Innovations in grazing

EGF Working Group Grazing, Lublin, Poland

3 June 2012, Agnes van den Pol-van Dasselaar

LIVESTOCK RESEARCH
WAGENINGEN UR

Innovations in grazing

- Grazing in Europe 2011
- Advantages and disadvantages
- Reasons for less grazing
- Solutions (four categories)

Grazing in Europe 2011

- Data on grazing in Europe are not easily available
- A survey was conducted among members of the EGF Working Group Grazing in October and November 2011
- The members were asked to provide an educated guess on the amount of grazing dairy cattle in their country and to report on recent innovations
- Data on grazing were compared with results from earlier surveys among members of the EGF Working Group 'Grazing'
- Please note: no statistical data, results are just educated guesses. No complete overview available

Grazing in Europe 2011

- Norway, Sweden, Finland: welfare legislation, six weeks to four months outside, results of 2011 show that the number of hours that cattle spent outside is decreasing
- Denmark: 84% in 2001, 70% in 2003, 40-50% in 2008, 35-45% in 2010, 30-35% in 2011
- Ireland: 99% in 2010 and 2011, staying consistently high, grass based seasonal systems dominate, 230 days, 22 hours day^{-1}
- The Netherlands: 90% in 2001, 85% in 2004, 80% in 2007, 74% in 2010, 70-75% in 2011
- Belgium: 85-95% in 2010 and 2011

Grazing in Europe 2011

- Luxembourg: 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 grazing is marginal, decreasing, 30% in 2011 in northern Germany
- France: decreasing in the more intensive area, but not in wet mountain conditions, 90-95% in 2011
- Switzerland: 85-100% in 2011
- Austria: 25% in 2011
- Poland: decreasing

Grazing in Europe 2011

- Estonia: 35% in 2011
- Czech Republic: 20% in 2010, sharp decrease in 1990-2008, currently slight increase
- Hungary: 5% in 2011, stable over last 5 years
- Bosnia and Herzegovina: 5% in 2011
- 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, less than 10% in 2011

Advantages of grazing

- Natural behaviour and animal health
- Environment: less ammonia volatilisation, energy use, methane emission
- Image of dairy farming (culture, animals in the landscape)
- Economy
- Labour (hours)

LIVESTOCK RESEARCH
WAGENINGEN UR

EGF

Disadvantages of grazing

- Labour: management
- Less grass yield
- Lower grass utilisation
- Unbalanced diet
- Environment: nitrate leaching, denitrification, nitrous oxide emissions, N losses, P losses

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

Grazing is complicated

- Farmers do not employ grazing
- Young farmers
- New farm situations

- “Grazing requires thinking”
- “Only few farmers manage well their pasture based systems. The potential to improve the efficiency is enormous.”
- Support is useful

LIVESTOCK RESEARCH
WAGENINGEN UR

EGF

Innovations in grazing

- Technical support
- Decision support tools for farmers
- Novelties in grazing management
- Innovative approaches in knowledge transfer

LIVESTOCK RESEARCH
WAGENINGEN UR

EGF

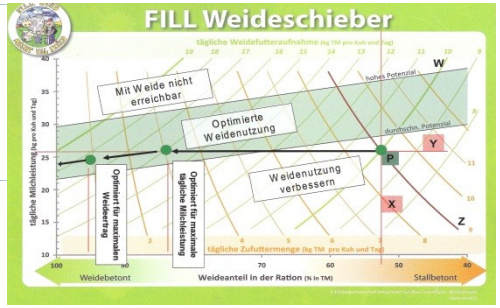
Technical support (hardware)

- Mobile automated milking systems. Useful in particular situations, e.g. in remote areas which are not easy accessible for grazing
- Methods to simply and quickly determine yield and quality of grass (rapid pasture meter, remote sensing)
- Automatic fence gates in the fields
- Automatic sward height measurements
- Automatic measurement of grass intake by sensor technology
- Methods to get the animals to the milking parlour

LIVESTOCK RESEARCH
WAGENINGEN UR

EGF

Decision Support tools



- Especially in Ireland many tools and models are available for farmers and Irish farmers actually use them
- Profit monitors and grazed pasture feed budgeting tools
- Also in other countries, e.g. decision support tools on a day-to-day basis
- Grazing information platforms, where all the available information is easily accessible for farmers.
- The information is not yet often used by farmers in Europe. Simple decision support tools are needed, which are automatically populated with data and which provide support for grassland management decisions.

LIVESTOCK RESEARCH
WAGENINGEN UR

EGF

Novelties in grazing management

- No major developments during the last few years
  - Rediscovery of continuous grazing instead of rotational grazing (advantageous for large herds since it is relatively easy to manage)
  - Simplified rotational grazing systems
  - Flexible part-time grazing to buffer variations in pasture quantity and quality
  - Night time grazing (ensures that animals are outside for a large part of the day, but the actual grass intake is relatively low)

Innovative approaches in knowledge transfer

- This category is needed to make the innovations from the previous three categories work
- Of course workshops, seminars, publications and courses for professional training of farmers and advisors on grazing strategies are necessary
- Experiences in the Netherlands (www.koeenwij.nl) showed however that the most successful projects focus not only on knowledge transfer, but also on the needs and personal preferences of the farmer

Concluding remarks

- The popularity of grazing in Europe is declining
- Innovations in grazing are needed
    - Technical support
    - Decision Support Tools for farmers
    - Novelties in grazing management
    - Innovative approaches in knowledge transfer

Innovations in grazing

LIVESTOCK RESEARCH
WAGENINGEN UR

EGF