

# Wildlife detection dog and hamster protection

- first results from the field -

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Saskia Jerosch & Mareike Schneider

# Previous Study

## Main Findings:

### Wildlife Detection Dog Team (WDDT)

- 95 % reliable detection of burrow
- Time-saving method



Preliminary tests on new methods to monitor Hamster populations: strength, weakness and perspectives



Charlotte Kourkgy, Julien Tremeaud, Guillaume Souchay, Elena Jeß, Frédéric Mussier, Julien Eidenschenck, Stéphane Marchandau

# Question

How reliable are the results of WDDT under certain conditions compare to Human chains?

A) Vegetation Height

B) Burrow Density



# Study design & Time

Mapping in 4 X 10 ha plots

## A) **Vegetation**

low (*Stubble field*)

high (*full grown sugar beet, maize*)

## B) **borrow density**

low <1B/ha

high >1B/ha

Timeframe : August 2020 / after grain harvest

First WDDT then human chain



# Key-Results

- Human chain detected more burrows in all sample sizes than WDDT also in not well visible terrain.
- High Borrow Densities ( $> 1$  Bau/ha) were too exhausting for WDDT

***But are the numbers actually comparable?***

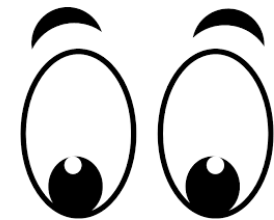
They are **different searching approaches!**

**Olfactory perception**



vs.

**visual detection**



# Conclusions

- WDDT is a not adequate method for detail mapping

## Possible Applications:

- Find active burrows for trapping
- Find active burrows to place measures in the same year
- Find active burrows to prove the presence

But

should WDDT be employed for example before application of Rodenticides?



# Findings

## Crucial Conditions for WDDT:

- **Local weather conditions**



Required a high level of experience of the dog handler

- **Hamster activity**



find the right timing for investigation



# Research Items

- Quantitative evaluation of active burrows
- Evaluate the bias in a large study areas with low burrow densities
- Sharp the conditions for fieldwork
  - Evaluate the factors that influence odour detection
  - How long does hamster odour adherent to vegetation / burrows
- Guideline for detecting hamster burrows with WDDT





Thank you for  
your attention!

