

## LIFE + BIODIVINE - Mammals protocol 2012

**As agreed during the meeting in Beaune (2011, October, 17<sup>th</sup>-18<sup>th</sup>), each demonstration site will have to monitor mammals in different landscape features during summers 2012 and 2013.**

We will monitor mammals thanks to cameras. For these camera observations (visible and infra-red), we will use motion detector cameras to observe mammals in different landscape elements. The cameras are stand-alone battery fed units with several months of operation. Please, refer to the pictures below to implement properly these cameras on field.

9-10 cameras will be needed for a sufficient monitoring on each site. Observations should be performed for 6 months each year. Monitoring period will take place between February and November. Batteries and the memory card have to be changed every month.

▪ Tutorial for cameras implementation:

- Choose 3 habitats among the habitats studied in 2011 for arthropods;
- 3 replicates have to be found per habitat;
- The habitats must be close to vineyards ;
- These replicates have to be found in different locations (*i.e.* for the habitat “hedgerow”, you will have to find 2 different hedgerows and avoid setting 2 cameras in the same hedgerow!!!);
- Cameras have to be dissimulated and locked to avoid stealing ;
- Cameras have to focus on the interface “Habitat/Vineyard”.
- Cameras should be installed in **VIDEO mode** (*allowing date, time recording through file properties, be sure to set date and time correctly*) with 15 sec. video for each observation to optimize identification (minimum 1 minute between videos)
- Cameras should best be physically engraved / marked.
- Cameras should be installed at approximately 50-75 cm height, slightly directed to the soil in front of an ‘open’ space covering approximately 10m wide and 15m long (camera range).
- Cameras should be facing NORTH (NE to NW) to avoid sun into camera lens
- Cameras will have to be checked monthly by partner to download pictures and check batteries.

▪ Conservation actions are:

- Hedgerow
- Fallow plots seeded with annual crops (“meadow” in the figure below)
- Vineyards with or without ground cover (inside rows or around plots)
- For each conservation action, sites containing **‘pairs’, with and without this action** should be focused.
- **Example** : In St Emilion, for 2012, we will focus:
  - 2 camera’s on existing hedgerows, 2 on plot interstitial space without a hedgerow.
  - 2 camera’s on fallow plots with seed mixture, 2 on fallow plots with bare soil.

- 1 camera in plot without ground cover and 1 with ground cover
- Data analysis
  - All photos will be send to Bordeaux monthly where data will be analyzed for:
    - number of observations
    - species (biodiversity)
    - number of individuals (abundance).

Camera reference recommended: **119467 Trophy Cam Black LED XLT HD**

Provider offering best prices (approximately 210 € per camera):

Bushnell Outdoor Products

4 rue Diderot

92150 Suresnes

tél: +33 (0)1 41 44 90 23

fax: +33 (0)1 41 44 06 09

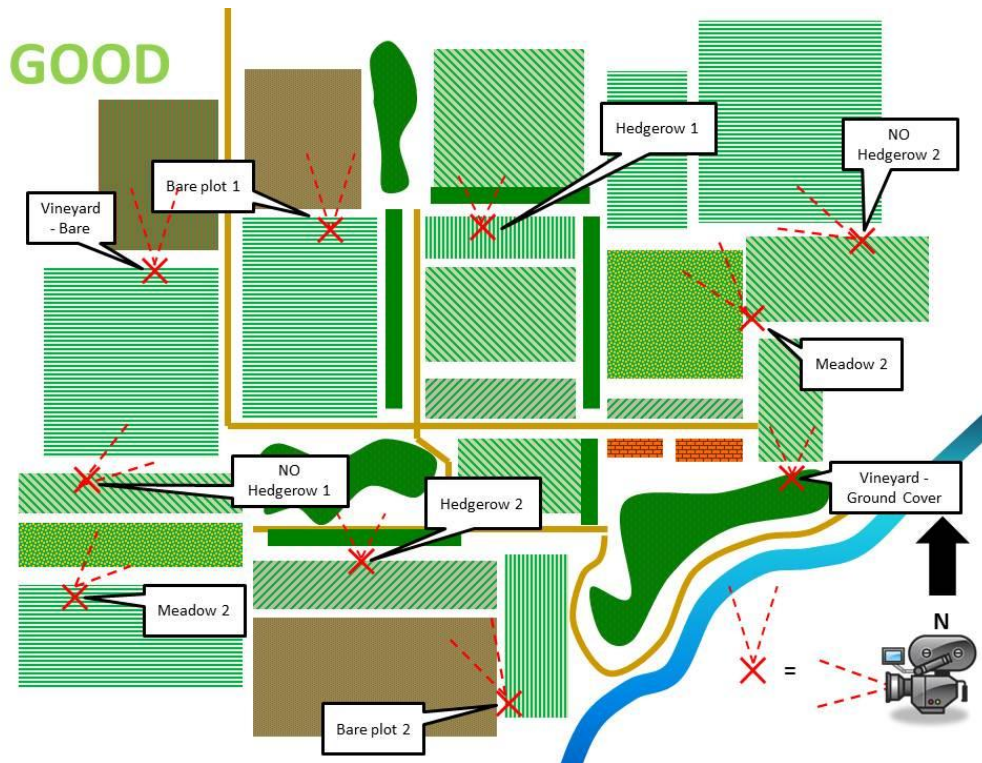


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▪ Example of correct cameras implementation:



▪ Example of incorrect cameras implementation:

