CHALLENGES OF GETTING COW ID

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In our daily business in Holland and Denmark we now and then see challenges with getting Cow ID

This presentation is based on information’s and views from sporadic observations reported by our field- and validation staff.
COW ID-TOPICS RELATED TO MILKING AND MILK RECORDING

• Animal ID is the first critical challenge when collect data from sensor's in a milking system.

• Sensor data is only valid and relevant when linked to an valid ID

• To ensure correct and true data, it is essential to have firm routines and technology to catch Cow ID
COW ID AND DATA IS AN ISSUE OF GREAT CONCERN

• Milking parlours with increasing throughput gets more and more automation.

• Milking system gets more and more sensors for constant measurement on a series of parameters.

• Therefor it gets more and more important to highlight the Cow ID topics
COW ID AND DATA IS AN ISSUE OF GREAT CONCERN

- Cow ID
- Antenna

- Device
  - Milk meter
  - Sensor
  - Milk sample

- Database
  - Cow ID
  - Milk weights
  - Sensor data
  - DDMMYYYY
DATA COLLECTION FROM SENSOR DEVICES
NEED ACCURATE COW ID

Body Condition
Body Weight

Milk Yield
Milk Composition
Milking Speed
Milk Flow Rate
Estrus/Pregnancy
Mastitis
Pathogens
MUN
Ketosis
VFAs
Johne’s
BVD
BLV

Mobility
Heart Rate
Rumination

Temperature
Feed Intake
Respiration
Chewing/Eating
Methane Emission

Animal Location
Standing/Resisting/Movement

Hoof Health
DO WE....

• Milk cows and collect sensor data?

OR

• Milk "transponders" and collect sensor data?
COW ID WITH RFID OR TRANSPONDER

• Both types have the same issue with accurate Cow ID

• The herd management system on the farm need to be set up with Cow no. and Transponder no. and Official animal number.

• Transponder at neck/leg band normal is put on heifers just before or just after calving

• RFID ear tags are normal put at new born calf just after birth
WHAT IS ACCURATE COW IDENTIFICATION?

• Reading all cow with a transponder passing the antenna at the entrance of the milking parlour!

OR

• Cow number on the milking point display is the same cow physically standing at that milking point!
CHALLENGES ON DATA COLLECTION

- Large variety in distribution of milking technology
- Portable meters are aging – some really old
- Sampling process not satisfactory
- Too much manual work
- Too many possible sources of errors
MAIN REASONS BEHIND ERRORS

- Cows without electronic ID
- User/Milker not familiar with the system
- Milker do not follow SOP for the system
- Cows pushed into the parlour
- Cows passing each other after identification
- Malfunction of installation
- Lack of maintenance of the electronic installation
- Electronic noise from other source
- Poor installation of electronics and wires
BIG PARLOURS – HIGH THROUGHPUT

- Validation of ID at bail and row is critical
- One missing cow ID is not only a problem for the individual cow.
- All bails after that cow might have wrong Cow ID
2X20 SIDE-BY-SIDE - BAIL #3 - COW NOT IDENTIFIED

- 18 bails with wrong CowID
- First 2 bails with correct CowID
- Missing RFID ear tag
- Cow in bail #3
ROTARY WITH EMTY BAILS
THE MILKERS PLAY AN IMPORTANT ROLE IN ADJUSTING THE COW ID TO THE RIGHT NUMBER
COW ID ON RECORDING DAY
COW + SAMPLE LINK
ON RECORDING DAY
Core value of any registration, whether manual or automatic, is to monitor, control and validate Cow ID.
THANKS FOR YOUR ATTENTION

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