

# Tips from 2011 and 2010

## *Tips from 2011*

### *December:*

#### **Easy help cleaning VMS**

The traditional parlor was cleaned (usually) two times daily. The VMS also has a daily cleaning necessary to be able to continue functioning.

By everyone is now known that camera and the last part of the arm is most sensitive (dirt) part of the robot. The camera needs 3 times a day a check or cleaning for example with "Antikal" (anti-lime?), especially if you have a lot of lime in the water, that causes Limescale and that may not have any chance!

Every time you rinse your boots you also rinse and squeeze the sponge: every time you pass.

And sometimes put a little of a cleaning product or de-lime product on the sponge will help even more. Thus, the camera all day / night gets a small supply cleaning after each milking.

Furthermore the short / long milk tubes also need a daily cleaning routine. VMS wash them off but it does so "with her eyes closed." The farmer sees the corners and checks.

A useful tool here is a car brush like the Gardena (see figure).

The Teat cleaner cup also can be cleaned this way properly.

And, ... everything is in the same time checked for correct functioning!

The caps of the VMS and the robot arm also can be cleaned with this brush perfectly.

Advantage is also that it splashes less than a "normal" hand

shower.



You better not clean the camera with a brush, to prevent scratches.

Better is using soft paper towels.

### ***November:***

#### **Shave udderhair in time**

In the fall, and especially from end lactating cows hair on the udder grows quickly. This can make the robot to search longer to find the teats, or give more incomplete milked cows! Has shaving the udder, or burning, a place in your work protocols?

### ***October:***

#### **Good strategy claw trimming**

To eat much roughage a cow needs to come often to the feed area.

To give much milk a cow must often come to the robot.

In order to realize all that is needed very healthy claws.

That cannot be achieved by only trimming a cow when she is lame but you need to have a preventive trimming program.

This means you trim all the cows before the dry period and check after  $\pm 120$  days in lactation. And in such a way that claws not only heal but also grow stronger.

After parturition cows have a heavy time: recover from calving and giving much milk. And therefore they should be able to eat

and walk much. Those cows you really have to minimize trimming because trimming always gives thinner and fragile claws. With healthy claws makes a cow on one day easily 2 or 3 more visits to the feeding fence, which means 10 to 20% more roughage, and she does an extra visit to the robot! And that is good for more milk and also for a shorter negative energy balance! And that translates into more disease resistance and a longer life!

Thus earns a monthly round hoofcare program for (nearly) dry cows and cows that are in mid lactation herself easily. Farms I've visited I often left an example of how preventive hoof care needs to be done.

### **September:**

In the spring grass is more than 1000 VEM and is delicious! In summer and autumn this drops to  $\pm$  950 VEM.

Imagine a cow eats about 18 kg dry grass in spring, far more than the autumn grass for example:

18 x 1000 = 18,000 VEM (accounts for  $\pm$  28 liters)

15 x 950 = 14,250 VEM (accounts for  $\pm$  20 liters)

difference .....3,750 VEM

1 kg of concentrate is  $\pm$  950 VEM. From August you usually feed some dry matter from grass silage and/or maize but that also has not VEM of spring grass. So when you want to compensate the high yielders there is required 3 to 4 kg of additional concentrate... ..

Lower yielding cows have with 14,000 VEM often enough. So it is with the various cuts this year, the spring silage is energetic and very tasty with lots of sugar. The later is less tasty and has less VEM. Again count that the cows just easy eat 2 kg more of the spring silage than from later harvested.

Compare it with the situation you also like to eat more when

mother/wife has done a very good cooking job.

So then you will have easily a drop in the feeding of  $2 \times 950 = 1900$  VEM per cow per day! That is also 2 kg extra feed to maintain the VEM level...

In addition, there are also large fluctuations in protein, etc.

It is very difficult to keep the cows on the milk all seasons round. So another possible motivation to make several pits to distribute de harvest and make it possible to spread the ration wider over the year.

Also fluctuations, especially in protein is not only bad for the production but also bad for laminitis and resistance for diseases.

And so this has also a lot of influence on behavior, the count of visits to the VMS, production and lifetime production from the cow!

Additional problem this year is that the second and third cut silage this year is almost impossible to keep cold. So when the silage is stored too high or the feed speed to slow the silage analysis can be easy different than the silage you are feeding.

**And then the feed rate is actually the boss about the ration instead of you ...!?!**

***August:***

### **Ventilation plan**

This year with its varying temperatures and humidity shows once again that good ventilation and fresh air is as much as an absolute requirement for our increasingly producing dairy herd. Cows need more and more fresh air and bacteria and viruses, so diseases, hate that!

You should not smell too long and too much manure, silage, etc. in your barn and avoid blind spots!

Make a good ventilation plan, watch the most frequent wind direction and take account if there are inhibiting factors such as buildings, trees etc. around the stables.

Open sides or sometimes even open "headsides" mostly do ensure adequate intake.

Fans move air only, so let them pull fresh air and let them create a circulating air flow through your barn.

We hope to see one blow towards the VMS, because cows like to walk and stand in the wind and then it is right in the waitingroom and the robot room cooler and more comfortable for her, and flies hate wind.

The other direction depends on the width and layout of the barn.

Depending on the content of the stable, they should almost always be turned on soft or harder!

Draft is unhealthy, (little) fresh wind is healthy!

## ***July:***

### **Healing chance by mastitis**

Because each milking brings data in the computer you can see quickly whether abnormalities are present in milk or that something on a cow changes. So you can be quicker in taking action. (see tip of the month June 2010)

This and following the developments in cow monitor and in the graph is pretty well possible to estimate if you have to treat the cow and how long?

Depending on speed of approach and following paragraphs, the cure rate for high SCC cows lays between 20 and 90%. (source UGCN)

These cows have a lesser chance of recovery:

- Lactation number > 3

- Lactation stage > 100 days
- Duration increased cell count > 2 weeks
- Height SCC > 300,000 c / mL
- More often treated? > 2x
- Rear Teat
- Resistance cow moderately / poorly
- Type of bacteria? SAU, CNS
- Insensitivity antibiotic?

Try to estimate on time if cure is promising or has no chance. Chanceless cows, even though it is cow Rebecca with lots of stories, can cost lot of time and money and meanwhile infect other cows in the herd ....!!!

**June:**

### **Efficient layout barnplan**

Do you have renovation or new building plans?  
Consider the following list:

I have in 3 minutes, or one person can (!):

- A newly calved cow brought into the VMS
- A lame cow in the treatment box
- Separate a cow to treat
- A dry cow moved to other group
- A calf moved to new group
- The young cattle moved to new groups

In my (new) walking route, I see three times a day:

- The milking cows
- The dry cows
- Newly calved cows
- Heifers
- Calves
- The sensors of the feed auger

- My cows have to make as less short turns as possible to save their claws.  
(Also -especially- the dry cows?)

And if you have no other possibility it is to consider to put rubber on these places on the racks!

And maybe you have for yourself even more ideas, good luck!

### **May:**

#### **Heavy silage is also heavy in stumach**

You are quite right when you start to mow, imagine that we are going to have just as long wet periods, as we now have a dry period!

But think about how to store, because the difference in forage could well be very big this year and thus more difficult for the coming season to make a good diet!

(See "March")

### **April:**

The teatcleaning treatment prior to milking has two known functions.

Obviously need to clean the teats.

But especially the good preparation to the milking is perhaps even more important!

Hence the time saved on shorter pre-treatment often is lost in time of milking or even in the good empty milking of the cow. So good teat cleaning is better for the milk yield and also for the SCC!

Recent research has again shown that the time between pre-treatment and the under hanging of the cups may

take almost one minute at a time. So use this time for good boost.

In VMS, this often means using the default settings, only when a highly productive group has one VMS, or light milking cows, you can put on a lighter or double for slow milking cows. Look at the progress of the flow on the touchscreen. With proper adjustment, the cow quickly near its highest milking speed, stays there and when finished goes very quickly down, then each quarter is taken off immediately. This is not only good for the empty milking the cow, but also for the teatpoints.

The settings can be made for an individual cow or each VMS.

A clean, well-functioning teat cleaning cup is also a requirement.

### ***March:***

#### **Store special grass silage on a special place**

Good forage is the basis for good economic management. Goal is to come as close to the 365 days to give your cows a ration equivalent to providing the best possible quality. This is thanks to you, for example to keep the fields through the winter as dry as possible and keep free from moles to give weeds so few opportunities. And as less possible sand in the silage.

And in the summer harvesting to the correct length and in fine weather. That all this does not always works is a given. Hence the need now to think about how to store your silage so you can feed as long as possible your cows so they can perform well. And we now know that good ration with a robot means more visits to the robot and more milk. The effect of good roughage supply gives an even bigger result having a robot!

So how do you store your silage?



This could mean the so-called lasagne silage, then you make more layers over each other. This takes a lot of the interim closings, so you need to have at least two clamp silos or hardened places available.

Or do you have some too short, too long or too wet or too...? Then also store it separately so you can use that to make adjustments instead you are forced to feed it as main menu. It would be very regrettable if the answer to your problem is located in the silo but you cannot use it because other silage lays before ...

## February

When you have different feeds or concentrates provided in the VMS or in the box it happens sometimes that one is blocked or for some other reason no longer works. You see or hear concentrate falling, but it appears to be one kind of feed. That other kind of feed you have not programmed for no reason so it gives an immediate drop in production or other effects what you do not want.

It would be nice if the probes of the feed auger from your layout at the sight that you can see when something is wrong. Or a part transparent tube above the VMS.

Or even test second kind of feed to tap the touchscreen if you do not trust it!

## January

More often than expected, are mice, looking for food, able to gnaw through wires and cables. This leads to annoying malfunctions and costly damage. Especially in winter when other food is difficult to find and some food can lay around the VMS. The holes, pipes and tubes, according to mice are safe places to stay and find food. Be aware of this to have as little as possible places like that and put

poison on a regular basis who are for other pets on the farm not accessible position.

## **Tips from 2010**

### **December:**

#### ***Freeze risks.***

It's winter again, are you ready?

The VMS should actually be in a room that never falls below +4 degrees!

The compressor is also a risky freezer, but it is often in a warmer room.

A heater towards the VMS and / or warm air from the engine room certainly helps.

And an (insulation) plate or rug from above the VMS to the ceiling in front of the barn helps to keep the warmer air in the VMS space.

The fan that is supposed to keep flies out in the summer can now, in the slowest setting, push the "warm" air downwards towards VMS.

Such a plate or rug should be able to easily remove or open when the winter is over, especially when it gets very hot in the summer.

Then it holds the stale air ...

A drop of anti-freeze on the clean sponge now and then also helps.

And of course: watch out for open windows, doors and possible draft holes!

### **November:**

After start milking with the VMS the schedule is changing properly. Again structure in labour is very important for

success.

Working in protocols is not always easy, but does help. Maybe it helps to put some points the first time on the calendar or put at the service counter.

That would look like this:

At morning food swiping first, and look in the stable (is it quiet?).

Then: Everytime cleaning boots rinse sponge and squeeze too

3 x per day: 2 minutes-check, clean camera + VMS-check (he works good?)

1 x per day: milk jugs, pipes and cleaning jug clean and check

1 x per week: frame VMS, food bowl, manorplate and photocell.

1 every 2 weeks: concentrate gift retrace, USB stick switch

1 x per month: check Cow Configuration (see august).

1 every 2 months shave or clean udders

1 x per 3 months: do concentrate calibration

## **October:**

The choice how much concentrate a cow should get is often determined by how much milk the cow produces and / or how far she is in lactation. Yet it is also very important in the amount of concentrates to look at the condition of the cow and roughage to estimate, namely the ratio of roughage / concentrate and by-products is very important for the cow and look at her (rumen) health. In what fit and active state she is has even much influence on how the next lactation starts up again, so how long she stays on your business, think to extend peak production instead of a short high peak what is also dangerous for health and claw embarrassment. We see a lot of cows who are on the edge of acidosis. These are not only very sensitive cows but also cows that suddenly come less to the VMS.

Harry's Rule: Try, especially the first 30 days after calving, concentrates and by-products should not be more than half its kg DM roughage! (16 kg DM => max. 8 kg concentrate)  
And later in lactation keep this ratio in mind too.

Again, the "eye of the farmer" is gold again!

### **September:**

The days are getting shorter, make sure you participate in study groups or meetings where you will find colleagues who run into the same things as you. Milking with milking robots is still relatively new and acknowledge that both you and I have not "stopped learning" are opening opportunities for further development. We often see comments on your experience that makes both users better!

See also page study.

### **August:**

It is wise to use "VMS Cow Configuration" to check all cow connected settings at least once a month.

Maybe you have used settings that are no longer required or should be changed. For example teat-settings and time settings, or for slow milking cows, etc. The VMS always does what it is told to do, but that does not mean it is supposed to anymore. Odd numbers or missing checkmarks can be seen immediately.

It also can be wise to reset the settings for a cow that has calved.

In Client: Click on the full herd (small black cow icon) then right-to "Batch Entry" and then to "VMS Cow Configuration"

In Delpro: Select a cow in Status, then with "ctrl A" select all cows, go to "Batch Edit", to "Batch VMS cow settings"

And you have a good overview on the cow-settings.

### **July:**

Automatic settings, as well for feeding as for milk permission are allright for 80-90% of the cows. Certainly correct milk permission is positive for production. But please take the other 10 to 20% beyond, who have to be milked perhaps less often or more often. But also (temporarily?) more or less concentrate than given advice is wise, because you as farmer the best sees your cow! Making time for this work pays very well because it results in fewer cows that cannot keep up the good work on your farm, its reducing replacement rates and thus increases the average production and age of your herd !!

### **June:**

By using VMS use of antibiotics to bottom? Through the 2-minutes-check, cow monitor and MDi, abnormalities are earlier seen. Often before the cow has mastitis or something else! Maybe you can use this time to send a sample? So you can focus on the right antibiotic and go for minimal use!!

Faster action means less antibiotic and a shorter dip in both production and roughage intake. And especially the latter is very important for the recovery and the resistance of the cow. Painkillers also help.

So she can handle more when there comes a next infection.