

## “There’s Nothing Like First-Hand Evidence” (Sherlock Holmes) The Cows Tell us What’s Happening

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First of all, I am honored and humbled for the opportunity to present a session at this 26th Tri-State Nutrition Conference. Over my 30+ years in the dairy feed business, I never imagined I’d be standing in front of you today. Many of my colleagues would agree. With that, I’ll give it my best shot!

Over the past 3 years, as Tri-State Conference board member, we had numerous comments and / or suggestions requesting more information to take back to the field. To address these requests, I’ll focus my session on field observations. “THE COWS TELL US WHAT’S HAPPENING!”

From the “Baby Boomer” generation to the “Millennials”, we have seen vast changes in communication, technology, and accessibility of information. Oh yes, can’t forget those “Generation X’ers”! However, for this presentation, we will use the wider generation gap. Each generation and individual has their own life history of events and environmental surroundings (history) around them, which contributes to your own individual “tool box”. Dairy producers have transitioned from station barns and upright silos to parlors, robotic milker systems, bunker silos, and TMR rations. The younger generations today are very comfortable with all the new technology available (cell phones/computers/etc.), utilizing and depending on them 24/7/365. Debatable, maybe too much!

Years ago, Dr. Herb Bucholtz and myself had a brief discussion after spending an entire morning on a farm walk thru and herd evaluation with his MSU dairy nutrition class. I asked, “Herb should I take new forage samples and reformulate the ration?” Herb replied, “You can if you want to, but the cows will tell ya!” Lesson learned! Balance ration, then look and listen to the cows.

Three rations exist on the farm:

1. Ration on paper – computer,
2. Ration fed to cows, and
3. Ration that cows eat.

For this presentation, let’s assume ration one is properly balanced. We’ll focus our discussion on rations two and three. Daily, we work with owners, employees, cows, equipment, forages, facilities, weather, etc. If there is one constant on dairy operations, it’s change! Sherlock Holmes is a perfect analogy for detective work, fact finding, and troubleshooting in deducing on-farm evidence - the real problem. There is a short list below, which covers some of the day-to-day herd dynamics. We could spend an entire presentation on just a couple of these items.

- Producer goals
- Communication
- Employees
- Bunker/Forage management
- Feed bunk space/Push ups
- TMR access
- Equipment/Proper mixing
- Clean water and access
- Over crowding
- Group changes
- Production records
- Milking equipment/Milk components

However, to demonstrate the “Sherlock Holmes” detective approach, here are a few true stories from fellow colleagues and myself to illustrate what can/does affect cow behavior and performance.

Included is a checklist from a longtime friend and colleague titled, “When few and/or many cows are down” (Appendix A). It might be a little outdated, but it is still a good list for troubleshooting, observations, and detective work. Maybe it’s not so elementary, my dear Watson!

## **Conclusion**

We spend hours on the computer balancing and re-balancing diets. Maybe rightfully so. My challenge is, “Are we allocating enough time for monitoring individual farm and cow herd dynamics?” Utilizing technology, such as video cameras, cell phones, and photos are excellent tools for on-farm detective work.  
**LOOK AND LISTEN!**

Always remember Dr. Herb Bucholtz’s comment: “THE COWS WILL TELL YA!”

## **References and Contributors**

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## Appendix A

### When Cows Are Down -- Look For:

1. Mastitis
2. Group change - since last test
3. Lame cows - trimmed feed too short on some cows or some need trimming
4. Added cows - no more bunk space
5. Late state lactation - skipping milkings - drying off these cows
6. Highest producing cows - lacking nutrition - not challenge feeding
7. Cows in heat on test day
8. Start of disease problem - dysentery - foot rot - pink eye, etc.
9. Early stage lactation cows dropping off - too short dry period - too long dry period - poor dry cow feeding program
10. Poor quality heifers added to milking herd
11. Had cows on show circuit - just returned home - upset cows
12. Poor body condition
13. Rumen upset: slug feeding - fine chopped forage - low fiber, etc.
14. Computer Feeder Grain Information not updated
15. McDonald's disease

### When Many Cows Are Down - Look For:

1. Mastitis
2. Drastic roughage changes - (quantity - quality - kind - moisture)
3. Disease present - I.B.R., dysentery, leptospirosis, etc.
4. Change of milking personnel
5. Change of feeder personnel
6. Too small milk lines or milking procedure - or equipment change
7. Added cows - did not increase total pounds of feed
8. Drastic weather change - hot or cold - heat stress

9. Lack of water
10. Lack of salt
11. Electric short or stray voltage
12. Improper weighing of feed - inaccurate or broken scales - weak scales
13. Computer or magnetic feeder ran out of feed - or not working properly - bad tags
14. Change from dry corn to high moisture corn and did not increase amount fed
15. Started feeding green chop or unfermented feed - direct cut - no wilting
16. Added cows - no more bunk space
17. Wrong vacuum on milkers - incomplete milking - poor ventilation
18. Ran out of concentrate
19. Reduced amount of concentrate fed - due to an increase in concentrate price
20. New man cleaning yards - disturbs cows for too long a time - less time to eat
21. Not consistent on milking times or interval - busy in fields, etc.
22. Not consistent on feeding times - busy in fields, etc.
23. Change in sequence of feeding
24. Eliminated one or more feedings per day
25. Lack of good fly or pest control program
26. Lack of water in holding pens during milking - in extremely hot weather
27. Change in high moisture corn - now buying poor quality high moisture or using up last of grain in silo
28. Turned cows out on pasture - did not provide hay bunks - salt - mineral or water out on pasture (even if he did make these provisions, cows may still drop because we cannot control amount of pasture consumed and they eat less milking ration)
29. Feed bunk empty for more than 4 hours/day
30. Feed bunks not cleaned regularly - full of old feed
31. Improper body condition
32. Unpalatable ingredients or additives.



33. Drop in intake
34. Level of fat in diet
35. Moldy feed
36. Herd or group composition change - more heifers - staler cows - new bull
37. Too much grain in manure - check effective fiber - grain processing - level of grain feeding
38. Hard fiber stools - check grain levels
39. No feed in bunk after milking
40. Check cud chewing
41. Check for a busy barnyard and nervous cows
42. Unbalanced nutrition