Pro-active Herd Management - a brief status

ICAR General Assembly 2007
Manufacturers’ Presentations
Verona, Italy
Thursday 31 May 2007

Steen Kold-Christensen
Int. Key Account Manager
FOSS

Agenda

• Brief summary from Kuopio meeting June 2006
• Partners
• Concept
• Product
• Biomodel example
• Vision
• Status
• Video

Summary from ICAR Kuopio June 2006

• On-farm monitoring of milk parameters by Ole Lind, DeLaval
• Future trends in the Milky Way by Steen Kold-Christensen, FOSS
• Proactive Herd Management project

The Partners

• Danish Cattle Federation
• Farm advisors/ veterinarians
• Lattec
• Biosens
• DeLaval
• FOSS
• Eurofins Steins

The solution

The product
• Upgrade-to-fit kit
• Capital Goods
  - Automatic proportional sample – low carry-over transport
  - Automatic analytical instrument
  - Bio models
  - Decision support software
• After Sales
  - Qualitative dry sticks tests for
    - Progesterone (~30 t/c/y)
    - Lactate dehydrogenase (LDH) (~200 t/c/y)
    - Urea (11 t/c/y)
    - β-Hydroxybutyrate (BHB) (60 t/c/y)
  - Software updates, spares etc.
• Knowledge
  - Education and advisory support

The history of in-line measurements - a strategic effort of research!

• “Memo experiments” at Skovgaard experimental station (1990 – 2000)
  - 14 parameters investigated for 10 years – including 653 lactations
  - FOSS as a service partner
• The Biosens research cooperation
  - Lattec (FOSS and DeLaval)
  - Danish Institute of Agricultural Sciences
  - Danish Cattle Research Centre
  - Danish Cattle Federation

The concept
• On-farm Herd Management solution optimizing:
  - Reproduction
  - Oestrus
  - Pregnancy
  - Disorders
  - Mastitis
  - Feeding
  - Protein
  - Energy - Ketosis
Pro-active Herd Management

Vision

...within seven years
1/3 of Danish Dairy Farmers
will benefit from
an automatic Pro-active
Herd Management System
linked directly to the
Central Cattle Database
with high-speed data exchange
giving them a unique leading position
in the fast changing global market
with quotas and subsidies fading away....

Project status

• Prototype 3 phase
• Installed successfully on 6 test farms in Denmark
  – Two have been in operation 2 & 3 years respectively
  – Four have been put in operation January - May 2007
• Focus on
  – Robustness & reliability
  – Validation of the biometric models
  – Development of SOP
  – Validation and proof of farmers values

Market introduction in Denmark

• Concept & project was presented at Danish Cattle Federation
  Congress February 2007
  – 6 presentations submitted including testimonial from a test farm
  – 600 farmers & advisors participated
• Plan to introduce the Herd Navigator concept in one region in
  Jutland end 2007
• Roll-out in more regions in Denmark during 2008
• Introduction in 2-4 countries beyond Denmark in 2009

Video