Leveraging Full Value From Your Feeding Software

GPS Dairy Leaders Forum
November 20, 2014
Erin Mosley, PhD
What can your feeding software do for you?
needs

• All programs provide the same basic features:

• “Feed sheet” options
  – Rations and ingredient DM values can be updated easily.
  – Scaled load sizes based on pen counts

• Basic reporting
  – DMI by pen
  – Ingredient usage for a specified time
  – Feeder loading accuracy
Wants

• Inventory management
  – Deliveries and routine monitoring of physical inventories to manage shrink
  – DM change monitoring
• Feeder Performance Evaluation
  – Monitor loads for errors
  – Update information as needed
• Milk production
  – As related to DMI with component values for calculation of energy corrected feed efficiency
  – Ability to reconcile loads sent to processor
• Flexible reporting
  – Easy to set up new/customized reports
Objectives

- Provide on-farm support for data analysis/interpretation to GPS clients
- Present data in similar format, allow evaluation w/o repeatedly running reports
- Various feeding software platforms
  - Feed Supervisor
    - Supervisor Systems (KS Dairy Consulting, Inc.)
  - TMR Tracker
    - Digi Star
  - Feed Watch
    - Valley Ag Software
  - EZ Feed
    - DHI Provo
Feeder Data Evaluation

- Package data to provide summaries for a specified period of time
  - Monthly, quarterly, yearly, …
  - Specific requests

- Various parameters
  - DMI
  - Feeding Times
  - Refusal
  - Target DM changes
  - Forage DM monitoring
  - Feeder loading accuracy
  - Specific requests
Goals

• Provide quantification of feeder related parameters
  – Identify current values

• What do you do with the data?
  – **Start conversations**
    • Are values where you want to be?
    • Areas you are excelling?
    • Areas to improve?
    • Establish goals to work toward
    • Routine feedback to feeders
Other Opportunities for Clients

• Help identify ways for clients to more fully utilize their feeding programs
  – Milk production data related to DMI
  – Inventory management
  – Evaluation of day to day loading data
  – Routine and timely feedback to feeders
Other Aspects Feeding Programs

• User friendly?
  – Learn the program

• Straightforward ration, load, pen, feeding settings

• Ingredient deliveries and physical inventory monitoring

• Milk production

• Flexible reporting

• How do you get the most out of your feeding program?
  – TRAINING
  – ROUTINE USAGE
  – ACCURATE DATA ENTRY
Ingredients

- Inventory summary

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<th>New Weight</th>
<th>Time Applied</th>
<th>% Dry Matter</th>
<th>Value Per Ton</th>
<th>Total Value</th>
<th>Projected Shrink</th>
<th>Last Shrink</th>
<th>Daily Use Lb</th>
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</table>
Ingredients

• Deliveries:
  – Timely entry of data

• Physical inventory entries
  – Use to monitor shrink on farm.
  – Time investment – establish a routine to enter this data
Ingredients

- Inventory reporting
  - Usage

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<tr>
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<th>Inv On Hand</th>
<th>Divry(UnShk)</th>
<th>TransTo</th>
<th>TransFrom</th>
<th>Other Inv Adj</th>
<th>Misc Inv Adj</th>
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- DM changes

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<th>Item Category</th>
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<td>Related</td>
<td>Ingredients</td>
<td>Corn Sil 12</td>
<td>Description</td>
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View Change History
Loads

• Routine evaluation of actual loads and feed delivery.
• Identification of load data errors
  – Correct/delete these values as applicable
  – Missing/incorrect data, computer/scale communication errors, feeder errors…
  – Evaluate actual load graphs if available
    • These show the gross scale weight changes as the loading progresses
    • Helps to monitor feeder performance (transition times, loading errors, …)
## Loads

### Loads - Actual Loads

**Pen 3-4**

- **Loading**: Completed at 5:04 AM, 5:04 AM
- **Feeder Count**: 1430, 1430, 15081
- **Adj Per Load**: 225, 63
- **Dev**: 0.76%, 0.44%
- **Cost**: $5.07, $0.03
- **Movement**: 618, 659

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<th>Status</th>
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<th>Feeder Time</th>
<th>Pen Count</th>
<th>Adj Per Load</th>
<th>Dev</th>
<th>% Dev</th>
<th>Cost</th>
<th>Movement</th>
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<td>5:04:01 AM</td>
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<td>Lact Mix</td>
<td>Completed</td>
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<td>5:04:18 AM</td>
<td>5,730, 5,730</td>
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<td>Haylage 2</td>
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<td>5:07:31 AM</td>
<td>630, 630</td>
<td>633</td>
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<td>5:10:53 AM</td>
<td>1,650, 1,650</td>
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<td>6,880, 6,880</td>
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**Unloading**

- **Start Time**: 5:20:06 AM
- **Pen Count**: 171
- **Adj Per Load**: 15,010, 15,480, 15,642
- **Dev**: 1.05%
- **Cost**: $3.24

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<tr>
<th>Feeder</th>
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<th>Dev</th>
<th>% Dev</th>
<th>Cost</th>
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<td>5:20:06 AM</td>
<td>171, 15,010</td>
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<td>81, 5,610</td>
<td>5,616</td>
<td>141</td>
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**Pen 21 Pre-Fresh Heifers**

- **Loading**: Completed at 5:36:39 AM, 5:36:39 AM
- **Feeder Count**: 996, 996
- **Adj Per Load**: 1,021, 1,021
- **Dev**: 71.90%
- **Cost**: $196.46

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<th>Feeder Time</th>
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<td>5:36:39 AM</td>
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<td>69</td>
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<td>5:44:27 AM</td>
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<td>132, 132</td>
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<td>5:43:46 AM</td>
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<td>621, 621</td>
<td>626</td>
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Pens

- Evaluate Pen data
  - Pen/Ration assignments
Pens

- Evaluate Pen data
  - Bunk Management
- Target DM or Global adjustments

Change History

<table>
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<tr>
<th>Date</th>
<th>Time</th>
<th>User Name</th>
<th>Type of Change</th>
<th>Item Category</th>
<th>Main Item</th>
<th>Of Item</th>
<th>Item Changed</th>
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• Evaluate Pen data
  – Milk Weight data
  • Bulk tank milk weights and component values
  • With appropriate pen group setup, DM efficiencies can be easily monitored
Reports

- Identify which standard program reports fit your needs and/or
- Create customized reports
Reports

- Use data export functions to further your data management/reporting abilities
- While reporting options may be intimidating at first, experience using the program will soon lead to confidence in optimizing the reports

- Spend time on SETUP
- Establish a routine
Conclusion

• Customize and optimize your program
• You can use as little or as much of the program as desired.
  – The more you use, the more you get your money’s worth!
• Use feeding software to help manage the multiple data groups: feeding, inventory, and milk production
  – Can eliminate the need for multiple external spreadsheets to merge this data together.
Data Examples
Load Graph Example

Example from EZ Feed.
Up-down pattern due to refusal pick up (every 2-4 days).
Increased DMI from beginning to end of month.
Generally most daily pen refusals less than 8%. Average from Oct 1 to Dec 31 is ~2 %.
Generally most daily fresh pen refusals less than 10%.
Target DM Change (lb DM/hd): Milking Cows

Appears to not be in synch with cows, lots of adding then subtracting DM.
Bunk Call Change (lb DM per hd per day): Lactating Cows

Changes in July values more variable, settles down Aug to Sep.
First Feeding Time: Milking Cows

Several pens experiencing large swings in first feeding time.
First Feeding Time: Breeding Age Heifers

Several pens experiencing large swings in first feeding time.
Same data as previous slide. When only look at 1 month, swings not as pronounced.