CowSignals®

The difference between just looking versus really seeing…
and what you do with the information to make more milk

Hubert J Karreman, VMD
CowSignals®: Removing Obstacles to Health...
To make more Milk

Look:
- See everything
- Large ≥ small
- UNO's
  Unexplained Notable Observations
- Waiting Cows
- Risk
  - Animals
  - Places
  - Moments

Think:
- What are the causes?
- Feed
- Water
- Space
- Rest
- Air
- Light

Do your cows get all the six freedoms of the pasture in the barn?

Act:
- What is good?
- What has to be improved?
- Do something!
- Your cows will pay you back in health and liters of milk!
CowSignals® is looking at familiar things from a different perspective
Cow Signals®: What does the cow want?

The 6 freedoms of pasture

Make the most milk by providing these when indoors
What does a cow do in 24 hours?

14hr laying – 6hr eating – 2hr socializing – 2 hr milking time

Resting and ruminating

Eating and drinking

Milking

Socializing
Facts per cow per day

10 times a cycle of approx. 2 hours

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleep duration</td>
<td>20 minutes</td>
</tr>
<tr>
<td>Number of meals</td>
<td>8 to 12</td>
</tr>
<tr>
<td>Meal size</td>
<td>2,2 kg dm</td>
</tr>
<tr>
<td>Meal duration</td>
<td>30-45 minutes</td>
</tr>
<tr>
<td>Eating time</td>
<td>4 to 9 hours</td>
</tr>
<tr>
<td>Rumination time</td>
<td>4 to 10 hours</td>
</tr>
<tr>
<td>Total &quot;chewing&quot;</td>
<td>16 hours</td>
</tr>
</tbody>
</table>

CHEWS PER CUD?
DRY MATTER INTAKE + WATER = MILK

45 lbs DMI +/- 10-30 gallons

(3.5% - 4% of Body Weight)
How a cow tells you about her eating
RUMEN FILL: DEPENDS ON DRY MATTER INTAKE & RATE OF PASSAGE

**TODAY:**
Rumen fill

**WEEK:**
Profile

**MONTH:**
Body Condition Score
Looks very fresh, yet not eating much – perhaps check her?
Rumen Fill

Score 1

Score 5
Belly Profile = feed intake over past week

Minimal  Moderate  Good
Belly profile: minimal
Belly profile: good
Belly Profile: great
Danger Triangle in early afternoon
Not all cows eat the same amount of feed...

Low ranking cow:
Risk cow / indicator cow
Will this cow get pregnant? When?
Is this useful information?
A Cow Signals® Workshop: engages farmers to see more, learn why things happen, to have cows make more milk

In the field:

1. The cows are quiet? alert? active? The cows are equally dispersed over the area? 
   Herd behavior: all resting and ruminating or all eating? Do you see waiting cows?

2. Every cow has always unlimited access to feed and water, of good quality/quantity? 
   2 drinking tanks per field?

3. Is the group consistent for: 
   check 10 random animals and find a percentage

<table>
<thead>
<tr>
<th>average figure</th>
<th>% of extremes</th>
</tr>
</thead>
<tbody>
<tr>
<td>height and weight</td>
<td>number of small heifers:</td>
</tr>
<tr>
<td>colour and shine</td>
<td>number of dull/sallow animals:</td>
</tr>
<tr>
<td>body position</td>
<td>number of curved backs:</td>
</tr>
<tr>
<td>body condition</td>
<td>number &lt; 2,5: number &gt; 4:</td>
</tr>
<tr>
<td>rumen fill</td>
<td>number &lt; 2,5:</td>
</tr>
<tr>
<td>hygiene (dirtiness)</td>
<td>number of dirty udders:</td>
</tr>
</tbody>
</table>

4. Check at least 5 of the following ‘at risk cows’ on hair coat, rumen fill and body condition: 
   a. heifers: 
   b. large cows: 
   c. adult cows in first month of lactation: 
   d. heifers in first month of lactation:

5. The manure in the field is of the same consistency? Well fermented? There are no grains or fibre or gas bubbles visible?

6. What % of the cows have a dirty back/backside?

7. Any cows panting, coughing, snots in the nose?

8. Avoidance score: Walk slowly (1 meter/second) towards 3 cows while looking at their feet. 
   You can approach them at: 5 m - 2,5 m - 1 m - touch them?

9. Which places of risk do you see?
CowSignals®: Removing Obstacles to Health…
To make more Milk

**Look:**
- See everything
- Large ≥ small
- UNO’s Unexplained Notable Observations
- Waiting Cows
- Risk - Animals - Places - Moments

**Think:**
- What are the causes?

**Act:**
- What is good?
- What has to be improved?
- Do something!

Do your cows get all the six freedoms of the pasture in the barn?

Your cows will pay you back in health and liters of milk!

WORK SHOPS AVAILABLE ANYTIME, ANYWHERE