

Healthy herb-rich grasslands

Farm: “Graasboerderij”

Location: **SONDEL, THE NETHERLANDS**



Background

The organic farm from the family Deinum is located in the northern part of the Netherlands, in the province Friesland. The dairy and beef cows are grazing on grassland with a grass/herbs mixture, for positive effects on animal health, soil health and biodiversity. The farm has a land area of about 130 ha, which is mainly grassland. The grassland is grazed by 160 dairy cows (Holstein-Friesians) and 75 corresponding young stock and by 35 beef cows (Herefords) and 67 corresponding young stock. The average milk production of the dairy cows is 5,800 kg milk per cow per year. The farmers practice strip grazing for 8 months a year in order to obtain a high grass utilisation.

The farm has been working with herb-rich grasslands for a long time. Next to herbs, the grassland contains several grass species, like rough meadow-grass, timothy, meadow fescue and also perennial ryegrass. Since three years the farm works completely biodynamic. Neither using antibiotics nor artificial fertilizer requires a well-balanced grassland with herbs to keep the cows and the soil healthy. This is now even more important.

Detailed description

The main species in Dutch grasslands is perennial ryegrass. Including herbs in Dutch grasslands is innovative for the Dutch conditions. It can be done for e.g. attracting meadow birds or improving animal and soil health.

Every three years the farmer checks the botanical composition of the grasslands and decide whether reseeding is necessary. If so, the farmer sows the new seeds early in the year with a machine for fine seeds. After that the cows spread the seeds into the soil when they graze the pasture.

Results

The farmer is very positive about the inclusion of herb-rich grasslands in his farming system and will continue to work with this system. Main benefits are the fact that the herb-rich grassland helps to keep both the cows and the soil healthy.

Herb-rich grasslands have been previously analysed via a SWOT-analysis:

- Strengths: improved animal health, better soil quality, higher biodiversity (e.g. insects and meadow birds), lower costs
- Weaknesses: lower protein yield per ha, lower forage quality, possibility of 'poisonous' herbs
- Opportunities: system valued by society, higher milk price, higher biodiversity, financial compensation for more nests of meadow birds
- Threats: inconsistent regulations and subsidies, not all herbs are suitable for all soils (for example due to pH)

Adoption criteria

Based on the SWOT-analysis, it is clear that this innovation cannot adopted by all farms. It fits perfectly in organic farms, but also in nature-oriented farms and farms that are not very intensive.

Future prospects

Herb-rich grasslands will further increase in the Netherlands. Not only due to their positive effects on cow health and soil health, but also due to the fact that the Dutch dairy chain is stimulating an increase in biodiversity. The Dutch farmers association and the Dutch dairy industry developed four goals for a “sustainable dairy chain”. One of them is in particular related to herb-rich grasslands and biodiversity: *“The dairy farms develop with respect to animals, surroundings and the environment”*.

<https://www.duurzamezuivelketen.nl/en/themas/protecting-biodiversity-and-the-environment/>

Herb-rich-grasslands can be further improved by breeding of grass and herb species and by carrying out research on the management of herb-rich grasslands, the benefits of herb-rich grasslands and on optimal seed mixtures.



GraasBoerderij