© Minuartia

Management of Animal-Vehicle Collisions (AVC) data

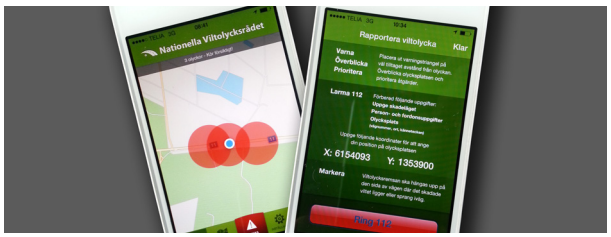
DATA COLLECTION To check

- ☐ Recording of the following data for any roadkill is undertaken, by providing field crews with suitable training and equipment
  - Collision date, and time if known.
  - Location: coordinates, infrastructure code and kilometer point.
  - Species involved, sex and age class, if known.
  - Any information which helps to explain AVC occurrence related to landscape (presence of rivers, nearby housing, etc.) or infrastructure features (fencing, road verges issues, garbage containers, etc.).
- ☐ A cooperative procedure with other organisations recording data related to AVC is established to develop a comprehensive database which will improve knowledge of AVC hotspots, helping to define solutions. Relevant organisations include:
  - Traffic police and insurance companies could provide information on injury and/or damage accidents involving large animals.
  - Research centres and NGOs, among others, could provide information on small traffic killed animals.

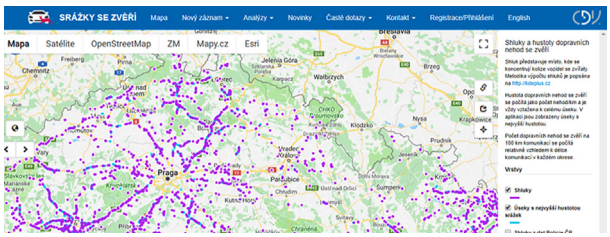
DATA MANAGEMENT AND AVC MITIGATION To do

Undertake analyses to identify where and when hotspots occur

- → Provide statistical analyses of the data collected which outlines seasonal, annual and location variations in AVC numbers.
- → Use a roadkill clustering method to identify hotspots where AVC occur in high frequency (e.g. KDE+ or any other which has the possibility to define a frequency threshold goal) and link it to an app/web-based system managing the AVC database.
- → Perform analyses for particular target species or group of species (e.g. endangered species or large animals which pose a major risk to drivers).
- → Use maps to visualize the location of AVC hotspots and provide data from different periods of the year.
- → Identify where and when AVC hotspots are occurring along infrastructure sections over time.



© C. Rosell



© CDV

Management of Animal-Vehicle Collisions (AVC) data

SPECIFIC MAINTENANCE TASKS To do

Identify causes and provide solutions to reduce AVC risk

- ➔ Identify local factors related to landscape, infrastructure features or human activities which could influence AVC clustering involving different species, to assist in the investigation of why hotspots occur.
- ➔ Define the most effective mitigation measures to be applied in hotspot areas based on causes analysed. Factors which go beyond the routine maintenance of the infrastructure require ecology expert assessment.
- ➔ Undertake monitoring before and after mitigation to ensure measures have reduced AVC numbers.

SCHEDULE

- Periodic data analyses should be planned according to the frequency and variation of the AVC hotspot along infrastructure sections, at least once every 5 years.