



Antilopes

Sahélo-Sahariennes

Study of small and medium sized carnivores by the use of camera trap in Termit and Tin Toumma (Niger)

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OBJECTIFS OF STUDY

- Determine the total time passed by camera traps (trapping effort);
- Confirm the presence of some species of the study area (Termit - Tin Toumma);
- Know activities periods (time, phase of moon) of small carnivores;
- Calculate time spent by each specie where the trap is operational
- Have a general idea on distribution of carnivores.

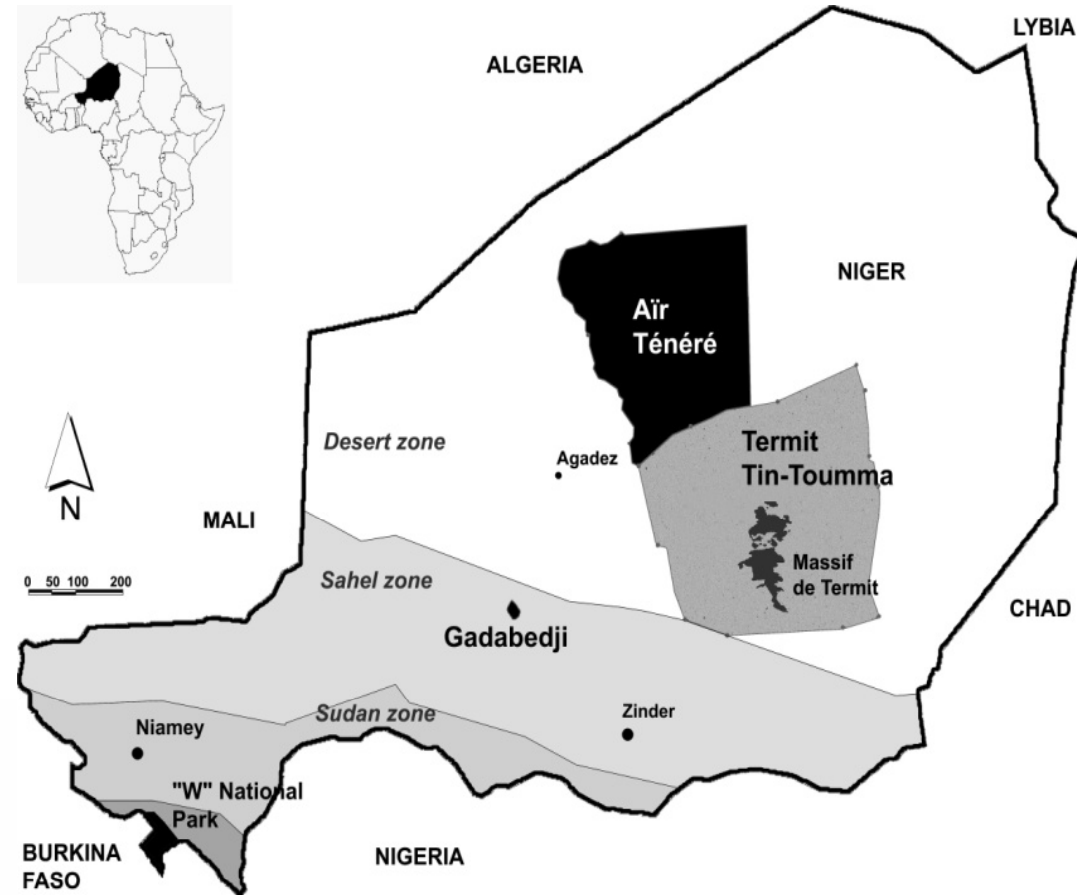
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MATERIALS ET METHODS

Study area



P= 120 mm per year in the south part and less in the north
5 ethnic groups: Toubous, Touaregs, Arabes, Peuls et Kanouris.

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Methods

Camera trap

2 types of Trapping: Nightly baited and fixed



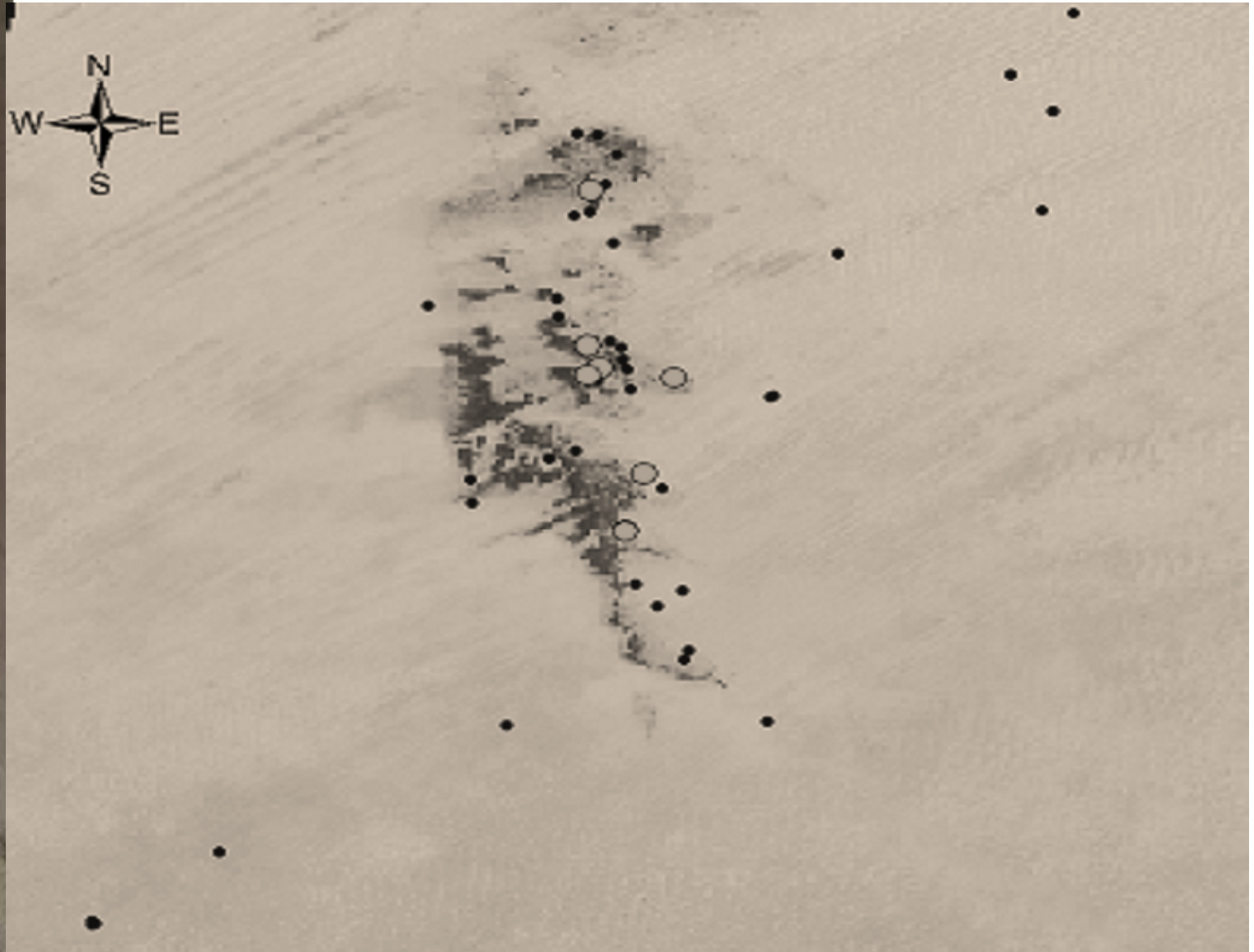
Coordinates, habitat, type of bait and orientation recorded in the CyberTracker

Photos from camera trap: date, time, temperature, moon phase, illumination and coordinates

2 Data bases: Access©, Excel©



Distribution of Camera trap



Echelle: 1/750000

○ Fixed camera trap
● Nightly baited camera trap

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Data Analysis

Extraction of CyberTracker data

exiv: Extraction of photos data, Number of events and moon phase

For 2 DB: Extraction by use of requests, sorting or Filters

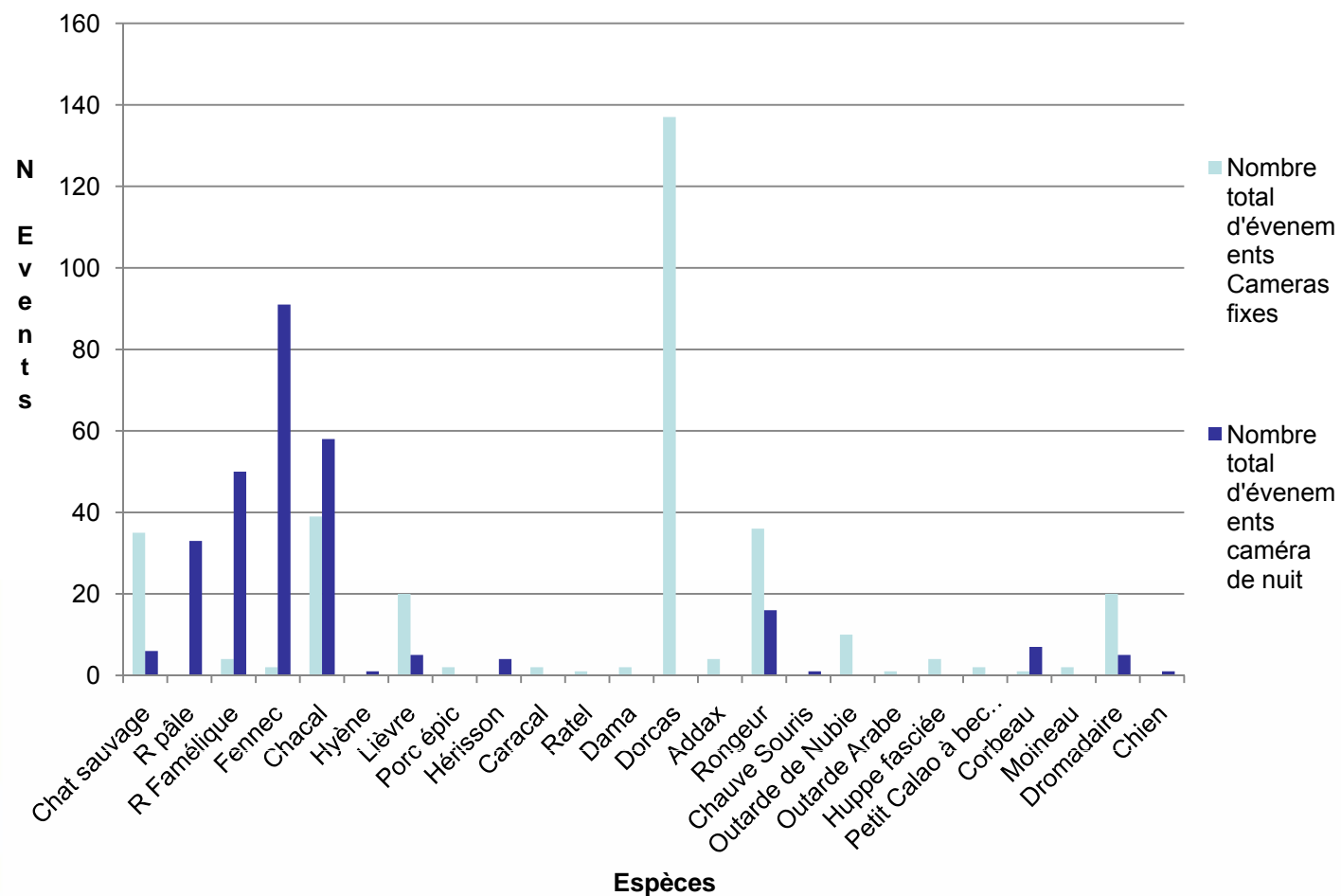
STATISTICA© and Excel© for data analysis



RESULTS

Confirmation the presence of some species of the study area

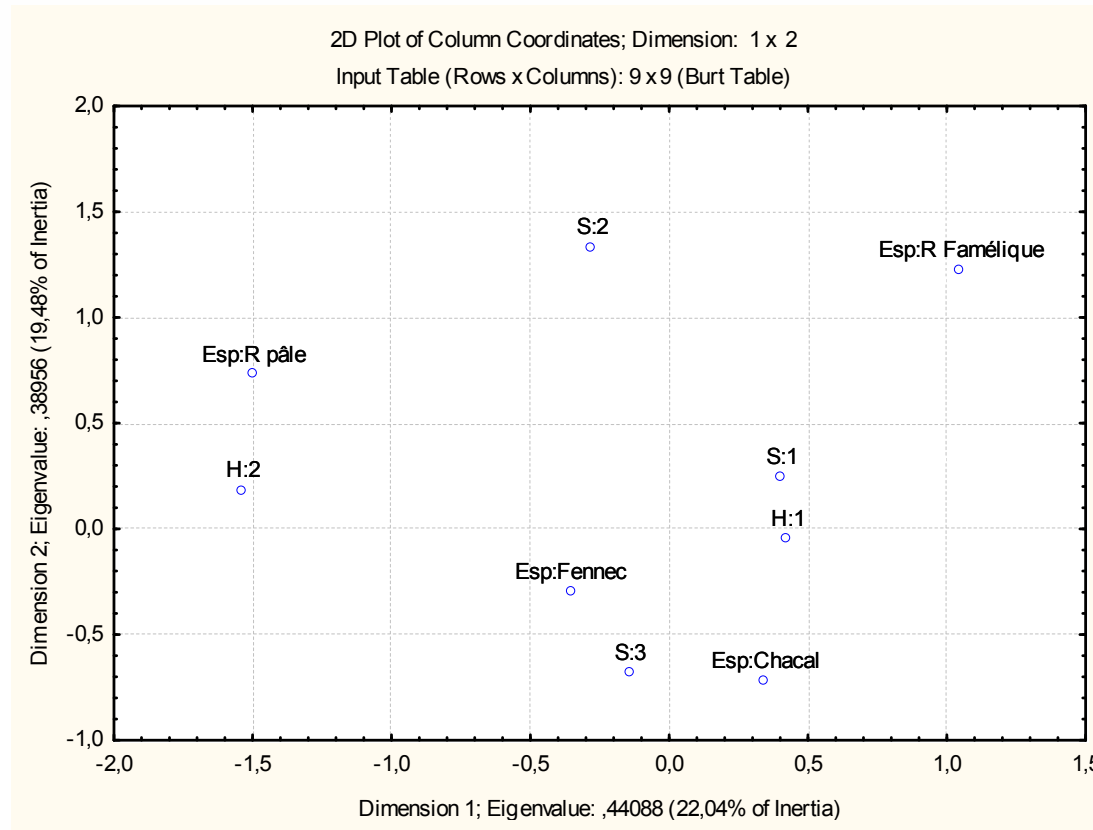
Trapping effort : **5339,99** hours ; **222,5** days of functioning



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Distribution of small and medium sized carnivores



S1: Saison chaude (MAMJ) ; S2: Saison humide (JOSO) ; S3: Saison froide (NPJF)
H1: Habitat 1 : Massif ; H2: Habitat2 : Dunes fixes et dépressions interdunaires.

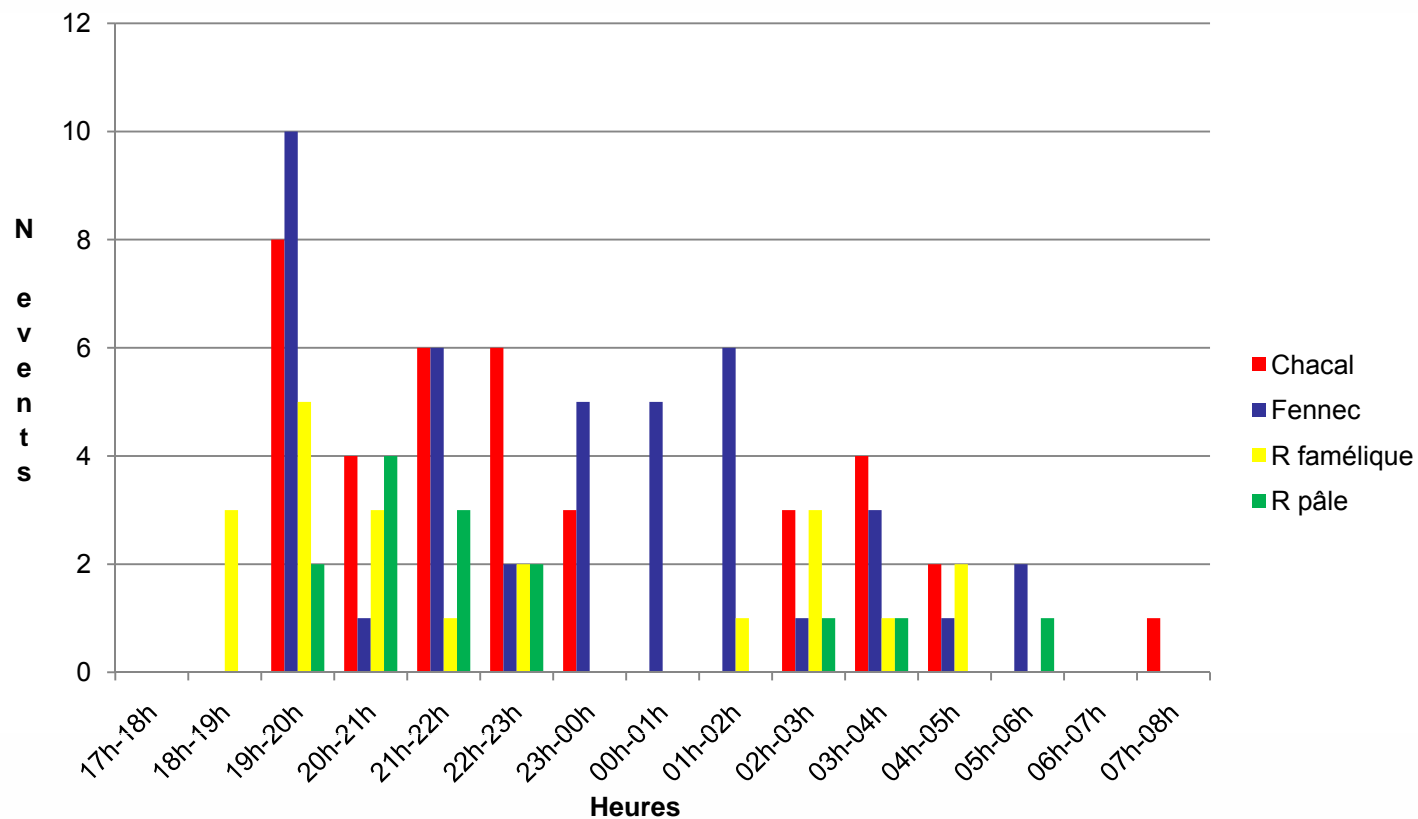
Paied fox is in habitat 2 (fixed dunes and dunes depressions) independently of seasons.the ruppell fox and golden jackal are in habitat1(massif)in dry and cold season. The fennec is in all type of habitats.

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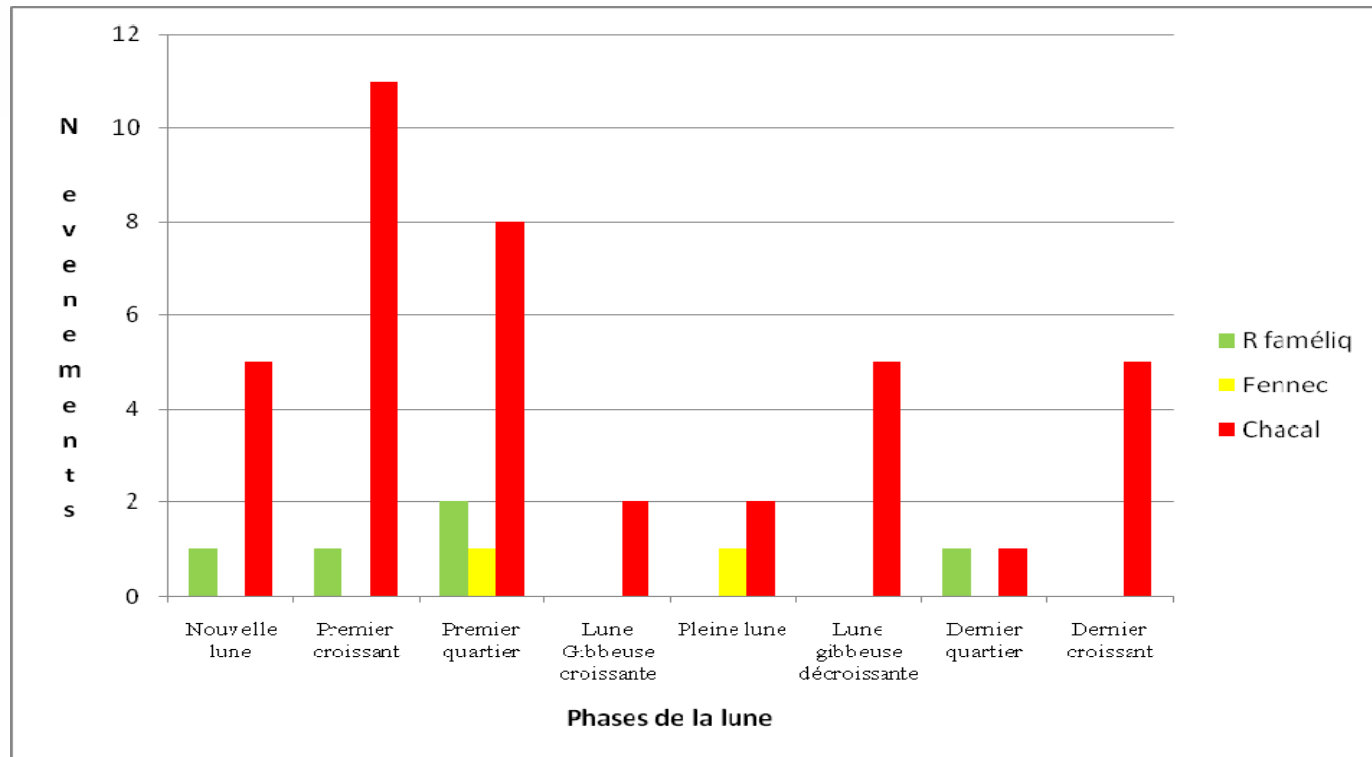
Time of activities of small and medium sized carnivores



Temps passé en heures			
Chacal doré	Fennec	Renard pâle	Renard famélique
87,16	136,54	56,01	90,14

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Khi² Test Golden Jackal: $p = 0,043591147$ Significant

Khi² Test for "paled fox, ruppell fox and fennec non significant at 5%

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Conclusions

- The study shows the presence of : striped Hyena, Caracal, Porcupine and Honey Badger.
- Small carnivores were filmed by itinerant photographic traps with sardine bait.
- The Golden Jackal is most active and the pale fox is the most fearful.
- The fennec is the plastic species because it is found in all types of habitats.
- The fennec fox, pale fox and Rüppell's fox are indifferent to the phase of the moon.
- The Golden Jackal presents some peaks of activity during the first crescent and the first quarter.

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Chacal doré (*Canis aureus*)



Fennec (*Vulpes zerda*)



Renard famélique (*Vulpes rueppelli*)



Renard pâle (*Vulpes pallida*)



Thank You for your attention