

# **Web-based migration survey of the Scarce tortoiseshell, *Nymphalis xanthomelas* (Esper 1781), in northwestern Europe.**

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## Oral presentation

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From 2009 to 2013 the Scarce Tortoiseshell, *Nymphalis xanthomelas* (Esper 1781) gradually expanded its range in Scandinavia and settled over large parts of southern and central Finland and southern Sweden.

In July 2014, an unprecedented migration to northwestern Europe was observed. Large numbers of *N. xanthomelas* were seen in wider parts of Scandinavia (including Denmark and Norway), the Netherlands, Flanders (Belgium) and southeastern England (Manil & Cuvelier, 2014; Manil & Cuvelier, 2015).

The question arose whether this phenomenon would result in a long term settlement of *N. xanthomelas* in northwestern Europe or if it will remain an exceptional annual migration.

To study the phenomenon the different national, open access, web-based platforms for the registration of nature observations were consulted at the end of the season and during two subsequent years (2014-2015).

These different national platforms are compared and pro and cons of the modules for studying such a migration phenomenon are presented. A suggestion is made for the development of an integrated European web-based platform for the registration of butterfly observations.

Results of the survey are summarized, giving a preliminary answer to the question whether we witnessed an exceptional migration or a potential long term settlement of *N. xanthomelas* in northwestern Europe.