



# Renovation of flooded meadows using meadow foxtail grass added to standard seed mixture



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### 1 Description of the innovation



During the growing season, part of the meadows located in Noteć valley in the farm is periodically flooded by river waters. The long flooding leads to the losses of valuable forage grasses introduced to the sward by the renovation. In order to optimize the fodder production on these grasslands, the farmer decided to renovate them with the seed mixture adapted to specific habitat conditions (organic soils, periodically flooded) with an addition of meadow foxtail grass preferring such habitats. Due to the lack of seed mixtures containing meadow foxtail, the farmer ordered seeds of this species in a seed company for supplementing the composition of the standard mixture used in renovation.



#### Added value:

Grassland production or yield

Grassland quality (species composition, feeding value)

Livestock production quantity

#### Farmer's strategy

The farmer recently purchased some meadows in the Noteć valley. These grasslands have not been used for a long time in a production way, which caused significant changes in their botanical composition with high share of weeds and species of low productivity. The organic soil type of meadows and their periodic flooding forced the farmer to use in the renovation a special seed mixture capable of effective forage production in such conditions. The problem was the lack of seed mixtures containing species resistant to such extreme habitat conditions on the market. The solution was an addition the meadow foxtail grass to the available seed mixture. The meadow foxtail is typical grass species which occurs in the botanical composition of flooded meadows.

## 2 Farm description

### ENVIRONMENT

Soil types:

Sandy loam, Peat

Climate:

Warm-summer humid continental

Altitude:

94 m a.s.l.

Slope:

0%

### GRASSLAND MANAGEMENT

All of the grasslands are exclusively mowed.

The sward is conserved by haylage making.

### STRUCTURE

**Annual Work Unit:** 4

**Agricultural Area:** 140 ha UAA

Main forage area: 112 ha

Arable land area: 100 ha

Permanent grassland area: 40 ha

Temporary grassland area: 4 ha

Other forage area (silage maize): 68 ha

Average stocking rates:

- agriculture area 1.0 LU/ha
- main forage area 1.3 LU/ha
- grassland area 3.2 LU/ha

### ANIMAL PERFORMANCE

Dairy cows: 90

Beef cattle: 15

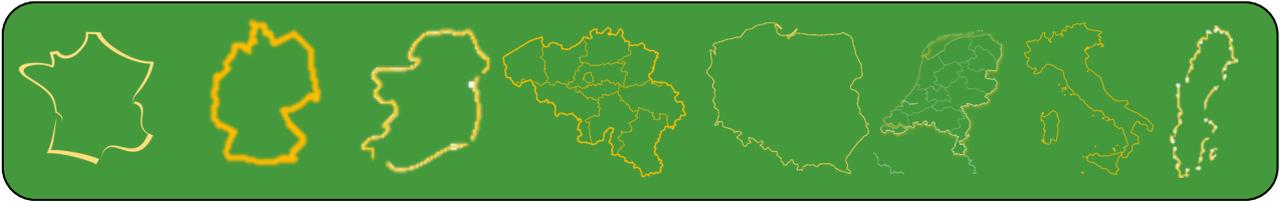
Total livestock units: 141.15 LU

Milk production per head: 10300 (l/year)

### WHY IT IS WORKING

The farm has valley meadows with specific habitat conditions. Due to their optimal forage utilization for cattle feeding the seeds of meadow foxtail grass was added to the available on the market seed mixture during renovation. Because the meadow foxtail is resistance grass to flooding and such habitat conditions are optimal for growth and development, the meadow sward is more productive and persistence.

## Country shapes



## Domains of innovation



Machinery, tools



Forage mixture



Forage conservation technique



Grazing management system



Legume management



Animal feeding management



Animal type (breed)



Product processing



Marketing



Farm system



Landscape

## Main types of animal

