

Genetic investigation of protected Lepidoptera species in West-Hungary (Presentation of methods, model species and aims)

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Effects of shrinkage and fragmentation of natural habitats are sometimes underestimated in species conservation, although small sized and isolated populations are more exposed to adverse effects, and even to normal fluctuations of environmental conditions. Knowledge on species' genetic background might help conservation work in recognising anomalies, unusual trends or in the understanding of population decline.

The present project aims to collect genetic material from butterfly and moth species, where little genetic information is available, but their ecology and distribution in Hungary are well known. We selected three butterfly and three moth species as models: *Eriogaster catax* (Linnaeus, 1758), *Eriogaster lanestris* (Linnaeus, 1758), *Lemonia taraxaci* ([Denis et Schiffermüller], 1775), *Lycaena hippothoë* (Linnaeus, 1761), *Apatura ilia* ([Dennis et Schiffermüller], 1775) and *Nymphalis antiopa* (Linnaeus, 1758).

Specimens for DNA extraction were collected in 2011 in the Órség National Park and other nature reserves in Vas County (Western Hungary) with permission from the regional conservation authorities (KÖTEVIFE).

In 2011, 13 specimens of 4 species have been collected. Collection of specimens of *E. lanestris* and *N. antiopa* failed due to their rarity and local distribution in the study area. The freshly collected material will be supplemented by voucher specimens from the insect collection of the University of West Hungary (Sopron).