Grazing systems are important components of the landscape in almost all European countries. Throughout Europe, forage is the main feed for dairy cattle.
Is there a lot of grazing?

- Long-term data of grazing in Europe are limited available

- Example of the Netherlands
Example of the Netherlands

Grass consumption in the Netherlands by all cattle & sheep, in million kg dry matter per year

Source: Van der Hoek, 2010 based on Van Bruggen et al., 2010
Example of the Netherlands

Zero-grazing

% of dairy cows


Livestock Research Wageningen UR

EGF
Surveys among EGF scientists

- Norway, Sweden, Finland: welfare legislation: six weeks to four months outside, decreasing
- Denmark: 84% in 2001, 70% in 2003, 40-50% in 2008, 35-45% in 2010, decreasing
- Ireland: 99% in 2010, staying consistently high, grass based seasonal systems dominate
- UK: 95% in 2005, decreasing
Surveys among EGF scientists

- **NL:** 95% in 1990, 75-80% in 2010, slow decrease
- **Belgium:** 95% in Flanders in 2010, decreasing
- **Luxemburg:** 90% in 2008, 75-85% free access in 2010, but 10% real grazing
- **Germany:** along the alps and low mountain range 85% in 2010, other regions zero-grazing is marginal, decreasing
- **Switzerland:** 70-80% in 2010
Surveys among EGF scientists

- Poland: decreasing
- Czech Republic: 20% in 2010, steep decrease in 1990-2008, up to now slight increase
- Slovenia: 25% in 2010, stable or decreasing
- Portugal: 50% in 2010, increasing
- Spain: 20% in 2010 in NW, rest 0%, slow increase
- Greece, 15% in 2010, slow increase
Grazing outside Europe

- Brazil: Total area of grazing is 162.9 million ha, >95% grazing in 2010, decreasing
Grazing in Europe

- In Northern Europe, grazing is practised more often than in Southern Europe.
- However, also in Northern Europe the percentage grazing is decreasing rapidly.
Grazing systems

- Grazing systems used differ between countries
- Rotational grazing is practised the most often
- When grazing is practised, cows graze mainly during the day. During the night, cows are indoors and get supplemental feeding
- The number of hours grazed per year and per day is decreasing.
Development of new systems

- Organic production (Greece, Spain)
- Part-time grazing (Finland)
- Modern continuous grazing (NL)
- Rotational short herbage grazing (Lu)
- Mobile automatic milking systems (Dk, NL, Belgium)

...
Reasons for less grazing

- To control rations and optimise grassland utilisation (knowledge is lacking)
- Reduced grass growth in summer time
- Need to reduce mineral losses
- Labour efficiency
- Grazing does not “sell”
- Increased herd size
- Increased use of automated milking systems
Increased herd size / Walking distance

- Grazing becomes more complicated with increasing herd size
- The average distance between paddock and milking parlour increases
Automatic milking

- Grazing in combination with automatic milking is possible
- But experienced as difficult

- Solution? Grazing opportunities with mobile milking
  - Session 2.1 Tuesday, 9.30
Advantages of grazing

- Natural behaviour and animal health
- Environment: less ammonia volatilisation, energy use, methane emission
- Milk quality: fatty acid composition
- Image of dairy farming
- Labour and economy
Disadvantages of grazing

- Labour: management
- Less grass yield
- Lower grass utilisation
- Unbalanced diet
- Environment: nitrate leaching, denitrification, nitrous oxide emissions, N losses, P losses
Less grazing, is this a matter of concern?
Results survey

- Norway, Sweden, Finland: welfare legislation, Yes, welfare, positive image
- Denmark: 35-45%, Yes, welfare
- Ireland: 99%, No, grazing is taken for granted
- NL: 75-80%, Yes: animal welfare, culture, biodiversity, landscape
- Belgium: 95% in Flanders, Not yet
Results survey

- Luxemburg: 75-85% free access, Yes, synonym with animal health, animal welfare, sustainable agriculture, but also with old fashioned, non-productive, unpractical and utopist milk production. No, for the general public (enough suckler cows)

- Germany: Important for tourists, especially in Alps and low mountain ranges, organic farming, animal welfare

- Switzerland: 70-80%, Yes, especially alpine grazing, positive image and part of the culture
Results survey

- Poland: Not really an issue
- Czech Republic: 20%, No
- Portugal: 50% in 2010, Yes: animal welfare, improved soil characteristics of animal products, landscape, forest fire prevention, biodiversity conservation, soil erosion prevention, CO2 sequestration
- Spain: 0-20%, Not really an issue, however milk packs show grazing cows
- Brazil: 95%, recently some concern about CH4 emissions
Grazing system and society

- General public appreciates grazing animals in the landscape
- Biodiversity of the landscape increases
- Society associates grazing with animal welfare
- Part of the culture
Grazing system and society

- Extent to which the general public notices grazing depends on:
  - Number of animals
  - Area grazed
  - Place of the pasture
  - Moment of grazing
  - Time the animals spend grazing
Grazing or zero-grazing
Determining factors

- Developments in dairy farming (e.g. increased herd size, legislation)
- Personal preference of the individual farmer determines the grazing system used
Determining factors

- Knowledge on the effect of grazing is affected by personal preferences and experiences
- Preferences may change:
  - With time
  - During major life events
  - Communication with society
Concluding remarks

- Grazing dairy cows: rapidly decreasing
- The decline in the popularity of grazing is supported by current trends in livestock farming in Europe (e.g. larger herds)
- There are economical, practical and personal motives for less grazing
- Grazing is or will become an issue for society
- Simple and easy-to-use grazing systems and practical management tools have to be developed to support farmers in grazing
Grazing in Europe 2010

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