



# Program "My Elephant Neighbor"

## Project : Mouhoun Elephant Aerial Total Count

### Final Report – August 2013



- 1. Title :** Program "My Elephant Neighbor" – Project "Mouhoun Elephant Aerial Total Count"
- 2. Principal coordinator :** Mr. Julien MARCHAIS & **Principal investigator** Dr. Philippe BOUCHÉ
- 3. Starting date :** February 1st, 2013
- 4. Completion date :** June 30th, 2013 (report took numerous discussions hence the delay of submission of this report)

**A full report of this project has been produced separately in French and English. Dr. Philippe Bouché is the main author. The office National of Natural Areas (OFINAP) and the NGO *Des Eléphants & des Hommes* are the two partner organizations of this project which was funded by IEF and Amnéville Zoo in France. This full report is attached to this specific report for IEF.**

#### **5. Summary of project goals and objectives :**

- Conduct an aerial total count of the Mouhoun elephant population during the 2013 dry season, between February and April.
- Produce an estimation of the population and its composition.
- Produce a map of its dry season range.
- Produce recommendations for the future management and conservation of this population, including establishment of corridors.

#### **6. Describe any changes in goals and objectives from the original proposal : None**

#### **7. & 8. Summary of project results, activities and findings :**

Boucle du Mouhoun is a soudano-sahelian ecosystem that shelters the third larger elephant population of Burkina Faso and one of the largest populations of West Africa.

The former survey of Boucle du Mouhoun ecosystem occurred in 2002 and in 2005 for Mare aux Hippopotames. Since, no aerial survey has been done.

Aerial total count method was used to cover a study area of 1976 km<sup>2</sup> between Deux Balé National Park and Réserve de la Mare aux Hippopotames. 13,6 hours were necessary to cover the area at scanning rate of 144,6 km<sup>2</sup>/hour. Main results are: elephants: 5 ; roan antelope : 19 ; duikers : 3, patas monkey : 7.

In the same time, cattle number reached around 5,000 animals, mainly present in the classified forests, revealing the lack or inappropriate law enforcement outside the Deux Balé National Park and the Réserve de la Mare au Hippopotames. During the 2002 survey, 10 herds totaling 93 individuals have been recorded, versus 1 totaling 5 individuals in 2013 despite a sample rate far larger in 2013 than in 2002 (20% sample in 2002 vs. 100% in 2013). Comparison with the results of the 2002 aerial count show a drastic fall of elephant population (-17 per year) since 2002.

#### **9. Explain what was the project's overall impact on conservation.**

Elephant populations counts are very important study to monitor and manage these populations, estimate their numbers, distribution and composition. Major decisions about their management and the preservation of their habitats can only be made based on these data. On top of the results of the count, 3 burkinabé wildlife officers were trained to conduct aerial survey which contribute to the capacity building.

**10. Did this project influence any local/regional/national policy in regards to elephant conservation and/or habitat protection? Explain. :** It is too early to assess the impact of this study which is currently discussed by the Burkinabé Wildlife authorities. The result of this study shows a drastic loss of the Mouhoun elephant population. We encourage the publication of the report in the elephant database (<http://www.elephantdatabase.org/>) so that the "elephant" community can be informed about it and have access to it. We will see in the coming months which recommendations are followed and if additional investigation is required to make definite conclusion about the status of this population. As long as the Wildlife authorities of Burkina Faso have not made their decisions, we think it is important to keep this report confidential. We will inform IEF when decision will be made about its publication.

**11. Captions of photos and maps :** 5 maps were produced from the aerial count data and are presented with captions in the attached aerial count report– 3 pictures were taken during the count itself and 7 pictures were taken in previous years and enabled us to give a new estimate of the Deux-Balé elephant populations. Captions of photos 1 to 10 are presented in the table below. Unfortunately no video could be made during the count. All maps and pictures are sent separately on jpg format.

Caption (picture credit)	Picture
Team of the aerial count except the team leader (Dr. Bouché) with the plane and the vehicle. (Philippe Bouché)	Photo1.jpg
Team in the plane with pilot on the right, Dr. Philippe Bouché on the left and wildlife officer Kevin Tiendrebeogo at the back (Philippe Bouché)	Photo2.jpg
Wildlife officer Kevin Tiendrebeogo counting on the right side of plane (Philippe Bouché)	Photo3.jpg
Picture taken from the "Kaicedra camp" on the Mouhoun River at the border of the Deux-Balé National Park, where the "My Elephant Neighbor" educational take place (Laure Berthon)	Photo4.jpg ro Photo10.jpg

**12. et 13. Immediate and Long term conservation impact :**

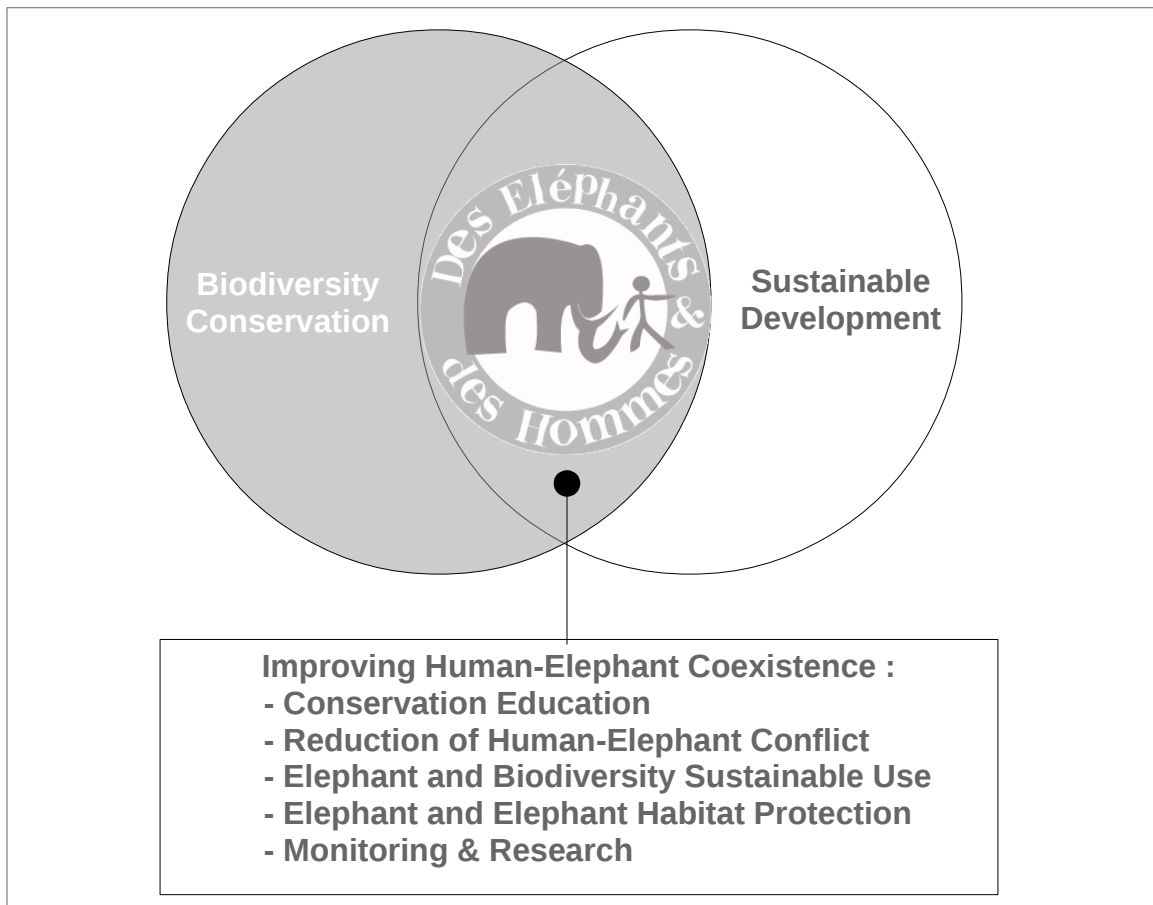
It is difficult to tell today what will be the conservation impact of this study. Today it acts as a strong alert about the fate of the Mouhoun elephants. One can wonder if this population is doomed to go extinct ? This alert is already an achievement but only decisions taken based on this alert will have an impact. We give below recommendations of immediate and long-term actions hoping decisions will be quickly made and appropriate means readily available.

**14. Recommendations**

- Maintain the implementation of aerial total count but concentrate them only on DBNP and MH.
- Pursue or reinforce law enforcement efforts in DBNP and MH.
- Due to the low number of elephant, create a team in charge of the individual identification of elephant that remain the most reliable method.
- Recover illegally occupied lands where it still possible.
- Reinforce the dialogue with cattle herders and veterinary offices in charge of cattle rearing to minimize the impact of cattle on protected areas
- design and put in place corridors between the last remaining elephant habitats of the region, especially between the Deux-Balé National Park and the Mare des Hippopotames sites preserving the forests of Pa, Tuy & Maro, between the Deux-Balé National Park and the Kabore Tambi – Nazinga – Sissili complex and between the Deux-Balé National Park and the Ghana and Ivory Coast border along the Mouhoun river.

## 15. Conclusion

This monitoring project is just one part of the "My Elephant Neighbor" holistic and collaborative program which has five type of actions as can be seen on the figure below.



We are extremely grateful to IEF and Amnéville zoo for funding this study we have been waiting for. The results are unfortunately worse than we expected and questions the development of our program. Indeed, we are now wondering what is the fate of this elephant population. We thought it was large enough to be preserved but is it doomed to disappear as it has been the case for numerous small West African populations ?

We think that what has been achieved so far is very positive. Our program that has run here for the past 7 years (2007-2013) has contributed to create a more positive relationship between humans and elephants. The fact that we started this program at a time when the conservation situation was very bad contributed to the involvement of the administration to reinforce the protection of the Deux-balé forest and the Mouhoun elephants. If our efforts continue, we can hope for a sustainable future for these elephants. In the long-term, the inhabitants could be their first protectors. Already illegal activities have decreased, the Deux Balé protected area is under rehabilitation, and the elephants have dispersed in parts of the reserve which were recently busy with illegal activities such as cattle herding, small-game poaching, and illegal wood collection. The quality of the habitat is improving, the elephants lead a more peaceful existence, and the signs of wildlife are clearly on the rise. The elephant of the Deux-Balé National Park reproduce well and Biodiversity is in a better state. The human-elephant coexistence is slowly becoming less antagonistic. However, the Mouhoun complex remains under high pressures and wild habitats are still being destroyed and fragmented. Is it too late ? What should we do ? We are currently thinking of what are the most relevant actions to lead in the coming years...