

Decision Support Tools for grazing

EGF Working Group Grazing, 3 June 2012

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Decision Support Tools and Indicators for Grazing in the Netherlands

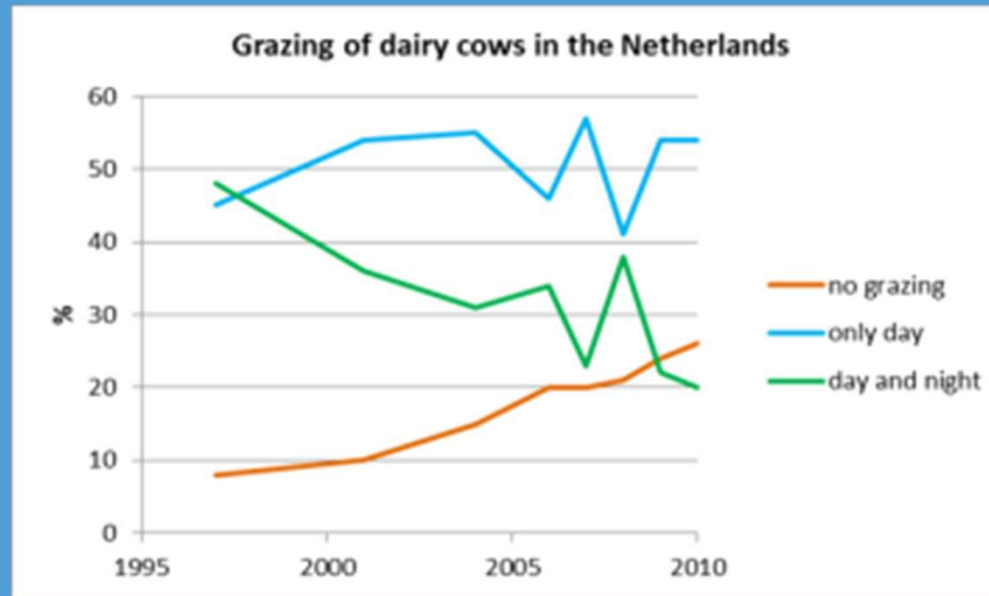
- Introduction and aim
- Methods
- Results and discussion
- Conclusions



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NL; every year less grazing

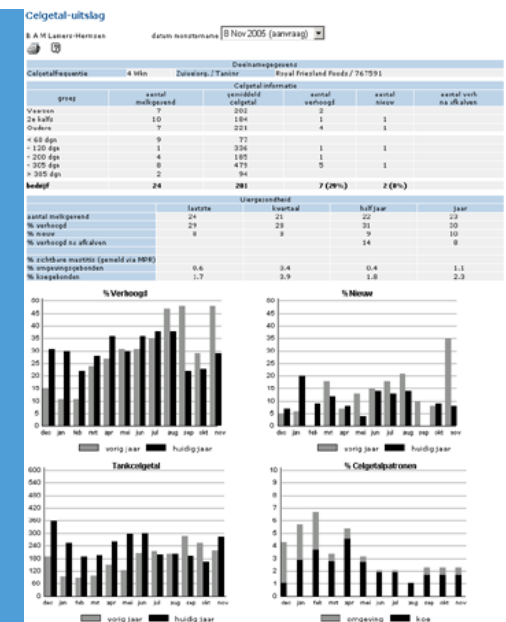


- Most dairy companies stimulate grazing
- Discussion changes:
'to graze or not to graze' → 'how to graze'



Solution; Decision Support Tools and Indicators for Grazing

- Operational management
 - Simple
 - Robust
 - Appealing
- Simple dashboard tool?
- Key figures/indicators for grazing?
 - milk recording
- Aim is to stimulate and quantify grazing!



Methods

- Inventory special needs farmers
 - Advisors, farmers and research (150 persons national and international, e.g. Netherlands Society for Grassland and Fodder Crops, EGF, IFCN, ...)
- Inventory available tools and hardware
 - Operational, tactical, strategic
- Discussion in advisory board
- Prioritization (9 items)
- Pilot test with stakeholders



Inventory grazing

- What are the main issues with respect to grazing for dairy farmers?
- What information is needed to facilitate grazing?
- What is already available?



Results; main concerns I

- Weather
- Maintaining a stable milk production
- Stay in control (of grazing)
- Labour input (time and attention)
- Management of grazing



Results; main concerns II

- Herd size
 - Introduction of AMS
 - Grass intake
 - Grass yield
 - Economics
-
- → Key indicators for grazing necessary
 - → Combine in Decision Support Tool for Grazing



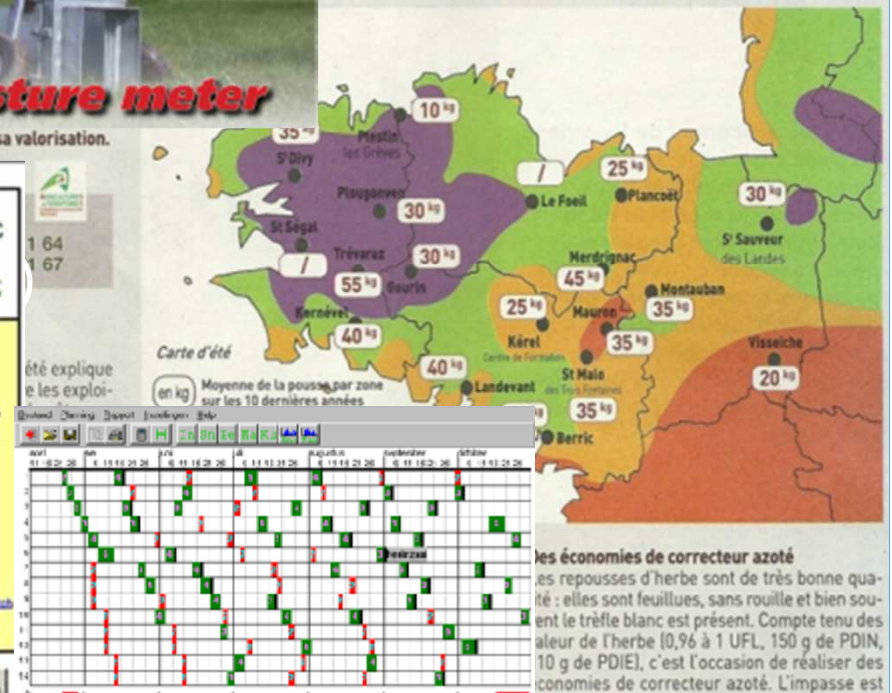
Examples of tools

- Grazing indicators operational
- Grazing indicators tactical
- Operational tools
- Tactical tools
- Hardware



observatoire des fourrages

... ha et par jour



Teagasc Grass Programme v12.2

Data that you need to enter once only

Enter Paddock Details Use to enter the details of the paddocks on your farm. Enter a paddock name, no and size. You must do this once - the 1st time you grass budget.

Select DMI for Cow Kg DM/head/day **18** Year **2010**

Data that you need to enter regularly during the grazing season

Cover Sheet **Enter Paddock Covers** **Annual Grass Budget & Stock Nos.** **View Wedge & Enter/Review Key Decisions**

Budget & Stock **Wedge Graph & Key Decisions**

STANDARD VERSION Less Sheets on view

COMPLETE VERSION All Sheets on

MetEireann Farmers Journal - Check out Grass Watch

Teagasc - Advisors Services

Also: Calving, Grass grown, Grass Growth, Programme, Print Weights

- Lots of ideas and possibilities
- No applicable standard for NL
- Advisory board
- Prioritization

A: Weather, grass growth, grass intake and milk production

- Variation in weather conditions
 - Effect on: quality, growth and palatability/taste
 - Grass intake
 - Milk production
- Predictability of grass growth and intake



B: Labour input, planning and control

- Difficult planning -> forced choice (what should I do now?)
 - No choice or automatic choice
- Amount of labour -> time-related work



C: Economics

- To graze or not to graze, what is profitable?
-> confirmation
- Profits of grazing are not clear
- No indicators



D: Automatic Milking

- Milking frequency may decrease, but milk production could remain stable
- Grazing is possible, however unknown to many farmers
- Zero grazing feels safe



No headache with grazing management!

- (A) grass growth should be predictable
- (B) support decision or avoid choice
- (C) clarify economic difference between grazing and zero grazing
- (D) gain experience and increase knowledge with the combination grazing and AMS



Indicators and tools for grazing

1. Grass growth per ha per day
2. Flowchart grazing
3. Grass intake (operational tool)
4. Feed energy production or efficiency per ha (kVEM/ha)
5. Costs per kg DM per day per forage species
6. Benchmark (of indicators)
7. Adjustments to change, e.g. weather
8. Economic grazing efficiency (tactical)
9. Labour needs



Priority 1

- Grass growth (key marker)
 - DM growth day⁻¹
 - Expected
 - Weather (forecast?)
- My Grazing System (tactical tool)
 - Automatic
 - Tactical tool

Grasmonitor.com



Priority 2

- Grass intake
- Costs per kg DM
- Feed efficiency (kVEM/ha)
- Benchmark (grazing indicators)



Kritieke opbrengstprijs per kg melk Werkelijke opbr.prijs per kg melk Saldo per kg melk

	Bedrijfsstructuur		
	Uw onderneming	Referentie	Landelijk
Aantal bedrijven	1	44	193
Kilogram melkquotum	1.235.414	1.065.541	741.916
Geleverde kilogram melk	1.219.795	1.055.740	732.074
Vetpercentage	4,07	4,25	4,42%
Eiwitpercentage	3,45	3,47%	3,54%
Gemiddeld aantal aanwezige koeien	137	122	88
Kilogram melk per gemiddeld aanwezige koe	8.904	8.688	8.297
Geleverde kilogram meetmelk	1.230.871	1.096.676	772.220
Aantal hectare grasland	46	43,1	33,2
Aantal hectare snijmaai	20	15,9	11,1
Voerprijs per 100 kg voor	€ 26,55	€ 23,47	€ 24,33



Conclusion / take-home message

- Grazing indicators
 - have to avoid headaches
 - are identifiable or recognizable
 - have to be picked up together with stakeholders
- Labour gives many discussions, but no tools yet
 - For economics only a few tools



Discussion



- Do you recognise the real issues?
 - Weather, grass growth... etc
 - Support decision or avoid choice
 - Identifiable economics
 - Gain experience with AMS and grazing

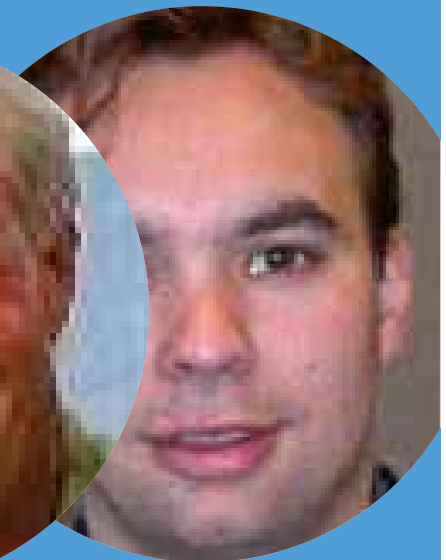
- Suggestions for?
 - Grass growth as indicator
 - My Grazing System as a decision tool



Tools and indicators for grazing

Thank you!

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