ARE OFFICIAL STATISTICS ON BEEKEEPING RELIABLE IN FRANCE?
THE MONT-LOZÈRE MASSIF AS AN EXAMPLE

Lehêbel-Péron A., Schatz B. & Dounias E.  
CEFE, UMR 5175 CNRS - 1919 route de Mende, 34293 Montpellier, France

contact author: ameline.lehebel-peron@cefe.cnrs.fr

Context
Among pollinator animals, bees are known to be the most important taxon in insect-pollinated plants. Many studies have measured bee pollination's benefits on agricultural crops, but the impact of beekeeping on the natural environment remains more difficult to assess. Through their maintenance of honeybee colonies, beekeepers - professionals or amateurs - certainly have an important role to play in maintaining diversity in natural and cultivated ecosystems. In the current global context of biodiversity loss and bee colony collapse, it is of prior importance to carry out studies on the features of beekeeping, particularly in areas with major ecological values.

Objectives
The goal of this study is to characterize beekeeping practices in a specific area following two procedures: performing a detailed census of beekeepers, by crossing data from different sources like professional organizations and associations and testing the census accuracy through a comparison with a detailed field survey.

Methods
We focused our work on the Mont-Lozère massif, which is included in two Natura 2000 protected areas and in the Cévennes National Park. To begin with, we identified the different sources of available data concerning beekeeping.

In France, statistical data are difficult to obtain and compare because the beekeeping profession is poorly structured. Our study shows that beekeeper status is not clearly defined, for instance, in terms of minimum number of owned hives.

We obtained data about beekeeping in the Lozère department from six different sources of information (including field surveys). Regarding the number of beekeepers, our results reveal significant discrepancies between the different data sources.

We crossed data from different sources to calculate a total number of beekeepers in the department. This combination still underestimates the number of beekeepers, but is closer to reality.

The average efficiency of field survey, carried out in 12 municipalities of Mont Lozère is close to optimum: 93% of total beekeepers. While, those of other sources could inform 76% of the communal beekeepers.

Beekeepers and especially the location of hives are not known by the institutions and with them the impact of a massive influx of pollinators in the natural environment.

Conclusion
Results obtained from a set of Mont-Lozère locations lead to a better estimate and characterization of beekeepers in this area. However, extrapolation of results to a more regional scale is hazardous given the variability in the number of beekeepers per municipality. Yet, regular update of this type of information, coupled with controls in the field - especially on the location of summer transhumant apiaries - is a prerequisite to assess the impact of beekeeping and honeybee pollination on different floras of their habitats.