Master thesis

Start: Mid/End of March

Effects of ploughing of flower strips on ground-nesting wild bees

Background

Perennial flower strips are a popular and state-aided measure for restoring biodiversity in the agricultural landscape. We are conducting a replicated field experiment on crop farms close to Freiburg to study the effects of ploughing of perennial flower strips on ground-nesting wild bees. Sites include both newly established as well as several years-old flower strips. Two sites are ploughed this spring and relevant for this Master project.

Aim of this work

We want to test if and how ploughing affects the ground-nesting bee community in perennial flower strips. To do so, we want to use soil emergence traps (the tent in the picture above) on ploughed (treatment) and non-ploughed (control) sites. The aim of this thesis also includes the evaluation of this method in terms of effectiveness to sample ground-nesting bees. Therefore, other sampling approaches such as transect searches may be tested.

Requirements

The thesis includes field work on farms around Freiburg (Opfingen/Riegel) that can be reached by bike, as well as lab work to identify bee species and statistical analysis of the data.

Contact

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You are also welcome to develop additional own research questions within this experimental context!