

This presentation was given at the Fourt Meeting of the Butterfly Conservation Europe Partners, held in Laufen, Germany 1–3 Dec. 2014.

The presentation was given by Hallvard Elven representing the Norwegian Entomological Society.

This was the first time that Norway attended the Buttefly Conservation meeting, and the aim of the presentation was to provide a brief overview of the butterfly conservation efforts in Norway from their early days until today.



Norway is a fairly cold and wet country, and the Lepidoptera fauna is consequently not very rich compared to other European countries. About 1/5 of the European butterfly species and 1/5 of the European moth species have been recorded in Norway.



On the other hand, with only 16 humans per km2, Norway is also one of the least densely populated countries in Europe. We have a lot of wilderness per capita.

From this, it would be natural to assume that the Norwegian buttefly populations were not undergoing the same decline as populations in the more heavily developed Central European countries. Unfortunately, however, many species are currently declining in Norway also.



There are mainly two reasons for the Norwegian decline.

Firstly, many species are tied to meadows, pastures and other man-made habitats in the agricultural landscape. Currently, these habitats are disappearing due to changes in agricultural practices; more specifically intensification in the more productive regions and abandonment of less productive farms.

Secondly, neither butterflies nor humans are randomly distributed. The highest species count is found in the warm, south-eastern part of the country, and this is also where the human population is densest. Along the southern coastline in particular, the pressure on nature is intense.



As a consequence, we currently have two butterflies which we fear have gone extinct, another two on the brink of extinction, and yet another 15 species in lower redlist categories. If we add moths, we have 462 redlisted species.



It must be mentioned that Norway were fairly late to see the increasing threat to butterflies and to nature in general.

It was as late as 1989 that Norway protected their first insect species. The species in question were the two butterflies *Parnassius apollo* and *Parnassius mnemosyne*, and they were only protected because Norway was required to by the Bern convention.

Also, species protection at that time was of the «stamp and forget» variety; i.e. the species were protected against active collecting, but their habitats were not protected in any way.



However, in the nineties, Norway began to wake up, and in 1992 we finally got our first redlist which also addressed invertebrates. In it were listed four species of butterflies and 194 species of moths.



In 2005, we got a new, governmentally funded organ: Artsdatabanken (The Species Databank). Their task is to collect and organise biodiversity knowledge from multiple sources and disseminate it to both the management and the general public.



Artsdatabanken undertakes or funds lots of projects to the benefit of nature conservation. Among other things:

- They maintain the Norwegian Redlist
- They fund surveys
- They provide species information on the web. One recent project is a web presentation of all Norwegian species of Macrolepidoptera
- They maintain a very popular online database called Artsobs (~'Species
  Observations'). The service, which is inherited from Sweden, is an online field diary where anyone can record their wildlife observations and make them available for others.
- They maintain an online database and distribution map tool called Artskart (~'Species map') which harvests and displays species records from both Artsobs, the national museum databases and multiple other sources



The latest major advance in species conservation came in 2009, when the old «stamp and forget» species protection law was replaced by the new Biodoversity Law.

With the new law, the process of protecting a species has become rather more elaborate. It now involves the allocation of money for the writing of an Action Plan, so that the species can receive official status as a Prioritized Species.

Once the species has status as a Prioritized Species, however, the law not only protects it against active collecting. Also, its habitats and hostplants are protected against all kind of damage, and the authorities are required to provide money for active conservation measures.



Today, several endangered butterfly species receive active conservation measures.

Mapping projects have been undertaken om many species. In 2007-2008, two development plans were stopped as they threatened the two remaining localities of the Chequered Blue. In 2012, a captive breeding programme was initiated on Reverdin's Blue.



Unfortunately, the latter species appears to have slipped between our fingers and gone extinct despite the captive breeding effort. We are still crossing our fingers though.

The breeding programme will continue, provided the species has survived. In the following years, similar breeding programmes may become relevant for the Chequered Blue and for the Glanville Fritillary.



(Photos are the author's, where not otherwise stated)