

## **Mark Recapture research of the Grizzled skipper, *Pyrgus malvae* (Linnaeus 1758) in a Flemish population.**

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### Oral presentation

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*Pyrgus malvae* (Linnaeus 1758) is distributed throughout Europe but has declined in large areas, especially in the non-chalk habitats. An example of its decline is found in Flanders (Belgium) with only four populations remaining. The smallest of these remnant populations is found in 'Het Drongengoed' (East-Flanders). Unfortunately, only little information about the population size, dynamics between suitable habitats and population structure was available. In order to fill this gap, a mark-recapture study was set up by volunteers of the VVE WG Butterflies.

During the flight period of *P. malvae* when temperature was above 15°C, monitoring was carried out from April till June 2015 in a selection of four potential habitat zones. On each captured butterfly, a unique colour mark was placed on the wings according to the habitat zone and period. Other recorded parameters were: sex, condition of the butterfly and vegetation type. 9,88 % exchange between different zones was observed.

In order to process the monitoring information gathered in the field, a specific web based database-driven application (based Oracle-Apex) was used by all volunteers. A demonstration of this system will be given during the presentation.

This system proved to be particularly useful to:

1. Inform participating volunteers and enhance/ease communication about the study and planned site-visits.
2. Enforce consistent input of data.
3. Draw detailed results of this MRR study.

Finally the results will be presented focusing on the population dynamics of *P. malvae* and on the importance of monitoring projects with volunteers to influence policymakers and nature managers.