atlantique in France and Vice-Chairman of the Committee on Regional Planning and Sustainable Development. Three students from Abidjan with their teacher visited the park – a contest prize they had won, offered by the French Embassy. The satisfaction questionnaire set up to measure the quality of services offered to tourists and to allow them to suggest improvements has produced very encouraging results. On a scale of 0 to 10, tourists highly appreciated the community project by giving an average score of 9.03.



Tourists in the forest and in the village of Gouléako 1

1.4.1.2 Ecotel Touraco / Hana river Lodge, Djouroutou

The 4 new WCF employees (2 eco-guides and 2 camp stewards) recruited in 2017, are fully integrated in the project. The chimpanzee community size is still not fully known because not all individuals of the group are habituated, but 20 chimpanzees are identified and recognized by the guides: 4 adult males, 7 adult females, 4 adolescent males, and 5 juvenile males. Sadly, of the 6 adult males observed in 2017, 2 have not been seen since December 2017. Poaching can be one of the reasons for their disappearance.

The rainy season has been particularly intense this year. The site had to be closed to tourists during September and October. Fortunately, the habituation process did not suffer, the chimpanzees were found, could be followed, and no loss of individuals was registered.



Chimpanzees in Taï National Park at Djouroutou

In 2018, **127 tourists** came to the forest for observing chimpanzees and for hiking on Mount Niénokoué. Due to the heavy floods, the site had to close down and tourist activities decreased accordingly. The majority of tourists come to Djouroutou to observe the chimpanzees, and the work of the guides has enabled 115 out of 125 visitors to reach this goal.

Since April 2018, the ecotourism site of Djouroutou including the Ecotel Touraco and the chimpanzee camp in the forest was given in concession by the park manager OIPR to a private manager, Mr. Louis DIAKITE, owner of N'ZI River Lodge in the north of Côte d'Ivoire. The renovation of the Ecotel and chimpanzee camp began in December 2018. Until then, WCF continued to manage activities in the forest as well as paying the eco-guides' salaries. From January 2019, a partnership agreement must be drafted between Louis DIAKITE and WCF, to allow WCF to continue the chimpanzee habituation and to contribute our expertise regarding the development of new tourist activities in the forest.

1.4.1.3 Promoting ecotourism in the Taï National Park

In 2018, we recruited an international volunteer to promote the Taï National Park and its touristic activities at the national and international level. We updated the webpage, translated it into English, and optimized it for search engines like Google, by choosing appropriate keywords. These measures made it possible to place the website www.ecotourismetai.com on the first page of Google when one looks for the words "tai national park". Following these changes, the number of visits of the website increased. Indeed, over the period from May 15th

to November 15th, visitors to our website through organic search (use of keywords) increased by 222.78% compared to the same period in 2017. Facebook posts have been created to boost visits to the eco-tourisme Taï website. It is not easy to obtain for free exchange links with other flagship websites in the sustainable tourism sector. Only babel-voyages.com agreed to offer a free online presence of www.ecotourismetai.com on their website for a year. Presently, the WCF website appears on classic Search Engine Optimization websites.

1.4.2 Eco-tourism initiatives around Taï National Park

We planned to develop 3 initiatives chosen by the communities around the eco-tourism projects with multiple objectives: 1. Increase revenues for women engaged in the eco-tourism project, 2. Promote natural resources and natural products in the region, 3. Offer various natural products to the tourists visiting the eco-museum.

The three initiatives selected are: Production of Makoré butter, honey and chocolate. The two first ones have been launched in 2018, the third, the training to produce chocolate, will start in 2019.

Makoré butter: We launched a test phase of manufacturing Makoré butter with the NGO OPRFT involving several villages near Taï. The Makoré butter is made out of the *Tieghemella heckelii* fruit, with the common name “Makoré”, in Oubi “Djourou tou”. Although this tree is one of the giant trees of the Equato-Guinean forest, it is not well known by the public. Due to the high quality of its timber, it has become a vulnerable species threatened by extinction. For this reason, it is part of the five different tree species banned from exploitation in the CCF. The bark, leaves and roots of this tree are used in traditional medicine, and the fruit kernels to extract an oil of high nutritive, cosmetic and dermatological virtues – all greatly appreciated by the local population, a forest equivalent of the Karité butter of dry regions.

Depending on how the extraction is made (traditionally using a mortar), 2 to 6 kg of seeds are needed to produce one liter of butter. We should obtain more oil using a press as this is planned for the next phase of the project. The butter is sold directly on the market, in plastic bottles. Its price is currently about 2500 FCFA/l. This product is rare on the market because, at this price, it does not benefit the small-scale producer. A business plan will have to be established next year to render the project beneficial for the woman.



A bee-hive and drying Makoré seeds

Bee-keeping: WCF, in partnership with the OIPR and NOFNA, decided to work with apiculture consultants (API CONSULTING) to train four bee-keeping groups from different villages, namely Zagné, Gahably, Paulé-Oula and Djouroutou. Two OIPR people from Soubré attended this training. In all, 16 people underwent training during one week in June 2018.

The consultants explained the life of the bees and how they work within their hive, and they presented the different products that can be exploited, such as pollen, royal jelly, propolis (a resin) etc. In the practical phase of the course, the participants learned to build a hive, to understand the mechanisms and the correct gestures to cultivate the honey without disturbing the bees too much. They also learned to find the ideal place for their beehive and how to harvest and sell the honey. Each of the 4 groups received 5 hives to be installed in their villages.

During two further visits in September and December 2018 the consultants visited the different sites and discussed the problems the villagers had with the bees who did not colonize yet, probably due to the particularly heavy rainy season this year. The hives of Keibly were colonized. Early next year, we expect colonization of all the hives and hope to start the first harvesting in 2019 with a final mission of the consultants for the harvest demonstration.

Cocoa transformation: One of the major threats on wildlife in the region is the destruction of their habitat for cocoa farming. Despite the fact that it is illegal in classified forests, this culture is one of the main causes (90% in the last 50 years) of deforestation in the country. WCF has worked with cocoa cooperatives and exporters to help them trace back the cocoa they buy but we have to note that, after 4 years of this effort, nothing has changed and bits of the CCF are still disappearing every day because of the cocoa trade.

To sensitize and promote good practices, we have developed a local activity that may help the local communities to produce some cocoa under the ‘zero-deforestation forest-friendly’ concept. For the training, we choose the “Domaine Bini”, next to Abidjan. A visit to Jean-Marc Bini, the 21st of December 2018, allowed us to understand, first, the different stages of the cocoa transformation process and ensure that it was simple enough to develop it in the village, and second, to discuss a potential partnership with the “Domaine Bini” for training our groups in cocoa processing techniques. We will contract “Domaine Bini” to train 6 people early 2019 to launch the activity.



The future training site “Domaine Bini”, presenting different cocoa transformations: powder, cream and “pépité bini”

1.4.3 Alternative livelihoods around Grebo-Krahn National Park

Aquaculture: Throughout 2018, continuous support and training have been given to 14 fish-farmers maintaining 17 fish-ponds in four communities (Sayuo and Peah in Konobo Statutory District and two in Zwedru) with regard to pond construction and maintenance, regulation of the water quality and feed production. All farmers regularly harvested fish, shared part of it with the community and sold the balance for income. A trained assistant from the local NGO Multi-Agrisystems Promoters (MAP) has partly taken over supervision and training of the fish farmers and is assisting them to harvest, recondition and restock the fish ponds. In order to further ensure sustainability of the fish farming activities, WCF is also in close contact with the National Office of Fisheries to plan for future collaboration and extension of fish-farming activities in south-eastern Liberia.



Fish-farmer from Sayuo, Grand Gedeh County, showing some of her harvest before sale

Bee-keeping: Since January 2018, WCF works with the Universal Outreach Foundation (UOF) to train and support bee-keeping activities around GKNP. In January 2018, UOF with support from FDA conducted a thorough assessment of 24 communities around GKNP, to evaluate the suitability and interest for bee-keeping activities. Except from one community having bees as their totem (Yeoh Town), all communities were suitable and highly interested in bee-keeping. During three training sessions in March, and a session in September, 120 farmers (47 women and 73 men) from 14 communities were trained in bee-hive construction and maintenance, attraction of bees, and caring for the bees. An extension officer is visiting trained bee-keepers on a monthly basis to monitor their progress, give further support and training. As of November 2018, 61 bee-hives have been colonized and a first honey harvest is expected for early 2019. UOF is collecting the honey directly at the location of production, thus offering to the farmers a guaranteed access to the market. Quality control is being done directly at the collection points at the communities. The honey is being sold as the brand “Liberia Pure Honey” and is available in the supermarkets and hotels in Monrovia. Recently, it won the first prize in the category “Charitable Organization Working with Beekeepers” at the National Honey Show in the UK. Furthermore, five bee-keepers from the GKNP communities (three from Grand Gedeh and two from River Gee County) were invited to the annual training of the National Association of Bee-keepers, held in November 2018 in Ganta, Nimba County.

Agricultural activities: In early 2018, WCF sub-contracted the Society for the Conservation of Nature of Liberia (SCNL) and Multi-Agrisystems Promoters (MAP) to assess agricultural activities and preferences in 24 communities around GKNP. This assessment was supported by FDA. Top priorities for agricultural projects were identified: Inland Valley Swamp (IVS) rice farming, cassava and cocoa. As FDA is already working with the Ministry of Agriculture to develop cocoa production in Grand Gedeh and River Gee Counties, WCF waited for the selection of communities involved in this project, before continuing the work on additional agricultural activities focusing on IVS rice and cassava farming. The work with SCNL and MAP is planned for 10 additional communities around GKNP starting in 2019.



Training for the construction of bee-hives for bee-keepers in communities around Grebo-Krahn National Park in March 2018

1.4.4 Alternative livelihood support for the communities between Tai National Park and Cavally Classified Forest

The communities living between Tai and Zagné are asked to protect the Tai National Park and the Cavally Classified Forest. It was therefore decided to support them with 10 development projects. The conception and support of these projects should go through local NGOs.

In this process, “Initiatives pour le Développement Communautaire et la Conservation de la Forêt” (IDEF) conducted a feasibility study on the livelihood projects proposed by the local NGOs (NOFNA and OPFRT). This study included a field mission from January 23 to February 2 during which IDEF assessed a total of 15 projects. Out of these, 8 were selected according to economic and financial viability criteria. IDEF then drafted a livelihood assessment report with a business plan for each project. After the field mission by a WA BiCC team and an environmental training session in April, all business plans have been reviewed by IDEF to integrate WA BiCC’s recommendations. In May, a ceremony for the launch of the development projects took place in Zagné. Authorities, town chiefs of the surrounding villages of CCF, and more than 1,000 people attended the event, which was important to convince the local populations that they are included in conservation management activities.

In June, the first development project was launched in Zagné with the implementation of a frozen food store, aimed at raising awareness among customers about the need to reduce the use of plastic bags. The NGO NOFNA organized a monitoring committee in charge of conducting monthly field visits to their projects' beneficiaries and reporting any issue to WCF. In August, Joseph Ano Kouassi, the Monitoring and Evaluation Officer, drafted a questionnaire for projects' beneficiaries in order to measure the future impact of such livelihood projects on their current standards of living.

In October 2018, the following projects were launched (including mitigation measures to limit eventual negative impacts on the environment): pig and chicken farms in Zagné, a cassava production and transformation project in Tiénkoula, and a dry fish store in Djidoubaye. In 2019, 3 more projects are scheduled to be launched in Keibly, Daobly and Zaipobly.

1.4.5 Capacity building

1.4.5.1 Capacity building of Ivorian civil society organizations and local population around classified forests

WCF's Independent Forest Monitoring (IFM) approach relies on communities surrounding the classified forests. These communities have been trained in forest management at the beginning of the project and we continue updating their knowledge. Ivorian NGOs show a strong interest in the IFM approach as a tool to bring necessary changes in the forest resources safeguarding. Following a first training session in 2017, WCF organized from 26 to 30 November 2018, a second capacity building session with already trained people and newcomers. 18 persons representing 12 NGOs were trained. Practical training was on legal analysis techniques, database management, mapping tools, and preparing field missions.



Participants of the civil society formation in Abidjan on 26 to 30 November 2018 and analysis of management and operational documents for the purpose of the independent monitoring mission

1.4.5.2 Building organizational capacity of local NGOs

Liberia: In the framework of the aquaculture program, WCF has been training an aquaculture assistant from the local organization Multi-Agrisystems Promoters (MAP). This assistant is gradually taking over full responsibility for training and supervision of 14 fish-farmers from the local communities.

Côte d’Ivoire: in November 2016, WCF had recruited an international volunteer, Marie Guittet, to train the local NGOs, NOFNA and OPRFT on administrative and financial management, planning and monitoring, reporting, environmental impact, and communication. From 30 January to 2 February 2018, two workshops were organized to determine the baseline capacity of the two NGOs. Fifteen members of NOFNA attended the workshops.



NOFNA’s first formation at 14 February 2018



Second evaluation of NOFNA; 11-12 September

From 11 to 12 September 2018, a second evaluation of the NGOs OPRFT and NOFNA was conducted with the tool “Organisational Capacity and Performance Index”, showing the members of NOFNA were progressing in the different modules received.

Due to problems with the management of the NGO OPRFT that did not participate fully in the trainings nor put enough effort in the different collaboration programs, we decided to stop all collaboration with this NGO at the end of 2018.

1.4.5.3 Capacity building of law enforcement officers

From 24 to 27 April 2018, WCF organized a capacity building workshop for Judicial Police Officers (JPO) on the procedures related to forest offences and transboundary regulation of natural resource management in Guiglo. This workshop aimed to improve the skills of the agents in charge of the observation and prosecution of offences committed within the forests, and to converge the different points of view of all the actors including magistrates, water and forest officials (OIPR, Cantonment and SODEFOR), gendarmes, customs, and army involved in the forest offences repression process. Several modules were developed by magistrates of Guiglo court and a jurist specialized in the field of the environment. This training brought together 22 judicial police officers and 6 judicial police agents.

1.4.5.4 Validation of a SODEFOR forest control procedures manual

In order to strengthen the capacity of forest control officers, WCF supported SODEFOR to compile all of its control procedures into a manual. A document relating to the forest control procedure already existed but was incomplete. A capacity-building workshop was held on 30-31 July 2018 and brought together 32 staff members directly responsible for the logging control implementation.

2 Activities in Guinea

Creation of the Moyen-Bafing National Park in Guinea

Having been mandated by the Ministry of Environment, Water and Forests in November 2015, WCF and the Guinean Office of Parks and Reserves (OGUIPAR) lead the necessary steps toward the creation of the Moyen-Bafing National Park (MBNP), located along the Bafing River and home to the largest known continuous population of chimpanzees in West Africa. In this context, several activities are conducted with various stakeholders. As part of the implementation of the 2011-2020 strategic phase of the Convention on Biological Diversity, the Guinean Government is committed to transform 25% of the national territory into protected areas covering different large ecosystems and being managed effectively. The Ministry of Environment, Water and Forests, through the Guinean Office of Parks and Reserves (OGUIPAR) developed and validated a national strategy for the management of this protected area that represents 8% of the country surface. Since 2010, a collaboration was established between WCF, OGUIPAR, the Guinea Alumina Corporation (GAC), the Compagnie de Bauxite de Guinée (CBG) and the International Finance Cooperation (IFC) of the World Bank, with the aim of offsetting the negative effects of mining operations and ensuring the conservation of western chimpanzees in a favourable eco-system. Thus, two specific processes, implemented in parallel, are pursued namely ecological compensation undertaken for the two mining companies CBG and GAC, with IFC/World Bank, and the creation of the Moyen-Bafing National Park. For the creation of the MBNP, apart from the on-going establishment of a working group to draft the Presidential Decree in 2020, some important actions have been undertaken in 2018.

2.1 Inter-ministerial commission meetings

An **inter-ministerial meeting** was held on July 5, 2018 with representatives from the Ministries of Mines, Environment and Energy to discuss 1) the impacts of mining and hydraulic projects in MBNP area; 2) the cohabitation between MBNP and the Koukoutamba dam; 3) the well-being of the local communities; 4) possible solutions to mitigate and compensate the damage caused by the dam construction. This meeting was organized in preparation of the workshop planned in Bamako on July 10-11, 2018 to present the Social and Environmental Impact Assessment (SEIA) study for the Koukoutamba dam construction area. The conclusions reached at this **Bamako meeting** concerning the environmental aspect of the SEIA were mixed. Many key aspects were not taken into account such as a compensation mechanism for negatively impacted chimpanzees.

2.2 Socio-economic study

In 2017, WCF-OGuiPaR completed the training of 14 sociologists for a **socio-economic study in the MBNP area**. This study is accomplished and data were analysed in 2018. The detailed results can be found in the study report, some are summarized here:

- The population of the area, mostly Peulh, is very young with a median age of 15 years.
- The isolation of this area limits access to basic public services such as education, health and drinking water: Thus, there is little public infrastructure and few qualified personnel to provide acceptable living conditions for local communities.
- Strong religious conservatism promotes Koranic rather than secular teaching. 47% of women over 18 have received Koranic education and less than 5% secular education.

Of the men, 74% have received Koranic and only 10% secular education. One in two women and one in five men did not go to school at all.

- The health status of humans in the area is deteriorating, mainly due to lack of access to health care, lack of sanitation, lack of access to safe drinking water, and food insecurity that can cause malnutrition. As many as 3/4 of the households have a food autonomy of less than 40%.
- 36% of women and 44% of men over 18 have no income, and two thirds of households have no means of transport to go to the market which is held, on the average, 23 km from the village away.
- Most practised activities in MBNP area are agriculture (bush-fields, plantations and gardens) and domestic animal husbandry: one individual in two practices agriculture, one individual in five practices animal husbandry.

Concerning the environmental changes and local knowledge:

- Village communities in MBNP have witnessed the increasing effects of environmental change on access to water since 1950. Pollution, climate change, and the drying up of rivers are increasingly limiting the access to water.
- Households acknowledge the negative impact of their activities on the environment (e.g. excessive deforestation, uncontrolled bush-fires) which accentuates the effects of climatic changes (e.g. reduced rainfall, drought, dry rivers).

2.3 Community consultations

In April and May 2018, the **third round of consultations of communities, regional and local authorities** took place, including 36 meetings, three administrative regions, five prefectures, 15 rural communes and 39 districts. Discussions focused on the ministerial decree for the processes of MBNP creation, the temporary boundaries of the park, the location of each village within the three zones of the park, the idea of development projects for communities. Moreover, the next planned steps were explained and questions and concerns of local communities were dealt with. Those meetings were part of discussions rounds required to prepare for the Free Prior-Informed Consent (FPIC) following the principles of the Durban Action Plan (2003). Along these consultations, key persons were designated by communities to animate discussions in the village about this subject and report all concerns from the communities to WCF and OGuiPaR.



Third round of community consultations in Gagnakaly

During the third round of community consultations, the principles of **village committees** have been discussed at the village level, at the commune level for consultation and conflict

management, and at the national level for a general coordination. A methodology for the establishment of village committees in 7 localities is finalised and will be launched soon.

To ensure informed participation of local communities in the process of creating the MBNP, **community outreach consultations** (called “Cadre de Consultation Communautaire de Proximité”, CCP1) began in January 2018. This consultation covered all localities concerned by the MBNP creation, i.e. 262 community entities (rural commune, district, sector and camp). Taking into account the boundaries of the communities’ territories, and various modes of use should make it possible to find a mutual agreement regarding the layout of three park zones. A first CCP1 mission (CARTO 1) was developed in six pilot villages of the Farmer Management Natural Regeneration (FMNR) project. Participatory mapping methodology was used to obtain, with the assistance of as many people as possible, precise information on community boundaries and on uses of territories in each of the visited villages. In parallel, a 4-months mission (CARTO 2) was implemented with the support of INSUCO (international social science and engineering office), in order to document the territorial boundaries of 262 communities of the MBNP. This project started in June 2018 and was completed in December 2018 (see all villages mapped in Figure 3 and one example in Figure 4). For the 26 settlements that lie in the fully protected zone of the MBNP, a strategy will be developed by all stakeholders and a field mission is planned for 2019.

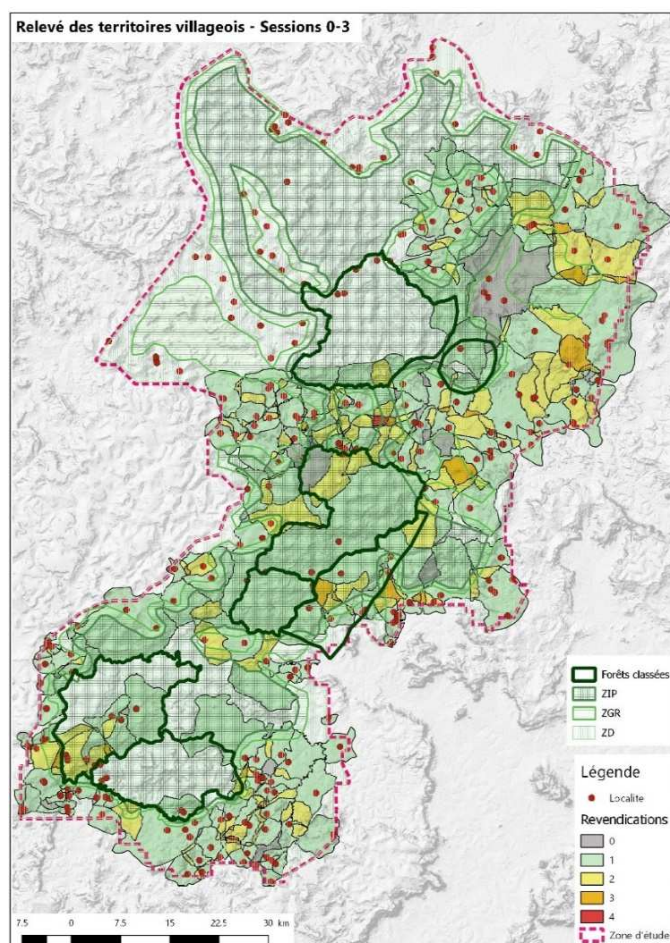


Figure 3: The village territories in the Moyon-Bafing National Park region, the seven classified forests with dark green boundaries and the three park zones with different green shadings: ZIP – „Zone Intégralement Protégée“ (Fully Protected Zone), ZGR – „Zone de Gestion de Ressources“ (Sustainable Resource Use Zone), ZD – "Zone de Développement“ (Development Zone)

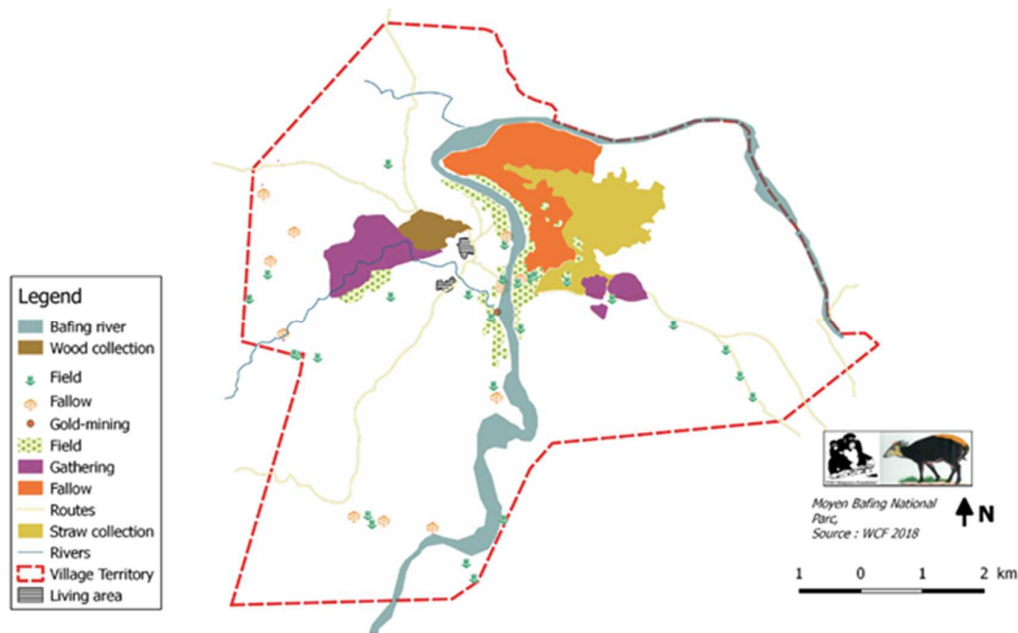


Figure 4: The use of areas within the village territory of Fougany mapped by our team

2.4 Law enforcement monitoring system

A surveillance strategy involving the communities and their comities, and anti-poaching actions involving a specially mandated patrol unit will be developed with OGUIPAR following international standards and national law. Cooperation will be developed with “Guinée Application de la Loi Faunique” (GALF) project to provide support in training agents mandated by the director of the MBNP to monitor illegal wildlife trafficking. A memorandum of understanding is planned for 2019.

2.5 Re-establish forest cover and ecosystem function

A **tree nursery** was implemented in Laafa village along the “Laafawol” river and consolidated with fences, preventing domestic and wild fauna to prey on plants. The nursery hosts approximately **12,690 plants, and more than 40,000 native tree seeds** have been stored. Two types of tree species selected for the nursery:

- Trees valuable for wildlife: species producing fruit known to be consumed by wildlife or used for nesting, such as *Carapa procera*, *Azelia africana*, *Daniellia oliveri*, *Dialium guineense*, *Cola cordifolia*, and *Parinari excelsa*.
- Trees valuable to the local human population: species known for their economic value, such as, *Azelia africana*, *Dialium guineense*, *Erythrophleum guineense*, and *Isobertinia doka*.

We created in 12 villages working groups formed by 10 members each, nominated by the village, to accompany the entire reforestation and forest regeneration process. The groups were asked to propose a list of sites for the reforestation, which implied for them to discuss the matter within the community and to obtain their support. The proposed degraded sites were then confirmed by WCF on basis of an initial analysis of SPOT images, and two field missions were organized for confirmation in March 2018.

Currently, 12 sites have been selected that were proposed by the villagers and also fulfilled the WCF criteria for ecological restoration. The sites were included in the signed agreements with village representatives. They are all located within the territory of our pilot villages. Noteworthy, after the signature of the agreements, some of the villages contacted the WCF to propose additional sites for reforestation and some were included in the agreement.

In addition, three other reforestation sites located in the Bakoun Classified Forest (CF), two reforestation sites in the Boula CF, all included in the fully protected area of the national park, have been selected. These sites are not subject of any community agreements, because the land is owned by the state. Moreover, two sites on the banks of the Bamawol and Baridondéwol rivers in the north of the park, and three spring heads in the villages of Kouly have been registered. The identification work will continue until the next raining season in order to determine more areas, and we will focus our intervention on 28 villages within the 15 rural and urban communes included in the land management plans.

In May 2018, a community mobilization/sensitization mission was organized to negotiate and **sign agreements to defend and restore significant landscapes as well as spring heads**. The mission concerned the villages Kalinko Konkero, Lallabara and Laafa-Boube. These villages had all raised concerns regarding deforestation and insecure water supply and unanimously agreed to protect important areas (such as spring heads) which could largely solve this problem. Agreements were discussed and signed by all participants of the villages.

In September 2018, the **first reforestation project has been launched. 4.34 ha in the MBNP were enriched with the following trees species: *Azelia africana*, *Erythrophleum guineensis*, *Cola cordifolia*, *Tamarindus indica*, *Diospyros mespiliformis*, *Detarium senegalensis*, and *Kaya senegalensis***. The local NGO “PRIDE” is supervising the activities of 30 local workers proposed by the community working groups. They have been trained in September by WCF and PRIDE to also carry out awareness actions about the MBNP creation, forest protection, and bushfire limitations.

2.6 Agro-ecological development strategy

WCF engaged in a partnership with the international NGO GRET with the aim to work on **agro-ecological development and consultation on natural resource management in the MBNP region**. The first mission of GRET took place in May 2018 with international experts and a 6-month internship was launched. As part of this WCF-GRET partnership, a student working for her final internship (Engineer at the SupAgro school in Montpellier, France), arrived in May 2018. The diagnostic mission was carried out to describe the operating systems of rural leaders and to collect information on how to efficiently initiate rural development in communities of MBNP. A first document summarising the observations and suggesting first levers for action was provided by the partner. Based on the geological, pedological, hydrological, topographical and demographic profiles of MBNP area, four intervention-areas were identified. They will be further specified following interviews enquiring on agriculture and livestock activities, as well as accessibility, particularly during the rainy season.

2.7 Farmer Managed Natural Regeneration

A pilot project to support rural development has been initiated by WCF and OGuiPaR. This project supports the introduction of Farmer Managed Natural Regeneration (FMNR) into existing agricultural systems for a conversion to innovative and environmentally friendly

systems. 12 farmer-leaders from six pilot villages and two districts were selected. WCF wishes to promote a participatory approach in order to ensure the sustainable engagement of these farmer-leaders. **Participatory and agro-ecological diagnoses of production systems were carried out at the scale of the six villages and family farms of the 12 selected farmer-leaders** to assess the initial situation and identify possible innovative solutions, including FMNR. These farmer-leaders can advise other community members to introduce new techniques into the region. In 2018, the WCF team for rural development comprised four activity managers and two program officers, and implemented several missions in the villages of Lallabara, Kalinko Konkéro, Kalinko Missira, Fougny, Kouli Fakara and Sangan. The data collected during the two missions DIAG1 and DIAG2 are analysed. The results will guide the community development support strategy to be considered for pilot villages and leading farmers. Posters to present the results of the diagnoses are being prepared.



Participatory and agro-ecological diagnoses conducted in Lallabara

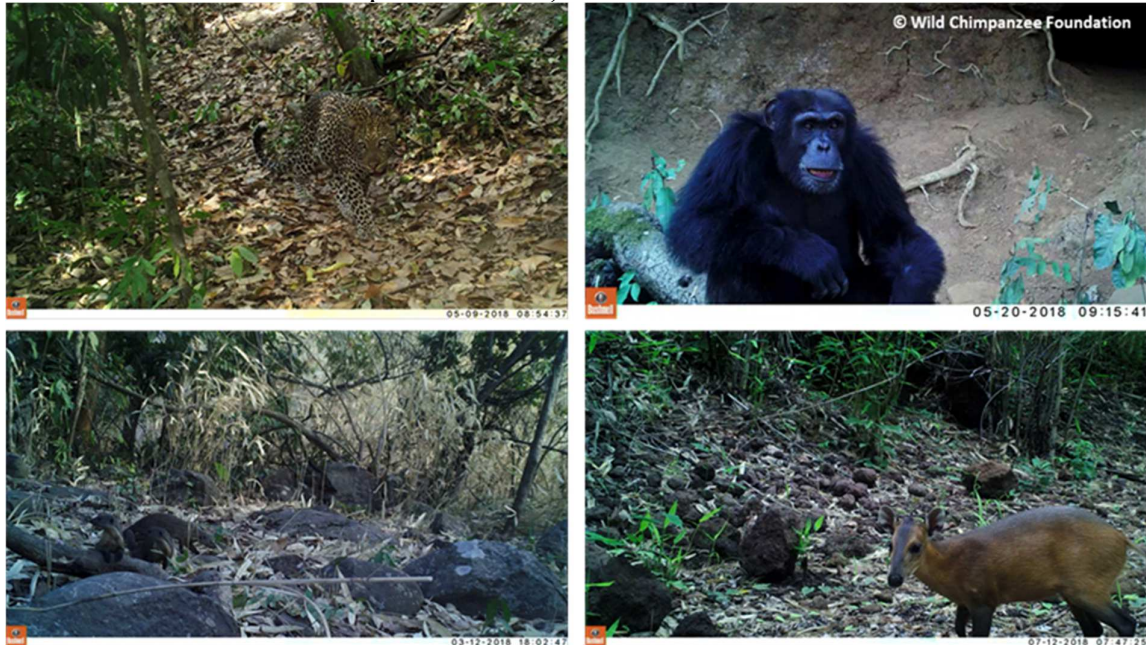
Conversion of the wetlands needs to be defined through a larger agreement with pilot communities including the reforestation process, protection of forest and specific natural resources (as defined in the 3 park zones), taking into consideration the results of agro-ecology diagnostics. This study will be extended to the entire park with the support of GRET. The process will be organized through economic interest groups, relying on existing associations called “Groupement d’Intérêt Economique” that WCF will reactivate, or create where necessary.

2.8 Biomonitoring

In April 2018, **400 cameras for monitoring wildlife** were installed in the north-western and central part of MBNP. 300 of them are used for a systematic inventory design throughout the park placing them in three phases successively from the north to the south. 100 cameras were placed in a denser spatial design to apply the capture-recapture method on chimpanzees (called “Spatially Explicit Capture-Recapture” - SECR) in a 100 km² area.

Out of **180,000 videos, 57,412 have been viewed to date, including 16,567 videos on which animals were seen**. At the time of writing, 32 animal species have been confirmed, such as baboon (*Papio papio*), chimpanzee (*Pan troglodytes verus*), common warthog (*Phacochoerus africanus*), leopard (*Panthera pardus*), Golden cat (*Caracal aurata*), African buffalo (*Syncerus caffer brachyceros*) and red flanked duiker (*Cephalophus rufilatus*). A new species new to the region was confirmed, namely the Gambian mongoose (*Mungos gambianus*).

To date, **590 individual chimpanzee videos** have been obtained and **23 adult males** have been identified (considered as such when analysts and supervisors have recognized the individual on at least two independent videos).



*Species filmed by camera traps in the Moyen-Bafing National Park: top left: leopard (*Panthera pardus*), top right: chimpanzee (*Pan troglodytes verus*), below left: gambiaan mongoose (*Mungos gambianus*), below right: duiker (*Cephalophus rufilatus*)*

Cameras were placed in the different habitats of the Moyen-Bafing National Park to monitor differences in wildlife abundance. Chimpanzees are most frequently seen in the forest, whereas vervet monkeys and baboons are most often seen in the bamboo forest. Patas prefer open habitats such as wooden and grass savannahs (Figure 5).

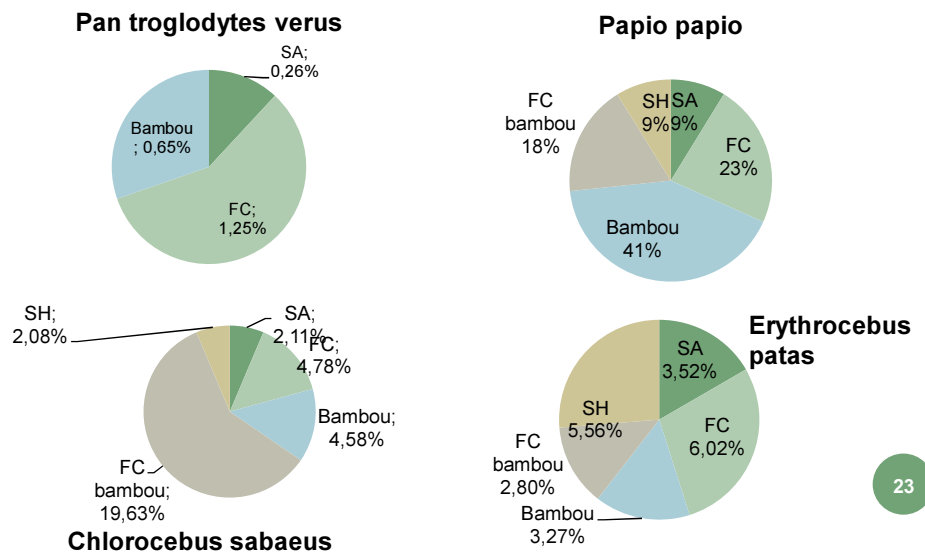


Figure 5: Species-specific habitat use for four primate species in the Moyen-Bafing National Park. For each species we present the 3 to 5 habitats they inhabit with the pie piece sizes proportional to the habitat-specific capture rates (Habitat types: wooden savannah (SA), grass savannah (SH), forest (FC) with or without bamboo, and bamboo alone)

2.9 Floristic inventory

A collaboration with the Kew Royal Botanical Garden and the National Herbarium of Guinea has been developed to conduct botanical surveys in the MBNP. To provide: 1) a list of all plant species found in the major habitats; 2) and identify particular threatened species.

In February 2018, a first mission focused on waterfall plants, and confirmed the biodiversity uniqueness of the park by discovering two plant species new to science and that possibly represent new genera (a scientific publication is underway). A mission that took place in May/June 2018 used inventory plots and Field Verification Points (PVTs). The team used standard 25m x 25m blocks in dense or open forest, 5m x 5m in grass. A total of 12 plots were surveyed in four vegetation types according to White's classification, plus 69 PVTs. They will be used for verification and characterization of vegetation types for area mapping.

A preliminary list of botanic species of MBNP is available and includes 206 species. Fourteen threatened species according to IUCN have been recorded (Table 2). The list is not yet complete and the number of species will increase with future field missions.

Table 2: List of threatened flora species found in the Moyen-Bafing National Park, IUCN categories: EN-Endangered; CR - Critically endangered; VU - Vulnerable, NT - Near Threatened

Family	Species	IUCN category	Habitat
Acanthaceae	<i>Barleria asterotricha</i> Benoist	CR	Evergreen Forest
Acanthaceae	<i>Lepidagathis fimbriata</i> C.B. Clarke	NT	Bowé
Acanthaceae	<i>Lepidagathis pobeguinii</i> Hua	NT	Bowé
Leguminosae-Caesalpinioideae	<i>Afzelia africana</i> Sm.	VU	Evergreen Forest/ Woodland
Malpighiaceae	<i>Acridocarpus spectabilis</i> (Nied.) Doorn-Hoekm.	VU	Wooded Grassland
Melastomataceae	<i>Argyrella (Dissotis) linearis</i> (Jacq.-Fél.) Veranso-Libalah & G.Kadereit	EN	Wooded Grassland / Wetland
Meliaceae	<i>Khaya senegalensis</i> A.Juss.	VU	Woodland/ Forest Gallery
Ochnaceae	<i>Lophira lanceolata</i> Tiegh. ex Keay	VU	Woodland
Primulaceae	<i>Embelia djalonensis</i> A.Chev. ex Hutch. & Dalziel	VU	Gallery Forest
Podostemaceae	<i>Inversodicraea sp nov. Koukoutamba</i>	CR?	Falls
Podostemaceae	<i>Stonesia taylorii</i> C.Cusset	EN	Falls
Podostemaceae	<i>Inversodicraea aff pygmaea</i>	CR (PE)	Falls
Rubiaceae	<i>Pavetta lasioclada</i> (K.Krause) Mildbr. Ex. Bremek	VU	Gallery Forest
Sapotaceae	<i>Vitellaria paradoxa</i> C.F. Gaertner	VU	Woodland

The SEIA study for the Koukoutamba dam construction area in the MBNP recorded 207 plant species, of which five are classified as vulnerable (VU) according to IUCN: *Khaya senegalensis*, *Milicia regia*, *Vitellaria paradoxa*, *Afzelia africana* and *Mitragyna stipulosa*.

2.10 Remote sensing analysis to identify vegetation types

For the Kew Royal Botanical Garden specialists, the pre-processed SPOT images were not suitable for vegetation classification mapping. Therefore, we have agreed to use Landsat imagery as baseline for the vegetation monitoring process. For another study with INSUCO, the SPOT images from 2015 and 2016 will be used.

During the course of Kew's Royal Botanical Garden project on important plant areas of Guinea, Jenny Williams of Kew's spatial analysis team did a classification of the entire country based on Landsat imagery. Vegetation classes were identified and extracted from Landsat satellite imagery over 10 years of dry season. Approximately 45 satellite image data (February to March) for each of 19 Landsat 7/8 scenes were processed into a time-series. These time-series images, containing many different spectral bands, were analysed and combined into a single 'green' layer and subsequently classified into 36 separate classes to facilitate the identification of vegetation types. This processing procedure was designed and implemented specifically to focus on forest cover types and senescent grasses for Guinea.

2.11 Monitoring of environmental parameters

Since February 2018, all data on water level variations in five main rivers have been collected on a daily basis by trained villagers. To anticipate extreme variations in the water levels, two scales were installed close to each other in most locations allowing to measure high and low water levels equally precise. To improve the quality of the data collected, two additional training sessions were organized in 2018.

In May 2018, three rainfall devices were installed in the park at Kalinko Konkero, Lekingbele and N'Direyanguey, following a north-south gradient to assess the variations of precipitation in the area and complete the information necessary for the management of the park.

2.12 Ornithological monitoring

The ornithological monitoring study in the MBNP was done with Biotope, a first mission in June 2018 and a second in December 2018. First results show that 147 bird species were encountered, belonging to 52 families including 16 intra-African migrants. The presence of three priority species for conservation is confirmed: Scavenger Vulture (*Necrosyrtes monachus*), African Vulture (*Gyps africanus*) and Rüppell Vulture (*Gyps rueppellii*). These species are on the 2017 IUCN Red List (CR, Critically Endangered).

The SEIA study at the Koukoutamba dam site in the MBNP recorded 189 bird species, and three new species for Guinea's birdlife: Natal Nightjar (*Caprimulgus natalensis*), Buzzing Lark (*Mirafra rufocinnamomea*) and Red-billed Worker (*Quelea quelea quelea*).

The WCF camera trap monitoring identified 4 bird species on the ground.

2.13 Bushfire study

In order to follow the evolution of the vegetation cover within MBNP, WCF has collected monthly information on burned areas from 2014 to 2018 (Table 3), and areas most susceptible to bushfire were identified.

Table 3: Bushfire observations over 4 years in the Moyen-Bafing National Park with NASA FIRMS

Observation area (buffer zone +15 km)	Number of fires detected	Years of observation	Number of fires average / year	Number of fires average / year / km ²
13,561.38	66,948	4	16,737	1.23

A specific strategy is going to be finalized and validated in 2019 with OGuiPaR and the local communities. Some bushfire prevention activities were initiated in 2018 to protect the 12 selected reforestation sites.

2.14 Awareness raising

In August 2018, the partnership with the rural radio of Tougue was finalized in Labé with the station director.

The recruitment of 14 community animators for the MBNP region is under way. The animators will facilitate communication with the local communities, broadening awareness in favour of sustainable management of the natural resources.

2.15 Theater tour

In November 2018, a new theater play about the creation of the MBNP was designed by WCF and the "Tawuly" company contracted via the Association for the Promotion of Health and Education in Guinea (APSEG). In December, the tour started in **14 villages of the MBNP reaching 1624 persons**. The theater tour will continue in February 2019 in 16 other villages.

2.16 Environmental education - Club P.A.N.

During the school year 2017/2018, Club P.A.N. (People, Animals, Nature) was active in six schools (Kalinko, Keyla, Gagnakaly, Fello-Kollet, Kounet and Kouratongo) with about **503 children participating**. Eleven participants (coordinators, teachers and principals) were trained in January 2018 during a four-day workshop in Dinguiraye. We conducted 10 education sessions in each school and finished pre- and post-evaluations of the children.

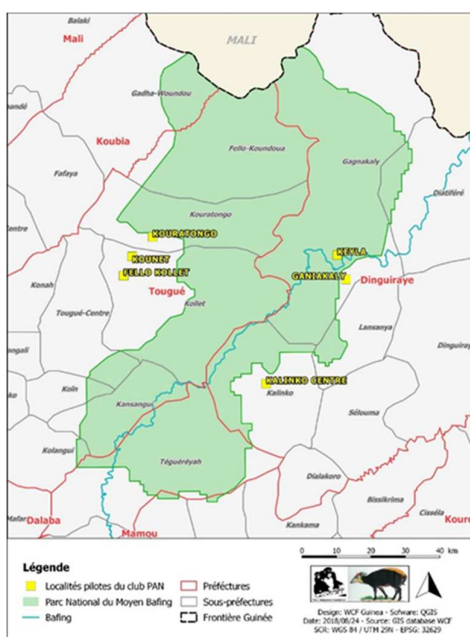


Figure 6: Club P.A.N. villages in the Moyen-Bafing National Park region in 2017/2018

The children were tested with nine different knowledge questions about basic biology and conservation in pre- and post-evaluations. They increased their knowledge by 43% on the average, and 87% of them want to avoid eating bush-meat in the future. Children also adopted a more positive view towards nature. The result is particularly encouraging regarding the status of the Moyen-Bafing National Park. After having participated in the Club P.A.N. program, 100 % of the children agree that this park needs full protection.

The parents' day, prepared by the children at the end of the school year reached **1059 villagers** of whom 60 adults were evaluated, all of them giving positive feedback to the program, mainly mentioning their increase of knowledge through the children, and the importance of national parks and forests for their own benefit.

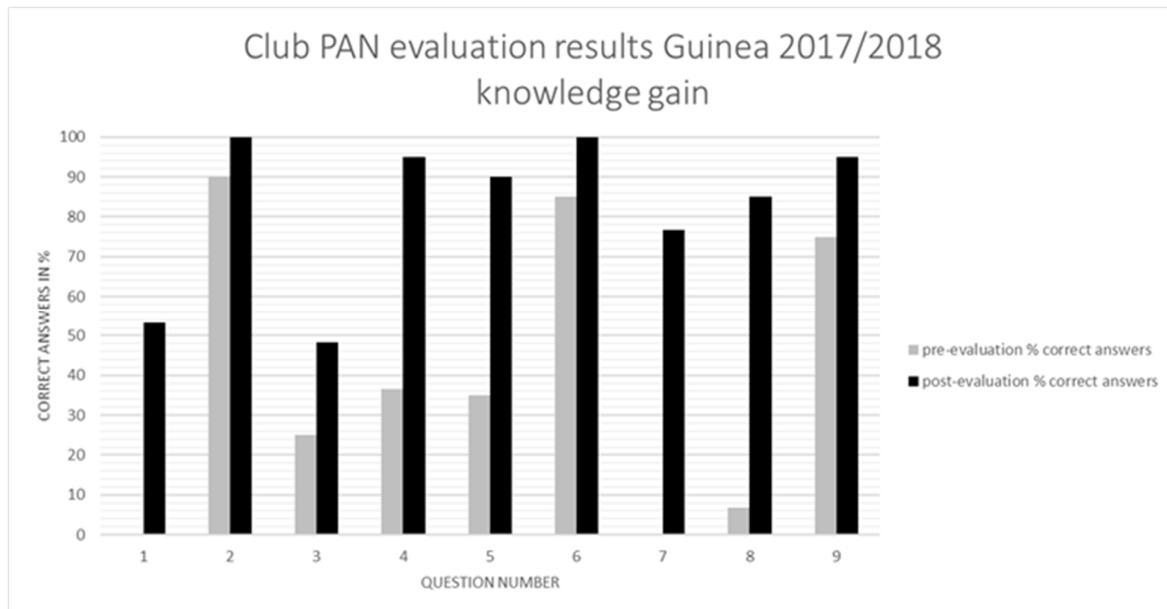
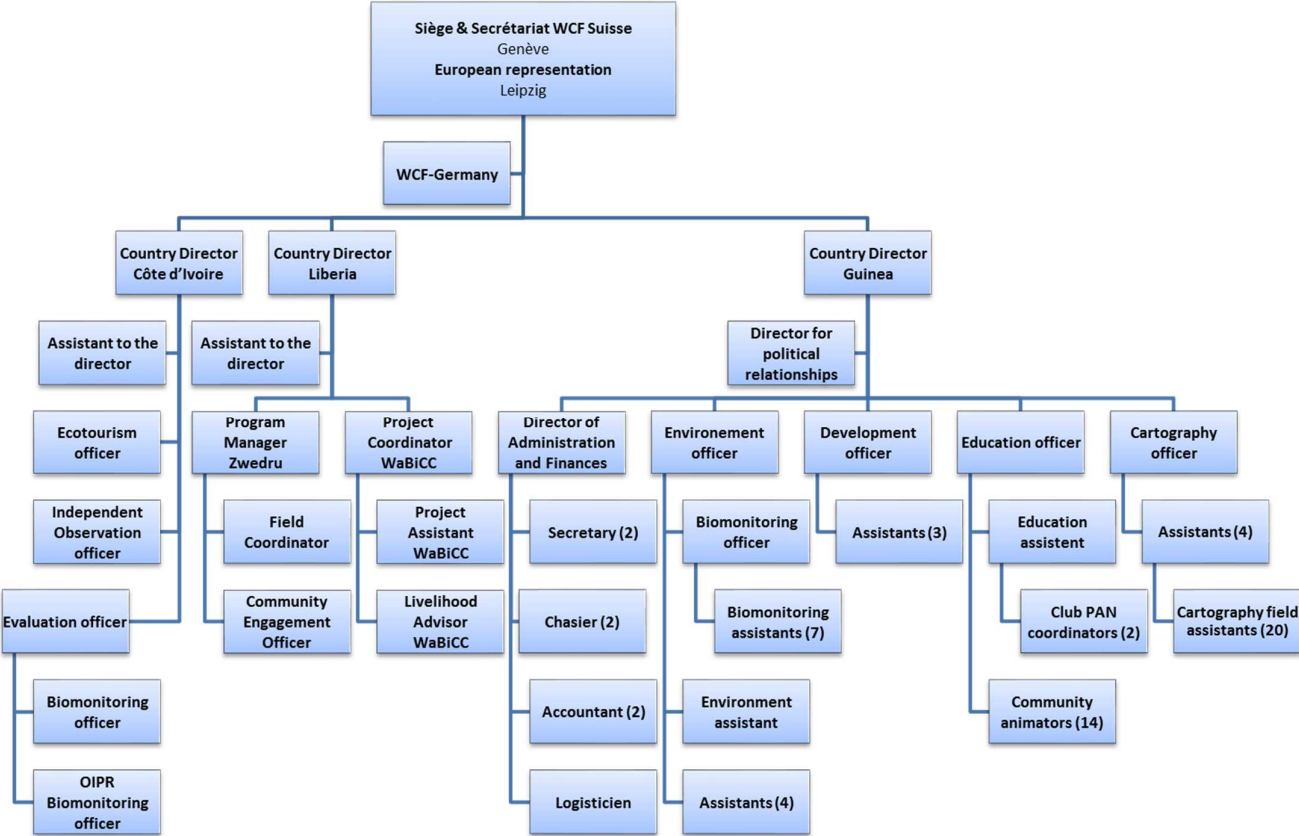


Figure 7: Correct answers in percent to nine knowledge questions during pre- and post-evaluations show the knowledge gain after Club P.A.N. program in Guinea

The new Club P.A.N. school year 2018/2019, already started with the teacher training workshop in Labé in the first four days of November 2018. During this school year we are working with 8 primary schools in the MBNP region: Daara, Laafa-Boube, Kalinko, Gagnakaly, Keyla, Fello-Kollet, Kounet and Kouratongo. We will reach more than 700 children and their families.

Detailed reports on all the activities are available upon request.

3 Organisational chart



4 Acknowledgements

WCF is grateful to all the conservation agencies and foundations supporting its conservation activities in 2018:

Arcus Foundation, Auckland Zoo, Ambassade de Suisse en Côte d'Ivoire, APE TAG, Bengo/WWF/BMZ, Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, Bingo-Umweltstiftung with FUN (Förderverein für Umwelt und Natur), Columbus Zoo and Aquarium, Compagnie des Bauxites de Guinée, Darwin Initiative, DierenPark Amersfoort Wildlife Fund, Disney Conservation Grant, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Food and Agriculture Organization of the United States (FAO)(EU-FAO FLEGT), Furuvik Zoo (Furuviksparken), Fondation Ensemble, FSPI via Ambassade de France, Guinea Alumina Corporation (GAC), Global Giving, Goldberg Grant for Conservation, Great Ape Conservation Fund of the U.S. Fish and Wildlife Service, Haldimann Stiftung, Oklahoma City Zoo and Botanical Garden Conservation Action Now, Paul Schiller Stiftung, PUMA/UNEP-GRASP/SSFA, Rettet den Regenwald e.V., St. Andrews Prize for the Environment, Swiss Foundation for Solidarity in Tourism, The Biodiversity Company, Tierschutz Zürich, WA BiCC project from USAID, M. Wientjes via WWF, World Wildlife Fund for Nature (WWF), World Bank/OIPR/PARCI, Zoo Leipzig, and Zoo am Meer Bremerhaven.

WCF is grateful to all partners supporting its activities in 2018:

Max Planck Institute for Evolutionary Anthropology, WILD Foundation, World Wildlife Fund, Rainforest Alliance, Fauna & Flora International, Ministères de la République de la Côte d'Ivoire, Ministère de l'Environnement, du Développement Durable, de Salubrité Urbain, des Eaux et Forêts, Ministère de l'Enseignement Supérieur et de la Recherche Scientifique, Ministère du Tourisme, Ministère de l'Education Nationale, Ministère de l'Economie et de Finances, Office Ivoirien des Parcs et Réserves, Ministries of the Republic of Liberia, Ministères de la République de la Guinée, Direction Nationale des Parcs et Réserves, Centre Forestier de N'Zerekore, Forestry Development Authority, Société de Développement des Forêts, Fondation Parcs et Réserves de Côte d'Ivoire, Centre Suisse de Recherches Scientifiques, Université d'Abobo-Adjame et de Cocody Abidjan, Deutsche Gesellschaft für Internationale Zusammenarbeit, KFW: Bankengruppe, Division Agriculture et Ressources Naturelles Afrique sub- Saharienne, Agence Française de Développement, Union Européenne, Eddie Theatre Productions, Alma Production.

The WCF sincerely thanks the many private donors concerned by the vanishing wild chimpanzee populations for their generous donations towards its projects in 2018.