

Optimum balance between grass allowance and grass intake

Farm: “**Wilry Giesen**”

Location: **GELDERLAND, THE NETHERLANDS**



Background

Wilry Giesen (39) has a dairy farm together with his father Willy (65). The 110 dairy cows are milked with an automatic milking system and produce on average 9,500 kg per animal per year. The herd includes Holstein Friesian, Brown Swiss, Fleckvieh and Swedish Red. The area of the farm is 47 ha of clayey/loamy soil. About 39 ha of the total area is permanent grassland with a mixture of perennial ryegrass and white clover. The remaining 8 ha is used for forage maize. The cows graze approximately 6 months per year. The farmer aims for a successfully and efficient grazing period. The strategy of the farmer is based on reducing costs and a more efficient use of the fresh grass. He uses a continuous grazing system.



Detailed description

There are hardly any decision support tools (DST) for systems with continuous grazing. Therefore, the farmer measures grass height in his parcels on a regularly basis. This provides insight in the grass growth of his particular farm. Measuring grass height is not often done in the Netherlands. The measurements give the farmer insight in the amount of additional feed he has to provide in the barn for an optimum use of the fresh grass from grazing. For an optimum use of the fresh grass, the (supplementary) feed in the barn has to be adjusted to the grass growth and the grass intake of the cows. Based on measuring grass on a regulatory basis, a DST for continuous grazing was developed (the so-called “Grazing window”; in Dutch: grasvenster).

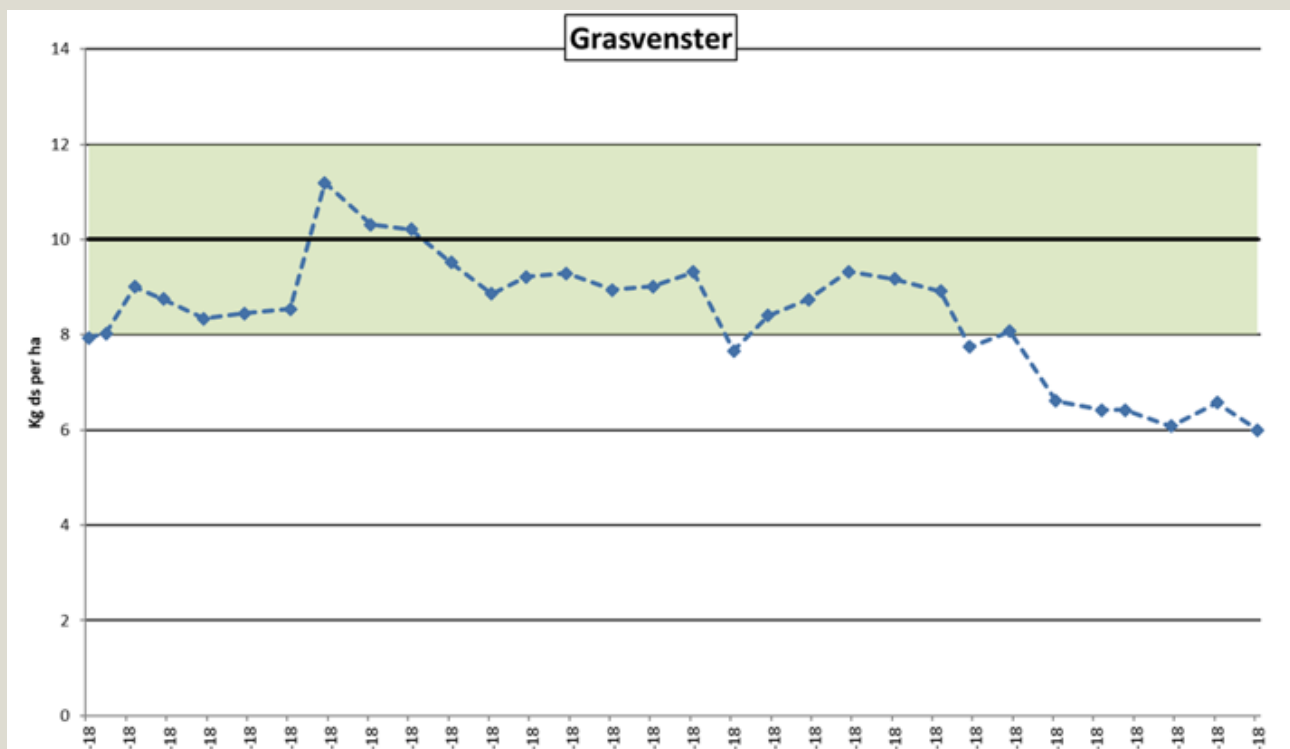


Figure 1. Example of a so-called “Grazing Window”. The grass height is followed during the grazing season and the aim is to keep the grass height in a target area. In this example, the target area is between 8 and 12 cm grass height.

Results

The Grazing Window is a Decision Support Tool that helps to provide insight in the optimal use of a continuous grazing system. The aim is to strive for a particular grass height (the green bar in the above picture).

Adoption criteria

The innovation is useful for farmers that want to control their grazing system and their cows. They should be willing to measure grass on a regulatory basis, for example once a week. Furthermore, they need to be willing to adjust their management to the results. They could either adjust the grazing area, the grazing time per day and/or the ration of their dairy cows. The Decision Support Tool “Grazing Window” is useful for farmers that practice continuous grazing.

Future prospects

Continuous grazing has been further developed in the Netherlands into the so-called compartmented continuous grazing. Since this is an easy to implement grazing system with good results, more and more Dutch dairy farmers are using it. The “Grazing Window” can be a very good tool for these dairy farmers to support their daily management. It will be further developed in the project Amazing Grazing (www.amazinggrazing.eu). The tool can be further improved if predictions of grass growth are incorporated in the program in the near future.