



**AFRICAN FOREST
ELEPHANT FOUNDATION**



BOOTS ON THE GROUND *ZIAMA 2.0 Interim Report 2019*



**AFRICAN FOREST
ELEPHANT FOUNDATION**

**INTERNATIONAL
ELEPHANT** 
FOUNDATION.ORG

Principle investigator: Christian Triay, Co-founder | COO
Co-investigator: Callum Gerrish, Co-founder | CEO
Project start date: February 2019
Project completion date: December 2019

BOOTS ON THE GROUND | ZIAMA 2.0

Principle Investigator: Christian Triay | Co-founder & COO

Co-investigator: Callum Gerrish | Co-Founder & CEO

TABLE OF CONTENTS

1. Summary of Goals and Objectives.....	3
2. Conservation Needs.....	3
3. Project Impact.....	5
4. Summary of Progress.....	7
5. Problems or Challenges.....	7
6. Conclusion and Way Forward.....	8
7. Project Collaborators.....	8
8. Media Information.....	8

1. Summary of Goals and Objectives

Goal

- To protect the last African forest elephants in Guinea and their forest habitat - the forests of the Ziama Biosphere Reserve.

Objectives

- To equip the eco-guards of Ziama with technical equipment to improve bio-monitoring and anti-poaching efforts, thus ensuring the protection of Ziama's forest elephants, as well as their habitat.



Expected Outcome

- Reduced African forest elephant poaching as a result of increased habitat security and effectiveness of security patrols.
- Extended anti-poaching and bio-monitoring patrols.
- Accurate forest elephant population size and movement monitoring in the Ziama forest
- Increased surveillance on illegal hunting and poaching in the Ziama forest.

Activities

- Purchase and deliver 10 camera traps; 10 handheld GPS units; 25 two-person tents and 50 camping mats to the CFZ Rangers protecting the Ziama Forest.
- Conduct a site-visit to review outcomes and assess further conservation needs on the ground.
- Use equipment to conduct an elephant population census.

2. Conservation Needs

The project focuses on the Ziama Massif forest in Guinea – on the border with Liberia – which contains the last remaining population of African forest elephants in Guinea. It is therefore considered to be a critical priority site for forest elephants in West Africa.

The Ziama Forest is a remote and vital tropical forest ecosystem in the mountainous highlands of southeastern Guinea and extends across the border to Liberia. Renowned for its incredibly high levels of biodiversity as a UNESCO biosphere reserve, boasting more than 1,300 species of plants and more than 500 animal species, the Ziama Forest ecosystem boasts pristine and dense primary and secondary mountain forest. Due to this richness of the ecosystem it is home to a great number of Africa's threatened mammal species, including chimpanzees and the only viable forest elephant population in Guinea.

Guinea is the source of 22 West African rivers, including the Niger, Gambia, and Senegal Rivers. Protecting the forests that act as watersheds for these rivers is crucial for the health of wildlife and humans alike across the region. The south of Guinea contains important remnants of the Upper Guinean forest that used to cover the entire region of West Africa. The biodiversity under the lush forest canopy is stunning – elephants, chimpanzees and many more endangered species, including 22 species protected by CITES, all rely on this unique habitat.

The Zياما Forest and the wildlife which benefits from and sustains this important ecosystem, is under threat. Agriculture has begun to encroach upon the Zياما Forest Biosphere, replacing pristine ecologically rich forest landscapes with farmland – we witnessed the encroachment of palm oil plantations and livestock farming onto what was formerly pristine forest now cleared for agricultural use. Habitat destruction in the form of forest clearing for agricultural development timber extraction, together with the ever-present poaching threat that accompanies these activities, threatens the very survival of both the forest and the elephants that call it home.

A census in 2005 revealed that only approximately 200 forest elephants remained in the Zياما forest - ecologically isolated from other forest elephant populations. However, recent studies have shown that this number may have been inflated by the migration of forest elephants escaping the turbulence of the Liberian civil war and that may now in reality be much lower.

“Forest elephants are a distinct species”

Unbeknown to many people, one quarter of the continent's elephants live in deep, often inaccessible rainforests in Central and West Africa. Scientific evidence now supports the fact that there are actually two distinct elephant species in Africa: the African savanna elephant (*Loxodonta africana*) and the African forest elephant (*Loxodonta cyclotis*).

African forest elephants are smaller than their savanna cousins; they have straighter, downward-pointing tusks, smoother skin, and rounder ears. Forest elephants even have a different number of toenails, with five toenails each on the front feet and four on the back feet (compared to four on the front and three on the back for savanna elephants). They live in smaller family groups than savanna elephants and have a very different diet in their rainforest habitat, with a penchant toward fruit when available.

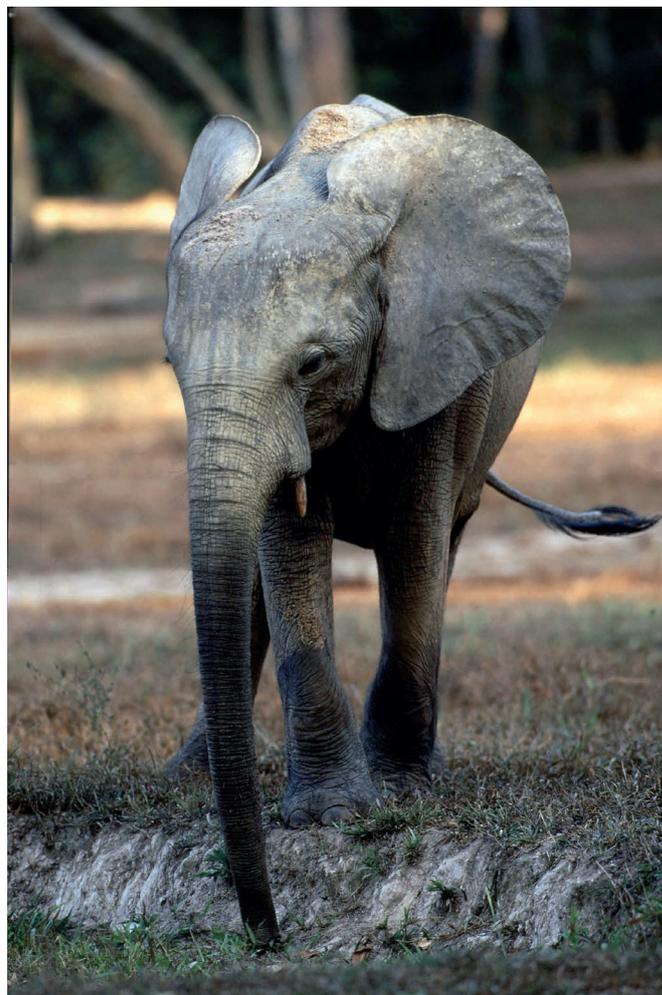


However, forest elephant populations face a greater struggle to rebound from the effects of poaching due to their biology. Leading forest elephant biologist Andrea Turkalo found that forest elephant females not only conceive less frequently than savanna elephants, but they start reproducing much later too. As a result, forest elephants have a population doubling time of up to 60 years, compared to only 20 years for savanna elephants. The slow reproductive rate, coupled with relentless poaching of forest elephants, does not bode well for their survival as a species.

Forest elephants are vital for the survival of the rainforests where they live. Each elephant produces about a ton of dung every week, which is an excellent fertilizer. They disperse seeds from more species of trees over greater distances than any other animal. Moving around the rainforest, they create gaps in the dense vegetation that, as well as being used by other animals, also allows new plants to grow. Importantly, they create and maintain forest clearings that provide water to other forest animals such as western lowland gorillas. They are the mega-gardeners of the forest in their role as seed-dispersers, and accordingly, they are a keystone species in the biodiversity of the rainforest.

“Forest elephants are in serious danger of extinction”

According to the results of the PLOS ONE study in 2013 (Maisels et al.) there have been a widespread and catastrophic decline in African forest elephant numbers, with a decline of 62% between 2002 and 2011 and a corresponding range contraction of approximately 30% in the same period. The cause of decline is due to the combination of the rapid increase in the demand for ivory in Asia and its ease of sale there, coupled with lack of effective governance in Central and West Africa. Poachers now have unprecedented access into the depths of the forests via unprotected roads created by logging companies whose operations destroy forest elephant habitat.



Unfortunately, despite the growing amount of evidence supporting two distinct African elephant species, most governments and conservation authorities – including the International Union for the Conservation of Nature (IUCN) and the Convention on International Trade in Endangered Species (CITES) – only acknowledge one species, the savanna elephant. As a result, the IUCN Red List currently classifies the African elephant population as ‘increasing’ and ‘vulnerable’. If forest elephants were to be classified as a separate species, then factually they would be listed as ‘decreasing’ and likely assigned a more serious category than vulnerable, such as ‘endangered’ or critically endangered’.

The future of forest elephants not only depends on recognizing forest elephants as a separate species but also on the management of protected areas staffed by well-trained personnel. This includes implementing effective anti-poaching and bio-monitoring patrols.

3. Project Impact

The immediate short-term benefit and outcome for the eco-guards will be the ability to carry out their anti-poaching and bio-monitoring duties more effectively.

The longer term, it is more than just providing eco-guards with equipment to carry out their duties. It is also about reminding the eco-guards that they are vital to the survival of the forest and all wildlife that inhabits it, and that they are not forgotten in the world's desire to protect wildlife. AFEF is committed to ensuring that these crucial men and women feel valued; maintain morale and self-worth; and ensure loyalty to the cause.

As you can see from the map of the Zياما region below, the ranger posts are located around the perimeter of the forest. As it stands, anti-poaching and bio-monitoring patrols are limited to three to four hours from the respective ranger posts due to lack of equipment (e.g. tents and gps units). This means that large tracts of forest are actually unmonitored.



Tents & Sleeping Mats

Without tents and sleeping mats, the Zياما rangers cannot conduct multi-day patrols—meaning that vast areas of forest are left unpatrolled. This is because rangers are limited to traveling around 4 hours away from each ranger post having to turn back to ensure that they can arrive in daylight. The ranger posts are all situated around the periphery of the Zياما forest reserve, leaving vast areas of the reserve without the security of the anti-poaching patrol presence. Therefore, tents would allow rangers to conduct multi-day patrols through deeper parts of the Zياما forest and ensure that habitat security in the Zياما forest is as robust as is necessary to protect the habitat itself, its forest elephants and other important wildlife.

GPS Units

We experienced how easy it is to disorientate yourself inside the dense forests of West Africa and the Congo Basin. Even the rangers who know the forest well can lose their way. GPS Units will help rangers conduct more efficient and targeted patrols of the forest without getting lost.

More importantly however, GPS units would assist with anti-poaching and bio-monitoring allowing rangers to record important information, such as location of forest elephant sightings; forest elephant dung; illegal farming; and evidence of poaching. This data collection which is made possible through the supply of GPS units is crucial to ensuring the assessment and implementation of comprehensive and effective conservation strategy. With our ground partners, we are taking steps to establish effective conservation solutions into the longer term and this data will be crucial to the protection of the ecosystem.

Camera Traps

Traditional transect methods of elephant monitoring are in the process of being replaced with the use of camera traps and DNA sampling. This method will allow us to more accurately estimate forest elephant population numbers by allowing scientists to identify individual elephants. A census using these methods will be conducted in the Zياما forests as well as surrounding forests in neighbouring Liberia.



A female forest elephant with its calf in the Zياما forest © CFZ

4. Summary of Progress

AFEF are in the process of arranging the delivery of equipment to the rangers in Zياما. Following the delivery of boots, socks, backpacks in 2018, AFEF will now be delivering 25 two-person tents; 50 camping mats; 10 camera traps and 10 garmin handheld GPS unit.

The 10 Reconyx HyperFire 2 Camera traps with blackflash, as requested by our partners on the ground, have now been shipped to the rangers in Guinea in partnership with Fauna and Flora International.

5. Problems & Challenges

We have not faced any problems or challenges to date however we anticipate number of similar logistical challenges to our previous project in 2018.

Firstly, due to the poor road conditions between Conakry and Sereidou, we will again travel to Monrovia in Liberia and then travel to Guinea by road. This requires visas for both Guinea and Liberia as well as travel arrangements in Liberia. Thankfully, Fauna and Flora International are willing and able to assist us with the necessary arrangements.

Secondly, due to the customs requirements, the equipment will be sent to Conakry and travel within Guinea.

6. Conclusion and Way Forward

The equipment will be sent from South Africa to Guinea in September 2019 so that they can be delivered to the rangers in Sereidou by November 2019.

We will be visiting the Ziama region at the beginning of December 2019 to officially hand-over the equipment to the rangers and assess the impact of the equipment that was delivered in 2018. We will spend approximately one week with the rangers in Guinea.



7. Project Collaborators



8. Media Information



www.forestelephants.org



@forestelephantfoundation



@forestelephantfoundation
@callumgerrish
@c.z.triay



@AFEF_elephants