Area survey of the Papilionoidea diversity in Durme- and Schelde territory, Flanders (Belgium) 2013-2017.

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As from 2013, volunteers of Vzw Durme started a detailed study in the area of “Durme- and Schelde” for all butterflies (Papilionoidea), focusing especially on the common species. For this 5-years study, a national, web-based module (www.waarnemeningen.be) for nature observations is used. All butterfly observations from Nr volunteers are registered. A mapping software is incorporated, documenting at 1x1km level the distribution of all the taxa and to study at a smaller scale, the detailed distribution of isolated populations. The study area is +/- 1000 km². Main land use, typical of the Flemish scenery, consists of agriculture, residential and industrial buildings. Remaining natural areas are sparse and found along the three rivers: Schelde, Durme and Moervaart. Here one would expect most of the butterfly diversity. In such a highly fragmented area, it is interesting to study the population size and evolution of common species like the Ringlet, Aphantopus hyperantus (Linnaeus, 1758) or get detailed information on the distribution of the Small heath, Coenonympha pamphilus (Linnaeus, 1758) and to study if the small populations are still connected. Can such a survey provide information why the Essex skipper, Thymelicus lineola (Ochsenheimer, 1808) is gradually disappearing from the area or why the Silver-washed fritillary, Argynnis paphia (Linnaeus, 1758) is extending its range? Preliminary results are presented, focusing on the status and evolution of “common” species, the discovery of 4 new species for the study area and the effect of using a web-based system on the investigation intensity of butterflies in Flanders (Belgium).