



Conservation status and ecological importance of Walter's duiker (*Philantomba walteri* Colyn et al., 2010) in the Dahomey Gap

Submitted by

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2024-09-26

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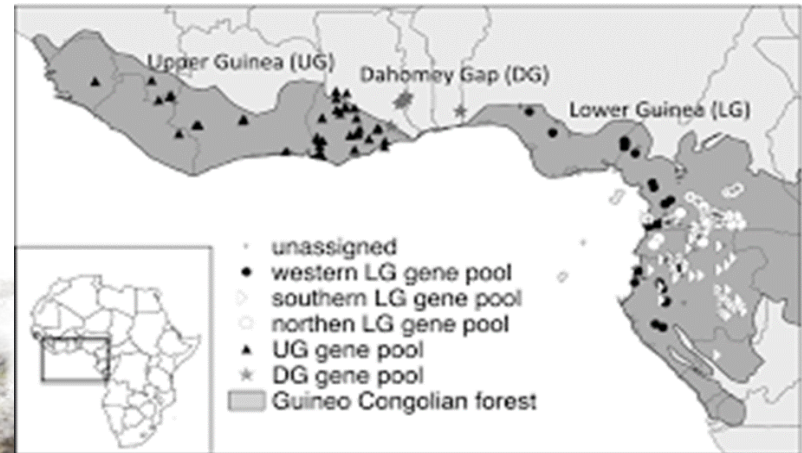
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Introduction



- World biodiversity erosion
- Dahomey-Gap
- Discovery of Walter's duiker
- No data on the species



Description of the species and the study area

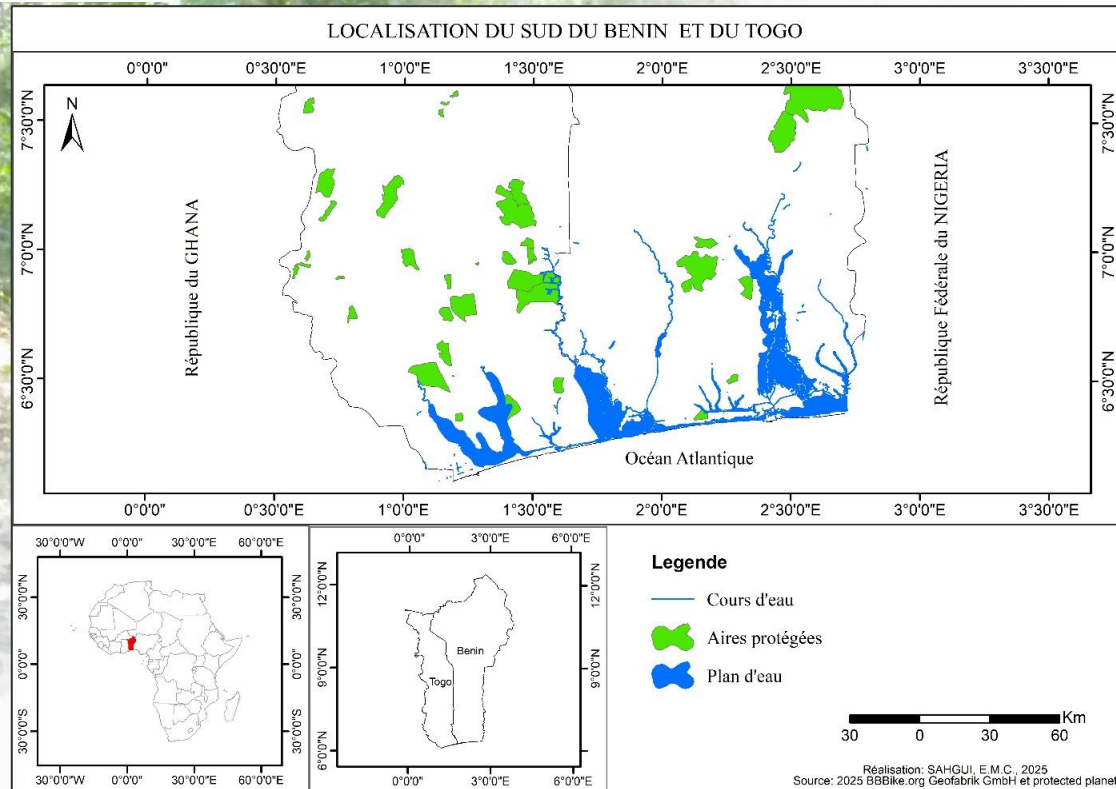


Figure 1: Study area location map



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Goals of the study

OS1: Document the abundance, spatial distribution and activity rate of Walter's duiker in southern Benin and Togo,

OS2: Determine the diet composition of Walter's duiker,

OS3: Examine the role of Walter's duiker in seed dispersal and the regeneration of plant species.



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Methodological approach

Specific target 1: Document the abundance and spatial distribution of Walter's duiker in southern Benin

Activity 1: Counting using photographic traps



- Image box
- Camera traps (20)
- Area > 400 ha
- Square device with 2 km sides
- 70 days of camera presence per point

Protected areas	Area (ha)
RF de Togodo Sud	15000
RF de Togodo Nord	10500
FC de Djigbé	3908
FSC de Gnanhouizoumin	27
FS de Kouvizoun	738
FC du Monaster	20
FS de Zannoudji	25
FN de Niaouli	65,5
FC de Pahou	1654
FC de la Lama	16817
FC de Kétou /Adakplame	2900
FC de Ouedo	580
FC de Agbodozoun	10
FS de Houedozoun	15
FS de Togbota	5
Forêt de Haloe-Baloe	
Forêt d'Asrama	
Forêt de Tététou (nord et sud)	

Methodological approach

Specific target 2 : Determine the composition of the diet of the Walter's duiker

Activity 2: Study of rumen content (germination of seeds and genetic analysis)





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Methodological approach

Specific target 3: Determine the role of the Walter's duiker in seed dispersal

Activity 3: Study of the impact of seed ingestion on germination (optional)



+



cephalophic droppings

steamed earth

mesh of 1 mm

27°C



2024-11-16



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Results

Specific target 1: Document the abundance and spatial distribution of Walter's duiker in southern Benin

- Inventory effort

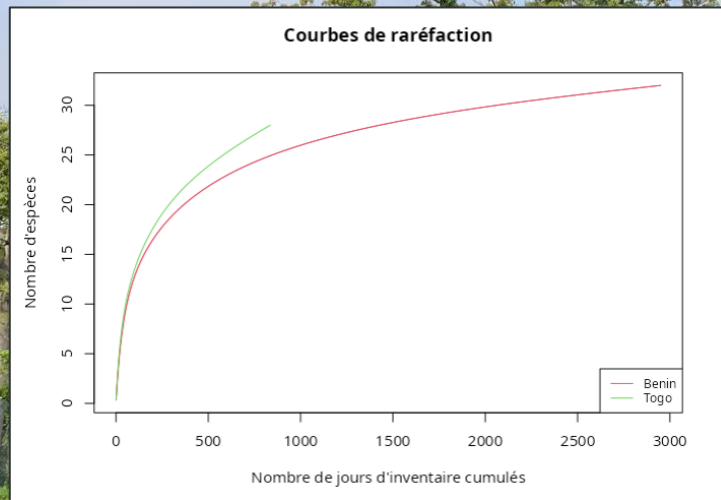


Figure 2: Inventory effort by country

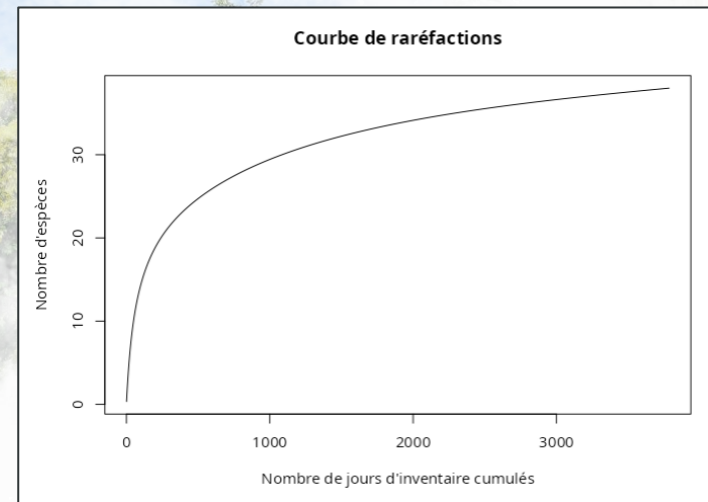


Figure 3: Total inventory effort



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Results

Specific target 1: Document the abundance and spatial distribution of Walter's duiker in southern Benin

- Specific richness

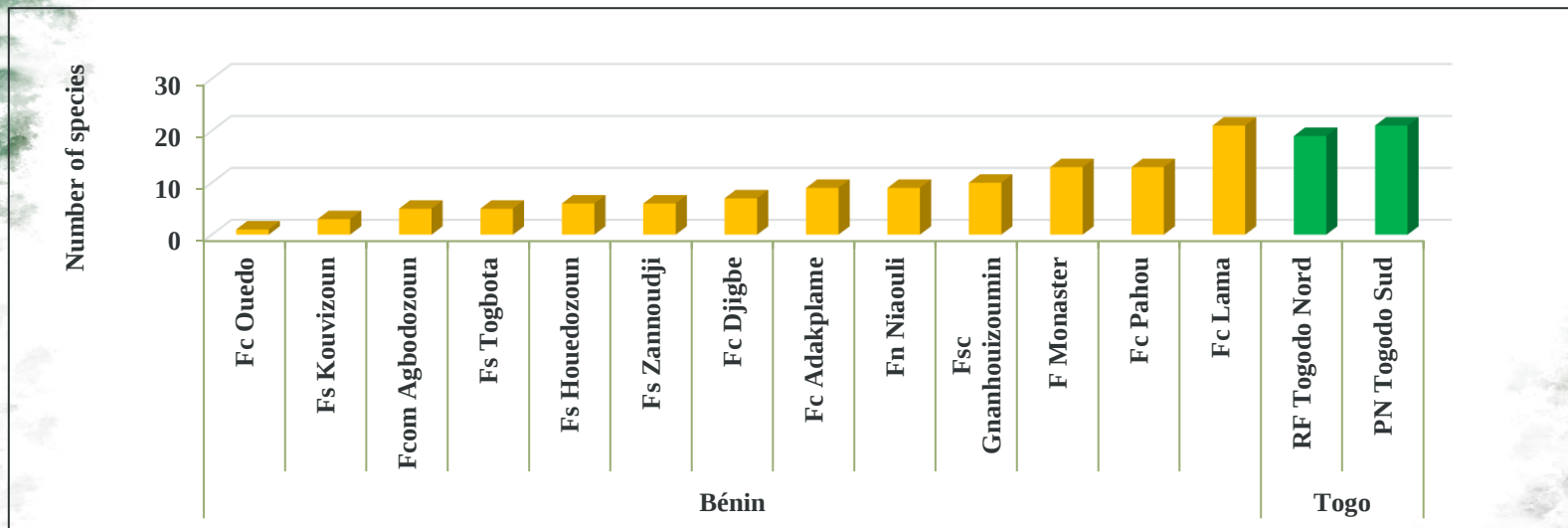


Figure 4: Specific richness by site



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Results

Specific target 1: Document the abundance and spatial distribution of Walter's duiker in southern Benin

- **Walter's duiker Relative Abundance Index (RAI) by site**

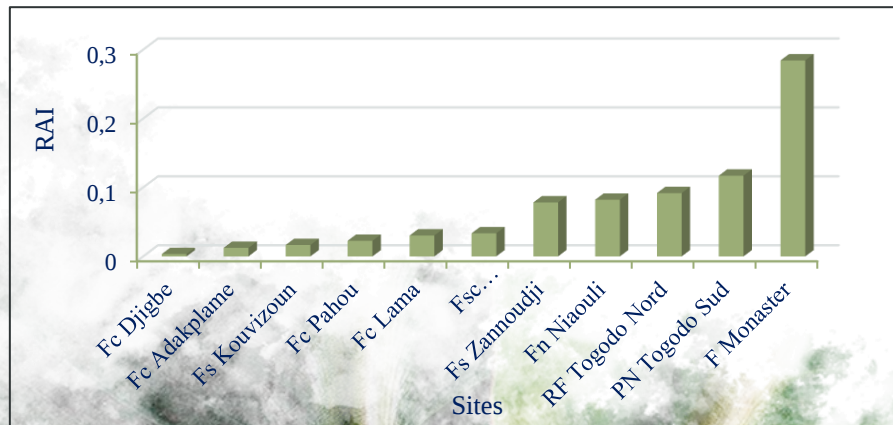


Figure 5: Relative Abundance Index (RAI) of Walter's duiker by site surveyed

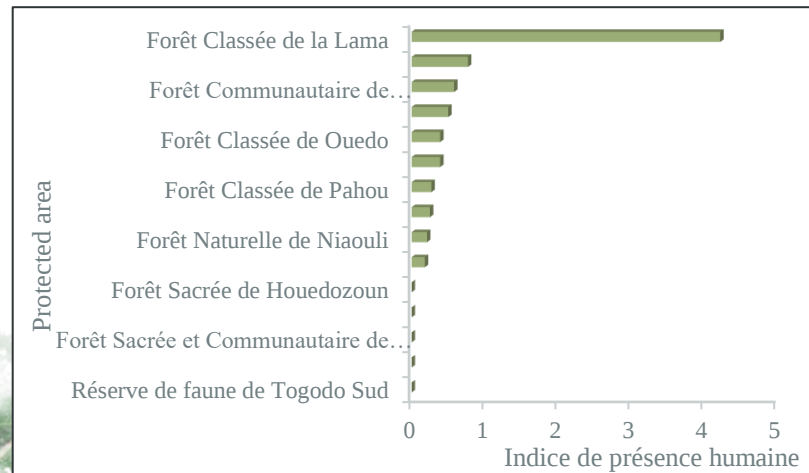


Figure 6: Monthly human activity by protected area



Results

Specific target 2 : Determine the composition of the diet of the Walter's duiker

- Seeds in the stomach



Elaeis guineensis
Jacquet indéterminée



Mimosa andongensis
Hiern



Ficus ovata



Dialium guineense



Undetermined



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Results

Specific target 2 : Determine the composition of the diet of the Walter's duiker

- Seeds in the stomach



Undetermined



Undetermined



Undetermined



Blighia sapida



Rourea coccinea



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Results

Specific target 2 : Determine the composition of the diet of the Walter's duiker

- Rumen germinated seeds



Ficus sur



Ficus uvata



Adenia cissampeloides



Landolphia togolona



Strychnos densiflora Baill





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Results

Specific target 2 : Determine the composition of the diet of the Walter's duiker

- Rumen germinated seeds



Dialium guineensis



Sorindeia warneckei Engl



Gmelina arborea





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Conclusion

- The presence of Walter's duiker was studied by photographic trap in eighteen (18) protected areas located in the south of Benin and Togo. The species was absent from four of the protected areas sampled in Benin.
- This small frugivorous ruminant consumes a wide variety of fruits, particularly figs.
- Megafauna (buffalo, cobs, etc.) are still present in the protected areas studied in southern Togo, but are absent from those in southern Benin.
- This indicates a gradual disappearance of wildlife, and the fact that protected areas are being emptied despite the protection measures they enjoy.





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Thank you for your attention