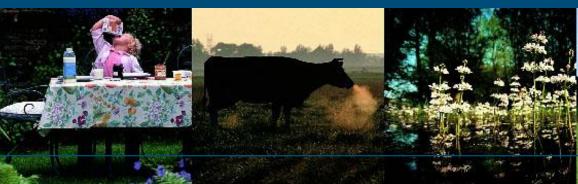
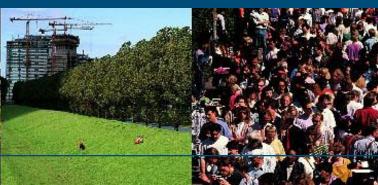
## Grazing in Europe 2010

Agnes van den Pol-van Dasselaar Wageningen UR Livestock Research, the Netherlands

Participants of the EGF Working Group Grazing











#### <u>Grazing</u>

- 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

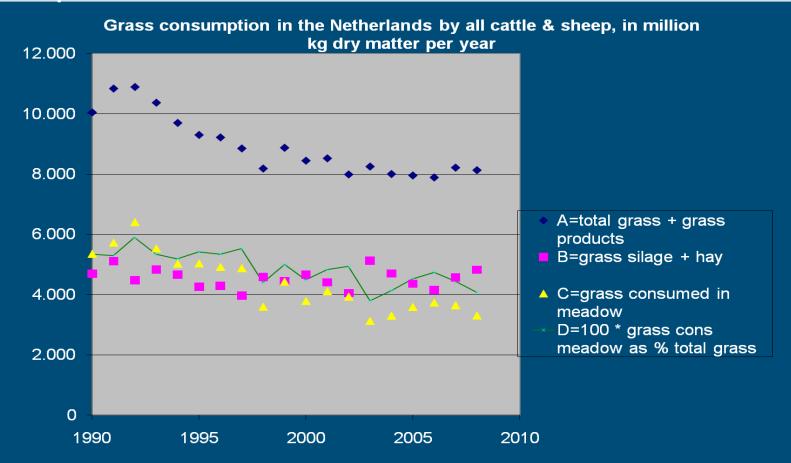
Example of the Netherlands







#### Example of the Netherlands

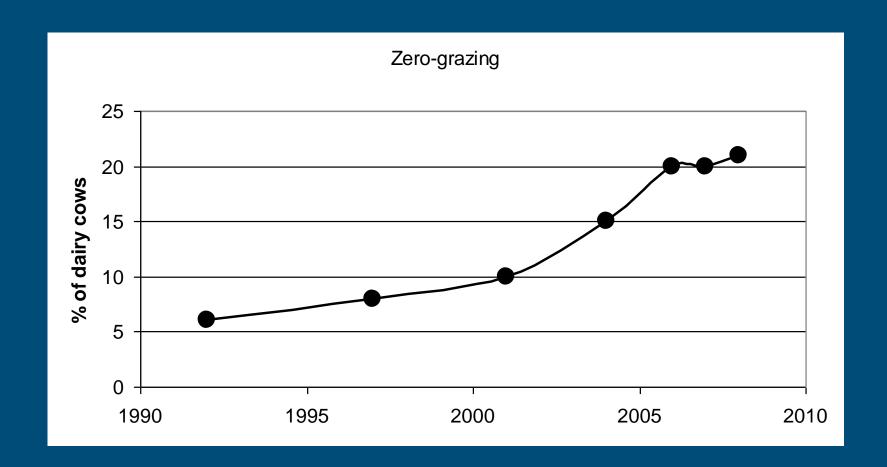


Source: Van der Hoek, 2010 based on Van Bruggen et al., 2010





## Example of the Netherlands







## 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





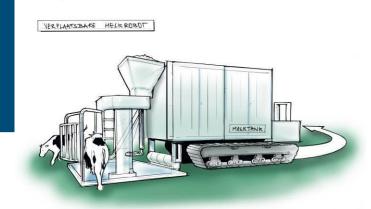
#### Increased herd size / Walking distance

- 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

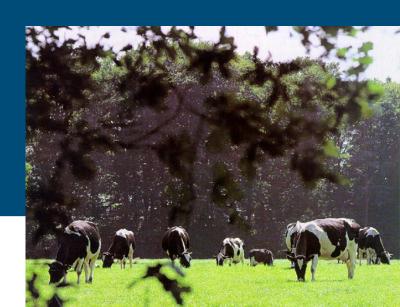
- Poland: Not really an issue
- Czech Republic: 20%, No
- Portugal: 50% in 2010, Yes: animal welfare, improved soil characteristics of animal products, landscape, forest fire prevention, biodiversity conservation, soil erosion prevention, CO2 sequestration
- Spain: 0-20%, Not really an issue, however 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





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