

Management of semi-natural grassland in Denmark – political instruments and possible improvements

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Abstract

In Denmark the semi-natural grasslands are protected physically by the Nature Protection Law; some of these are also protected by EU Habitats and/or Birds Directives. In spite of the heavy protection, management to preserve nature qualities is not secure. Management is in most cases the farmer's initiative, only, and many areas are abandoned. Farmers can apply for support from the stewardship schemes for grassland located in designated Natura 2000-areas and some protected grassland outside Natura 2000. This support is higher for management by grazing than by cutting, and in all cases use of fertilizer or pesticides is not allowed. The grasslands taken into management by farmers are mainly the easiest ones, and 84 % of the swards supported by these schemes are at the same time able to obtain aid per hectare from EU, i.e. contain "suitable" forage and cultural species. Management of grasslands has in recent years been uniform because of rules about cutting date and a low sward at the end of the season, to obtain a simple control of the farmers' works by EU. Nature quality, however, is not the measure for subsidies. Different possibilities to improve this situation are discussed, e.g. a higher payment for high nature quality swards combined with specific aims for management at the different localities and less bureaucracy.

Introduction

The total area with semi natural grasslands in Denmark is 343,000 ha, 8 % of the total area. A new survey of the protected habitats indicates a decrease in area between 9,200 and 19,500 ha from 1995 to 2008 (1). Results from the yearly monitoring of habitat quality at selected sites show an increase in overgrown habitats and occurrence of invasive species (2). Recently National Environmental Research Institute has shown that more than 50 % has an insufficient management practice (3). A major problem is small areas and many owners. Different political instruments influence the state of semi-natural grasslands.

Political instruments affecting management of semi-natural grassland in Denmark

Different rules that affect the semi-natural grasslands: 1) Areas protected by the law of nature conservation; 2) The right to re-cultivate after 15 years; 3) Duty of notification in Nature 2000-areas; 4) Rules for permanent grassland in the EU support scheme; 5) Grassland stewardship schemes; 6) The obligations of clearing agricultural areas for woody plants.

1. The law of nature conservation

The law of nature conservation, revised 1992, states that the condition of heath land and semi-natural grasslands should not be changed when the area is 2,500

m² or bigger. It is allowed to continue agricultural practice as used before 1992, e.g. if 50 kg N has been used earlier this practice can continue. The protection status of the area is dependent of management. Areas that has not been ploughed in 7-10 years may be protected by the nature protection law (§3-areas), whereas ordinary cultural grassland in rotation is not concerned. Many lowland areas becomes §3 if not ploughed. To keep the freedom of cultivation many farmers plough such fields with short intervals. As a consequences organic soils are ploughed, which is inappropriate from an environmental and a climatic point of view (leaching, CO₂-emission). Many §3-swards are influenced by earlier intensive agricultural management and the swards varies much in nature quality. The protection status may change with time, and if the farmer wants to cultivate the area, a specific quality evaluation will be carried out. The §3-swards are not conserved as such.

2. The right of 15 years reestablishment

The right of 15 years reestablishment, from 2004, count for grasslands which are not already a §3-area. Farmers, who want to keep the opportunity to grow annual crops can avoid §3-status by applying the municipality. This right has been especially relevant after the cessation of fallow in 2008, where many swards were ploughed, but some were saved by the 15 year rule.

3. Duty of notification in Natura 2000-areas

In Natura 2000-areas, which cover 8.3 % of the Danish land area, changes in management have to be reported to the municipality. This counts for intensity of grazing or fertilization. If a reported change is refused, a financial compensation for the loss will be given.

4. Rules for permanent grassland in the EU support scheme

Permanent grassland receiving aid per hectare includes both §3-areas and areas, which are reseeded and grown with grass in 5 years or more. Permanent grass includes therefore more than natural grassland. The areas are eligible and the aid per hectare has been 500 DKR per ha per year, but increases gradually, until same level as other agricultural areas in 2012, i.e. about 2,200 DKR. Permanent grasslands shall maintain a cover of grass and other forage species, maintained by grazing or mowing at least once every year to receive aid per hectare.

Permanent grassland has to consist of at least 50% grassland species of good forage quality and is not allowed to be overgrown with wetland species (e.g. juncus, typha). Areas with more than 50% unwanted species are subtracted from the area that receive aid per hectare. Similarly for areas with trees and bushes, and if more than 50 single trees and bushes per hectare, no aid is given. Wet permanent grasslands can only receive aid, if they can be used agriculturally in a substantial part of the growing season (1 June – 31 August).

5. Stewardship schemes for specific grassland areas

Management of grassland in designated Natura 2000-areas and some protected grassland outside Natura 2000 can be supported. The aim is to protect and improve nature- and biotope conditions at agricultural grasslands, to protect the water environment by reducing N and P leaching, and the amount of pesticides in agriculture. The requirements are no pesticides or fertilizer. The support is 1,400

DKR per hectare per year when grazing and 800 DKR when grazing/cutting. A small group, 850 ha, being assessed especially valuable and difficult to manage, rate 3,350 DKR.

When grazing, the sward shall be in grazing management 1 June until 31 August. Tufts of grass established by grazing are accepted. Cutting is only allowed on a part of the sward as a natural part of management with grazing, or as trimming after grazing. When grazing /cutting the sward shall be subjected to this management from 21 June to 31 August. In both cases the sward shall appear with a dense and low sward at 31 August. Whatever the obligation, it is not allowed to cut from 1 May to 20 June and the support area should be at least 0.3 ha. Requirements: Commitments for a 5-year management period, submit a yearly request of payment, grazing and/or cutting, only few trees, no supplementary feeding, no fertilizer, no pesticides and no reseeding. When there are more applicants than money, then areas in Natura 2000 will have priority. Actually, the amount given is reduced substantially and it can be a problem to make farmers use the system.

6. The obligations of clearing agricultural areas for woody plants

An administrative announcement from 2004 (4) required that all agricultural land shall be kept in good agricultural- and environmental conditions, and regulates clearing of semi-natural areas. All flat land should be maintained in a way that trees and bushes will be no more than five years old. This rule was changed in 2011. Now all permanent grassland has to be maintained by at least mowing once a year between 1 July and 15 September. Mowing can be exchanged with grazing, if the swards appear well managed in September (6).

Weakness concerning protection or improvement of nature quality

Support is not dependent on nature quality. The farmer can obtain 3,600 DKR (2,200 DKR as aid per hectare, and 1,400 DKR for grazing management) to manage trivial grasslands, areas dominated by cultural species and a low degree of nature quality. If the area appears with too much nature the farmer will be punished economically, and not only for the semi-natural grassland, but also for fields in rotation because of cross compliance. In 2010 many semi-natural grassland areas were rejected at control because of too many natural species.

If the sward has a dominance of natural plant species the farmer can obtain 1,400 DKR, only, even though it is more costly to graze the high nature quality sward than trivial grassland. Rules and paperwork are complicated, the sites are often far away from the farm, it may be necessary to use special cattle breeds, and the growth of the animals are slower. In any case the farmer can only obtain subsidies if the sward appears with short and dense grass after the season, and often areas are trimmed just to make sure it is acceptable. This is no good for nature, which have to look like anything else than a golf course, and these requirements do not give incentives for management of nature.

Small farmers can no longer obtain subsidies for male cattle, so if less than 10-12 suckler cows there will be no subsidies. In Denmark the average is 13 cows for suckler cow farms. It is voluntary to manage the nature. No one can blame the farmer, for cashing 3,600 DKR for trivial grassland with a low nature quality but

with a higher economical output. Yet the new rules for permanent grassland concerning clearing with at least a cut every year or grazing may turn out to be a huge problem for the farmers and they will have to find some way of use for the areas.

A lot of money is used for subsidies, and the public would be happy to get more nature for this money. It will benefit tourism and the settlement outside the big cities. But at present an important part of our nature appear abandoned because of lack of incentives for management. EU and national subsidies do not aim for semi natural grasslands or high nature quality.

Possible improvements of the political instruments

A less complicated administration can make it easier for the farmer to manage semi-natural grasslands. A major problem is cross compliance concerning too many natural species and trees, seeing that it affect payment for fields in rotation.

More focus on the actual management for a given area is needed instead of general rules. To have a strategy for nature quality improvement is a much more interesting way for the farmer compared to regulations without specific goals. The challenge is to follow up on the management strategies, and to find a way to document the farmer's efforts in a simple way - an alternative to heavily grazed or newly trimmed at the end of August. More flexible rules for cutting dates is preferred to general rules, which make management very difficult - and also leads to a uniformity of all swards. And in reality some areas do better nature quality with an early cutting whereas others with a later cutting. Also the weather conditions - and not date - have to be considered to have good quality hay from grasslands.

There is a need that the better nature quality areas are given better subsidies than others, and therefore it is a problem that Natura 2000-areas are having higher priority than other areas. More than half of the §3 areas are outside the Natura 2000 sites. Also the use of supplements may be acceptable in some situations as the nutrient balance in total may be negative where grazing is combined with cutting. If hay from species rich neighbouring fields is given as a supplement it may also be a good way to increase local grassland species. As an extra political instrument some innovative support can be used. For example, innovative support can be given to harvest of biomass - and nutrients - from the more productive swards. Also it can be support to the development of local products e.g. meat and cheese from cattle, sheep or goats managing nature quality. Overall there is a need of good instruments and economic resources to secure management of semi-natural grasslands.

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