Cow Management and Milk Recording Records in the context of the Evolving Northeast US Expansion in Dairy Herds

Dairy One's Mission

Dairy One Creates and delivers, data and information that will be used to make profit enhancing decisions for the agricultural community

Dairy One's Context

- Dairy One provides DHI Records Service for about 500,000+ cows and 5000- farms
- We also sell, install and support software for managing cows to farms that use DHI and to farms that do not use DHI records services

Dairy Management Resources Group

- Sell and support farm systems
- Support Technicians providing DHI milk recording service
- Priorities
  - First, making the farm system serve the needs of the herd manager
  - Secondly making DHI as easy as possible for everyone

Cow Information Management Systems

Abouts..

Software	Herds	Use DHI	Have AMR
Dairy Comp	600	410	180
Scout	290	230	0
PCDART	210	210	9

More Fun “Abouts”

Automatic Milk Recording (cow ID and meters)

Boumatic	79
Westphalia	25
Afikim	49
Alpro	25
Germania	1
Dairy Master	1

Servicing the Herd's Management Information System (HMIS)

When working with the farm's HMIS we are not thinking about DHI service or even if they use it.

We spend most of our energy minimizing the farms' entry time, and optimizing their work lists, such as, rBST, synchronization, Vet Check, Foot Trim, Vaccination, Etc.

Why do these Herds use Milk Recording?

1. Milk Weights
2. Somatic Cell Counts
3. Young Sire credits from AI Studs
4. Reconciling Milking Inventories
5. Participation with Breed Association programs
6. Other…

DHI Service on our Larger Farms

- Our larger farms rely on their farm based software, (typically Dairy Comp 305) and their DHI records have a reduced value to them for managing their herd.
- Our goal for DHI Service is to get in, collect the information with as minimum disruption as possible, and get out, leaving the farm with milk weights and making it easy to get lab results back into their software.
- When one of these herds begins “testing” we spend some time with them on how to use the Milk weights, SCC and component information.
- DHI technicians generally do not get involved in the use of the information but there are notable exceptions.

DHI Service on our Larger Farms

- When our larger herds “Test” our Technicians take a backup from the farm’s Dairy Comp and “absorb” it into a DHI Field Technician Format.
- They add Sample numbers and Milk weights, run edits on the information and upload it the “LOOP”, updating the farm computer with just the test day milk weights before leaving.
- The farm then downloads their milk analysis results after the herd has processed. Most of our herds process their records at DRMS @ Raleigh.

Testing Dairy Comp 305 herds “in a Nutshell”

1. Farm data file -> Technician (Tech)
2. Add sample numbers and milk weights
3. Run edits
4. Milk Weights -> Farm data file
5. Tech-> LOOP -> LABs -> Processing Center
6. Processing -> LOOP -> Farm (milk analysis)

Dairy Expansion in the Northeast

Dairies have been expanding in the Northeast from the beginning.

Until relatively recently the manner in which they were expanding was compatible to the way we deliver DHI (Milk Recording) services.

Evolution of Northeast Expansion

- Herds have been expanding since the beginning
- First they just added cows, switching more crops to forages as necessary
- Then they purchase neighbor farms to build bigger barns on the home farm, and crop more acres and have more capacity for manure spreading
- Ultimately they can not get more land at the home farm and purchase another dairy non-local to the home farm

Expansion or Multiplication?

- In the beginning, they run the second farm as a separate entity and all HMIS and DHI Services work just fine
- The next step is to move cows one way to “balance” facilities. At this point the DHI records begin to risk records not being transferred to the destination facility and animals must be “sold” from the origination facility, but all in all, it works.
- As much a trouble for the DHI records, it takes more work for the farm to get the animals in the respective facilities HMIS. Usually done with floppy disks, or now, thankfully, USB Storage Devices.

Pressure builds

- The system breaks, when the farm builds a central dry cow facility, or wants to concentrate all the breeding animals in one facility. Now it is records pandemonium with each facility acting as separate management pens (with trailers in between).
- All of the data needs to be available at all of the facilities and we need to coordinate sampling the facilities as a common test day.

First Solve the Management Problem

- As we solve the management problems, we also solve the DHI records problems
- Solving the farm problem has meant we had to provide networking service
- Simplest solution would be entry on the master data file at only one location, and copies go to “look only” version at other facilities.

It becomes Complex

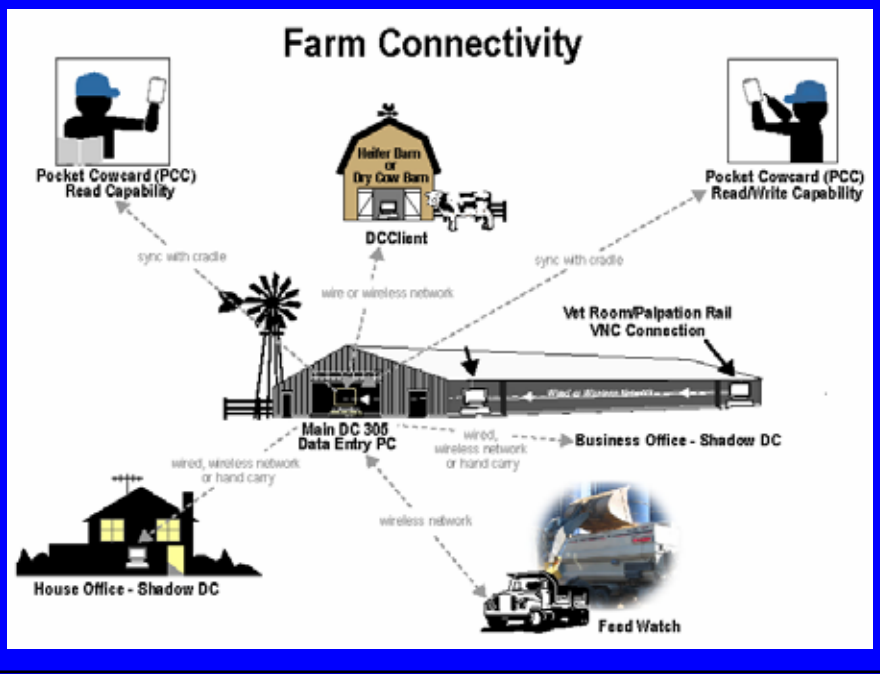
- Most complex is a Wide Area Network with a server\client configuration, look-only refreshed copies, VNC direct connections and Handheld PC's sprinkled throughout.
- We currently have 30 "Clients" in 23 farms.

Our Most Complex Setup

1. Three separate milking facilities each with an Automatic Milk Recording System
2. Main Farm has a VNC connection from Hospital area to herdsman's office, and a "look only" copy refreshed in the Manager's office.
3. Main farm is connected the internet with a cable connection
4. Farm two is connected to Main Farm with a wireless network <.5 miles.
5. Farm three is connected by a Satellite connection
6. Heifer farm is connected by a Satellite internet connection
7. Three "read-only' handheld PC's are sprinkled through the facilities.

Summary – Connecting Facilities

- Each facility has a high speed internet connection or is connected by a wireless network.
- Entry and creating reports can be simultaneous at each location
- Different locations have different pen numbers, but it is all one file.
- We can fill in other needs throughout the operation with VNC, Look only copies, and Handheld PC's that can be read/only or read/write.



Considerations

- There are a lot of different people to keep happy spread through different locations. Telling the “boss” or training one herd manager, does not set clear enough expectations and impart necessary skills throughout widely spread facilities. This is exacerbated by it being a new management system for the farm managers and they find it difficult to anticipate just what they will need, and where.
- Farms are not used to investing in information technology and we are the ones bringing the news. There is a pressure towards under building or under pricing the system. Do not start unless you can build it adequately with enough money to complete the job without resentment towards the dairy. We are talking about days of work, not hours.

Considerations

- The technology is changing rapidly, and keeping up with it is challenging and requires a critical mass of learning and sharing knowledge and experience
- Construct the system knowing you will have to change it significantly over the first weeks of operation as the managers learn what they really want
- Remember to tell the DHI Technician where to make a backup! We also must prepare the technicians for coordinating the data handling and sampling at each location.
- The volume of documentation to be able to service the system 6, 10 or 18 months later is large and must be available to anyone in the team who may need it. Creating it and maintaining needs to be in the price.
- Plan extra flexibility in time around internet providers who will not work to your time schedule.

Summary

- The Herd Management information System must be focused on solving the herd management needs
- Structuring the system is not a small task, requires a lot of installation, training and follow-up support
- The best structure is compatible with getting good records for delivering DHI records service.

End