

COMPLEXITY OF DAILY YIELD CALCULATIONS



Angie D. Coburn

Vice President, Dairy Operations

adcoburn@agsource.com





TIMES THEY ARE A CHANGING





Milking Cows Circa 1980

- Median herd size 40 cows
- 12 min per cow
- 3 milking units
- 3 hours per milking



Today's Environment

- Groups of 225-250 cows
- 4-5 turns per hour
- Limit of 24 hours a day

A tall, clear glass filled with white milk. A dynamic splash of milk is captured mid-air, rising from the top of the glass and fanning out. The background is a light gray with a subtle geometric pattern of dots and lines.

“A PINT’S A POUND THE WORLD AROUND”

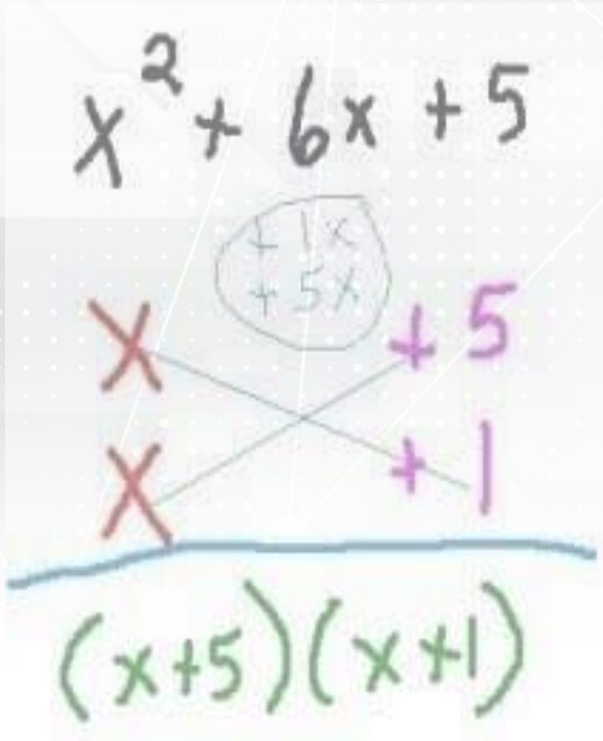
Elements Affecting Yield Calculations

- Equipment
- Software
- People
- Equations

MASTER OF MANY...

pail&scale
basement
in-place rotary
hoses Afimilk Inline
certified calibrations
Vented Inflation^{EMM}
Sensors ROBOTS
analog vacuum parallel
wide-bore
Meters portable

“IT’S ONLY MATH...”


$$x^2 + 6x + 5$$
$$\begin{array}{r} \text{1x} \\ + 5x \\ \hline \end{array}$$
$$\begin{array}{r} + 5 \\ + 1 \end{array}$$
$$(x+5)(x+1)$$

Start with Correct Parameters

- Times milked per day
- Milking times by pen
- Pen structures
- Tank totals and transport frequency

Unknown Influences

- Feeding times
- Ration changes
- Weather influences
- Random “whatevers”

FREEDOM DAIRY




PARLORCOMP

OVERVIEW

ParlorComp Overview

CUSTOMIZE THIS PAGE

Parlor Status

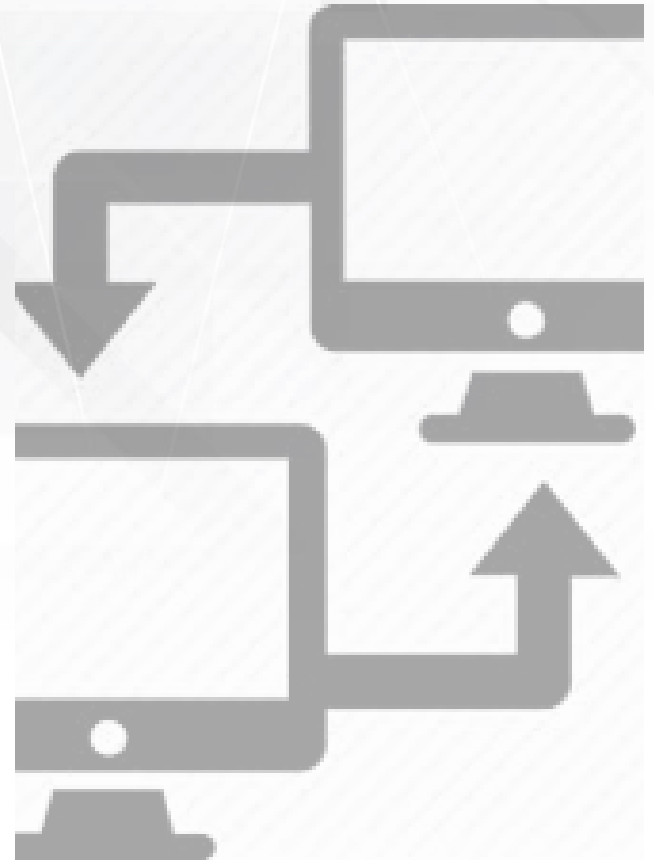
PARLOR STATUS	CURRENT SHIFT	CURRENT PEN	CURRENT FLOW
 Milk	1	4	65.00 GPM
COWS IN PEN			289
CURRENT PEN TOTAL MILK			2850.00 GAL
CURRENT SHIFT TOTAL MILK			28500.00 GAL
CURRENT TEMP	 145.90 °F		TEMP ALARM
			 NONE
TOTAL TIME	0 MIN	SEC/STALL	97

Last Rotary Data

ROTARY	MINS/ TURN	SEC/ STALL	COWS/ HOUR	TURNS/ HOUR
FASTEST	9	8.2	441.0	6.1
AVERAGE	9	7.8	460.0	6.4
EFFECTIVE	11	6.7	372.0	5.2

UNDERSTANDING SOFTWARE INTEGRATIONS

- EID system is functioning
- Consistency of data
 - Measurements
 - Calculations
- Archived data patterns



People Make the Difference!

- Professional Expertise
- Proper Training
- SOPs
- Adaptation
- Interpretation
- Continuous Education

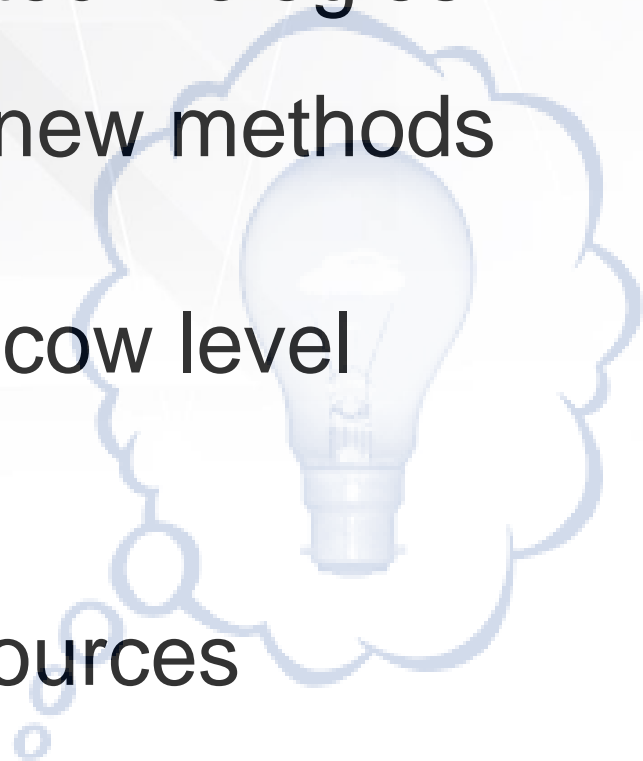


WE MUST ADAPT

- Take better advantage of technologies
- Prioritize development of new methods and different QC

Herd level, pen level, cow level

- Faster implementation
- Improved educational resources



COMPLEXITY OF DAILY YIELD CALCULATIONS

Thank You!



Angie D. Coburn
Vice President, Dairy Operations
adcoburn@agsource.com

