Recording claw disorders electronically

ICAR annual workshop 2011
Bourg-en-Bresse
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Danish Cattle federation
Background

- Increase in herd size
- Change in cow environment
- More cows per man hour

=> Dramatic increase in Claw disorders

- Interest in possible breeding improvements
- Increasing focus on management actions

=> Action was necessary!!
CATTLE DATABASE - THE BASIS OF ADVICE AND SERVICE TO THE CATTLE FARMERS

- Yield Calculation
- Herd Statements
- Cow Statements
- Slaughter Weight
- Carcass Evaluation
- Quality Control
- Cattle Health Service
- Mastitis
- Diagnosis
- Reproduction Control
- Health Supervision
- Herd/Cow Statements
- Production-Budget
- Feed Planning
- Management Lists
- Information
- Observation Lists
- Feed Control
- Production-Control
- Inseminations
- Pregnancy Control
- Breeding Planning
Recording Claw diseases

Until 2009:
- Claw health not recorded on a regularly basis in Denmark
- Central Danish Cattle Database: Cow numbers, data on milk yield, reproduction ect. but
- Very few central data on claw diseases

Jan 2008
- NAV working group: Joint Nordic Claw record scheme (DK, S, Finland) (NAV = Nordic Cattle Genetic Evaluation)
- Hoof trimming traits to be recorded including a short description of the trait

2008 – 2010
- Software program for recording claw disorders during trimming
- Program communicating on-line with the central Danish Cattle Database
- Touch screen solution ready spring 2010
Output after trimming

The Trimmers program

The comprehensive view

Central Cattle Database

Central Animal output program

Data

Other program

Other program

Other program
Recording Claw diseases

2010 - 2011

- About 112 trimmers in Denmark
- 52 trimmers have bought the touch screen we recommended

Blue Line Panel PC 67 12 "

- 12 inch screen
- Wireless internet connection
- Cost: About 2.000 euro

- A few trimmers have chosen a cheaper solution (paper or cheaper screen)
Former recordings on actual cow...

6 registrations for 12345-6789

<table>
<thead>
<tr>
<th>Dato</th>
<th>Sygdom</th>
<th>Grad</th>
<th>Ben</th>
<th>Sko</th>
<th>Forb.</th>
<th>Behandler</th>
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<tr>
<td>29-03-2009</td>
<td>Såleblødning</td>
<td>Svær</td>
<td>VF</td>
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<td>Svær</td>
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<td>Svær</td>
<td>HB</td>
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<td>Mild</td>
<td>VF</td>
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<td>Svær</td>
<td>VB</td>
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</table>
Output for diagnosing - graphs / Visual output

Heifers

Skin related claw diseases

Claw related to the horn

Cows 1. lactation

Cows 2. lactation
Why we designed the program as we did

• The program design - easy to use
• See recordings from last trimming on actual cow
• Mild >> Severe (does the farmer take action in time?)
• Status on screen while trimming

Output for diagnosing

• List of all animals recorded
• List of diseases in %
• List of animals needing care after trimming
• Graphs / Visual output

Output for planning ahead

• Heifers
• Cows
Data from claw trimmers 2010 - 2011

Trimmings / Month

Antal klovbeskæringer
01/06/2009 - 05/06/2011:
355,616
fordelt på
1097 besætninger

År - måned
What did the trimmers record until now?
(1st June 2011)

- No. of *trimmings*: 350,000
- Per month (average): 30,000 trimmings
- No. of *farms*: 1,100 (out of 4,000)
How valid are the registrations?

<table>
<thead>
<tr>
<th>Claw disease</th>
<th>% - (trimmers)</th>
<th>% - (Scientist)</th>
</tr>
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<tbody>
<tr>
<td>DD</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Sole ulcers</td>
<td>7</td>
<td>6</td>
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<tr>
<td>WLD</td>
<td>6</td>
<td>8</td>
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<td>Double sole</td>
<td>3</td>
<td>5</td>
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<td>Sole bleeding</td>
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<td>59</td>
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<td>Heel horn erosion</td>
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<td>55</td>
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</table>
Recording claw diseases in the future will get even quicker:

Electronic ear tags + Antenna =
Any questions?