HIGH NATURE VALUE (HNV) IN DENMARK

TARGETING SUPPORT FOR AREAS OUTSIDE OF NATURA 2000

In Denmark, one of the purposes of the agro environment measures’ support is to encourage biodiversity, however biodiversity cannot be sufficiently preserved and supported without a clear picture of what landscapes are rich in biodiversity (specifically in those areas outside of Natura 2000). The current Rural Development Program’s (RDPs) primary focus for support has been aimed at grazing and cutting (conservation of grasslands). Presently there are 340,000 ha of semi-natural grassland (freshwater meadows, salt meadows, dry grassland and heathland) in need of grazing and cutting, but the current budget only allows for 90,000-100,000 ha to be addressed. Additionally, more than 50% of this land is outside of Natura 2000. The allocation of valuable time and funds for the development of an HNV map is justified as it serves to illuminate HNV areas and allow for the prioritization of limited budgets to target semi-natural areas rich in biodiversity.

The HNV map for Denmark was developed by the Danish Centre for Environment and Energy at Aarhus University. The map is based on the existing knowledge of biodiversity and points out the most important high nature value areas in Denmark. This study aims to target the most cost effective means for encouraging biodiversity, especially in RDPs support for grazing or cutting of seminatural areas outside Natura 2000.

A MULTI-LEVEL MAPPING APPROACH: WHY SPEND MONEY ON MAPS

The HNV map consists of 14 parameters, each chosen because they indicate a higher level of biodiversity related to a specific area. These parameters make it possible to assemble data for the whole country. For each parameter, it is possible to score either 0 or 1.

14 parameters form the map

3 habitat based parameters
Certain habitats – especially seminatural habitats, such as dry grasslands, heathland or meadows, uphold higher biodiversity than the average farmed landscape.

- Protected seminatural habitats
- Proximity to protected areas (seminatural habitats, lakes and water courses + a 50 meter zone around them)
- Proximity to small biotopes (a 50 meter zone around or adjacent to e.g. e.g. woodland and hedgerows).

This parameter in particular was selected to represent the highest nature value in a mosaic landscape.

3 landscape based parameters
Some landscapes uphold more biodiversity than others.

- Coastal areas (a 1 km zone fringing the marine coastline)
- Steep slopes (a slope of more than 15 degrees)
- Low-lying areas (Danish wetlands based on a historic map)

In any case, intensively managed fields receive no score.
2 land use based parameters
These parameters were chosen because HNV is higher in areas without traditional intensive farming practices.
- Extensive farming (e.g. no farming, permanent grassland with low yield)
- Organic farming (all organically grown fields)

6 species based parameters
The species based parameters are the best indicators of high nature value. Monitoring of species is not complete for any group of species in Denmark, but all accessible and reliable data is included.

Three parameters were included because of the presence of characteristic plants which are typically a strong indicator for HNV in different seminatural areas (plant sub-indicator 1, 2 and 3, the best areas with many characteristic plants and few non-characteristic plants score all three points). The responsible authorities report plant lists. Data is valid for 15 years.

Three parameters were included based on the presence of redlisted species and the EU Habitats Directive's annexed species. Threatened species are good indicators of overall biodiversity and are conservation targets in their own right. The map includes both voluntary reported data (citizen science data e.g. www.fugleognatur.dk) and data from Danish authorities. For selected mobile species, such as birds and butterflies, distribution maps drawn by experts are used to localize the habitat of these species to supplement observation data. Areas with at least 4 threatened species score all three points. Data is valid for 10-15 years.

RDP SUPPORT FOR HNV AREAS?

Based on an analysis made by Aarhus University, the Danish AgriFish Agency has chosen areas reaching at least 5 points as HNV areas (HNV score 5-13).

When applying for support for grazing or cutting in the Rural Development Program (RDP) the areas with the highest HNV score obtain the highest priority. Only 0,1 ha of a field needs to have a HNV score between 5 and 13 for the farmer to be able to apply for the whole field, and the field is prioritized according to the highest HNV score on the field.

This approach is for Denmark, where semi-natural areas are often fragmented and spread out over many farms, a manner to target support for biodiversity to the areas with the highest potential for enhancing high nature value. The HNV map has increased discussion and awareness of biodiversity’s value by giving incentives to farmers to increase their HNV score (e.g. register redlisted/annex species, or to influence local municipalities to register characteristic plants).