



## Conservation Measures Needed for European Butterflies

A new research has identified Prime Butterfly Areas (PBA) in Europe where conservation efforts should be focused. The obtained information shows that many species are declining rapidly, even within protected areas, in response to the degradation of the breeding habitats. Conservation measures are needed urgently.

The decline of European butterflies has been long time recognized but it was not until the publication of the Red Data Book of European butterflies in 1999 that the full scale of the problem was known. This study showed that 71 of the 576 species known in Europe were threatened (12% of the total). Protecting their natural breeding habitats is crucial not only to avoid European butterflies decline, but also to protect other species of animals and plants, and areas with an important ecological value.

The current paper has presented and discussed the results of a follow-up project that aimed to identify Prime Butterfly Areas (PBA) in Europe, where conservation efforts should be focused. The study identified the most important (prime) areas for targeted species of butterflies using a network of national experts. The selected species had to meet three requirements: being threatened according to the Red Data Book of European butterflies, global distribution restricted to Europe, and listed in Appendix II of the Bern Convention (on the conservation of European wildlife and natural habitats).

A total of 431 PBAs were identified among 37 countries and three island archipelagos. In total, they covered more than 21 million ha, equivalent to 1.8% of the total land area of Europe. The results of the research also showed that target species of butterflies were declining in one quarter of PBAs, indicating a continuous degradation of the breeding habitats, even though some of them were already protected under national conservation laws. Threats to butterflies' habitats are caused by intensification of agriculture (43% of the PBAs), plantation of trees in former open land (40% of the PBAs), isolation and habitat fragmentation (35%), and abandonment of traditional land use (33%, especially in Eastern and Southern Europe).

The authors proposed nine recommendations to conserve Europe's butterflies:

- Detailed description of the PBAs in each country and protection of all of them under national law.
- Protection of the defined PBAs under European legislation (e.g. Habitat and Species Directives).
- Provide or support the adequate legislation for butterflies' protection outside the EU.
- Ensure habitat management within the PBAs and the according management in the surrounding areas.
- Implement measures to protect the wider environment and the whole landscape in the surroundings.
- Improve the monitoring of targeted populations and investigate what is the most appropriate habitat management technique.
- Revise the current European legislation in order to ensure that the information provided by the Red Data Book of European butterflies is taken into consideration.
- Keep the list of PBAs continuously updated.
- Conduct a more comprehensive study of PBAs in Europe as soon as possible.

The current study documents, for the first time, the most important butterfly sites in Europe. It provides a new set of recommendations and information for butterfly's conservation planning in Europe.

**Source:** Chris A.M. van Swaay and Martin S. Warren (2006) "Prime Butterfly Areas of Europe: an initial selection of priority sites for conservation", *Journal of Insect Conservation* (2006) 10: 5–11 DOI 10.1007/s10841-005-7548-1

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**Theme(s):** Biodiversity

**Additional Information:** Over the last decade, a number of LIFE-Nature projects have been implementing concrete conservation actions for rare butterfly species. These projects were taking place at a national level (one project was located in Denmark) or on particular Natura 2000 sites (several projects in the UK, France, Belgium, the Netherlands and Germany). The most frequently targeted species are Marsh fritillary, *Euphydryas aurinia*, the Large copper butterfly, *Lycaena dispar* and various *Maculinea* sp. (blue butterfly) species. Just a few days ago (25 April 06), three more projects specifically dealing with butterfly conservation have been shortlisted for funding under LIFE-Nature 2006. These are taking place in Poland, Sweden and Austria. For more information about these projects see the [Life Projects Database](#) and search by: [Life-Nature Options](#) - Species - Arthropod

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