

Grouping strategies to maximize profits



Great **People**
Great **Cows**
Great **Returns**

LLOYD & DAPHNE HOLTERMAN
TIM STROBEL ~ JORDAN MATTHEWS
WATERTOWN, WIS. USA

1981



2018



Four partners



Farm Overview

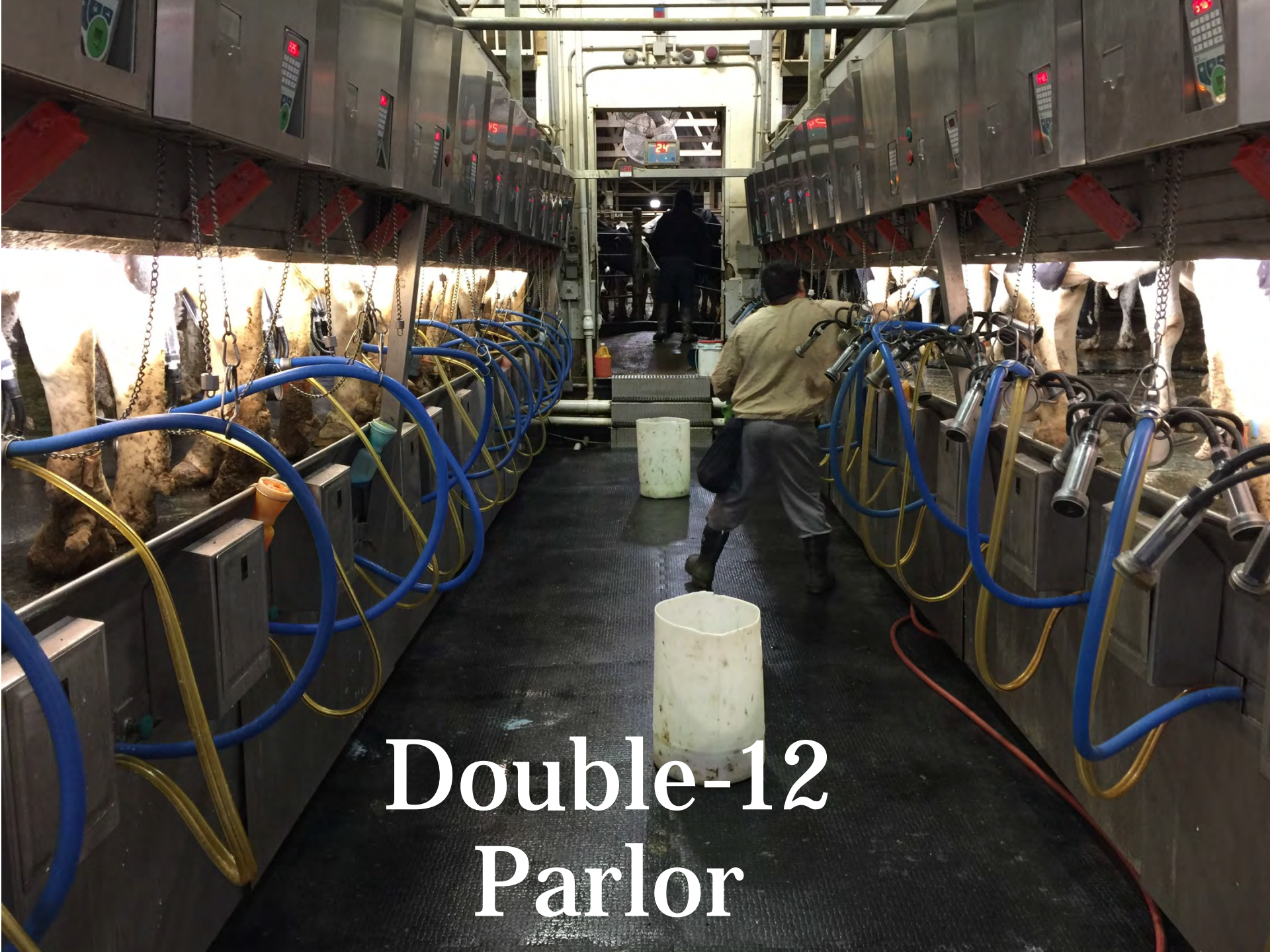


- Lloyd: finances, genetics
- Daphne: accounting, Human Resources, public relations, safety
- Tim: crops/machinery, environmental compliance, safety
- Jordan: cows, milking staff, reproduction

Grouping goals



- Meet nutritional needs of cows
- Keep similar cows together
- Keep feed mixer efficient
 - Full batches
 - “Straight lines”
- Improve parlor efficiency



Double-12 Parlor

Grouping criteria

1. Nutrition & age
2. Milking speed



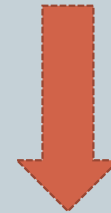
1. Nutrition and Age: Grouping flow #1



Dry cows

Springing
heifers

Close-ups



Dry Cows



- 100 % stocking rate
- 12.8 KG Dry matter intake (0,87 kr./kg ts)
- \$1.85/cow/day feed cost (11,10 kr.)
- 13.42 % crude protein diet
- 12.4 month calving interval

Springing heifers



- 120 % stocking rate
- 11.39 KG Dry matter intake (0,75 kr./kg ts)
- \$1.42/heifer/day feed cost (8,52 kr.)
- 14.3 % crude protein
- 22.3 months first calving

Close ups



- 90 % stocking rate
- 21 days prior for cows
- 14 days prior for heifers
- 12.8 KG Dry matter intake (0,87 kr./kg ts)
- \$1.85/cow/day feed cost (11,10 kr.)
- 13.42 % crude protein

Feed info

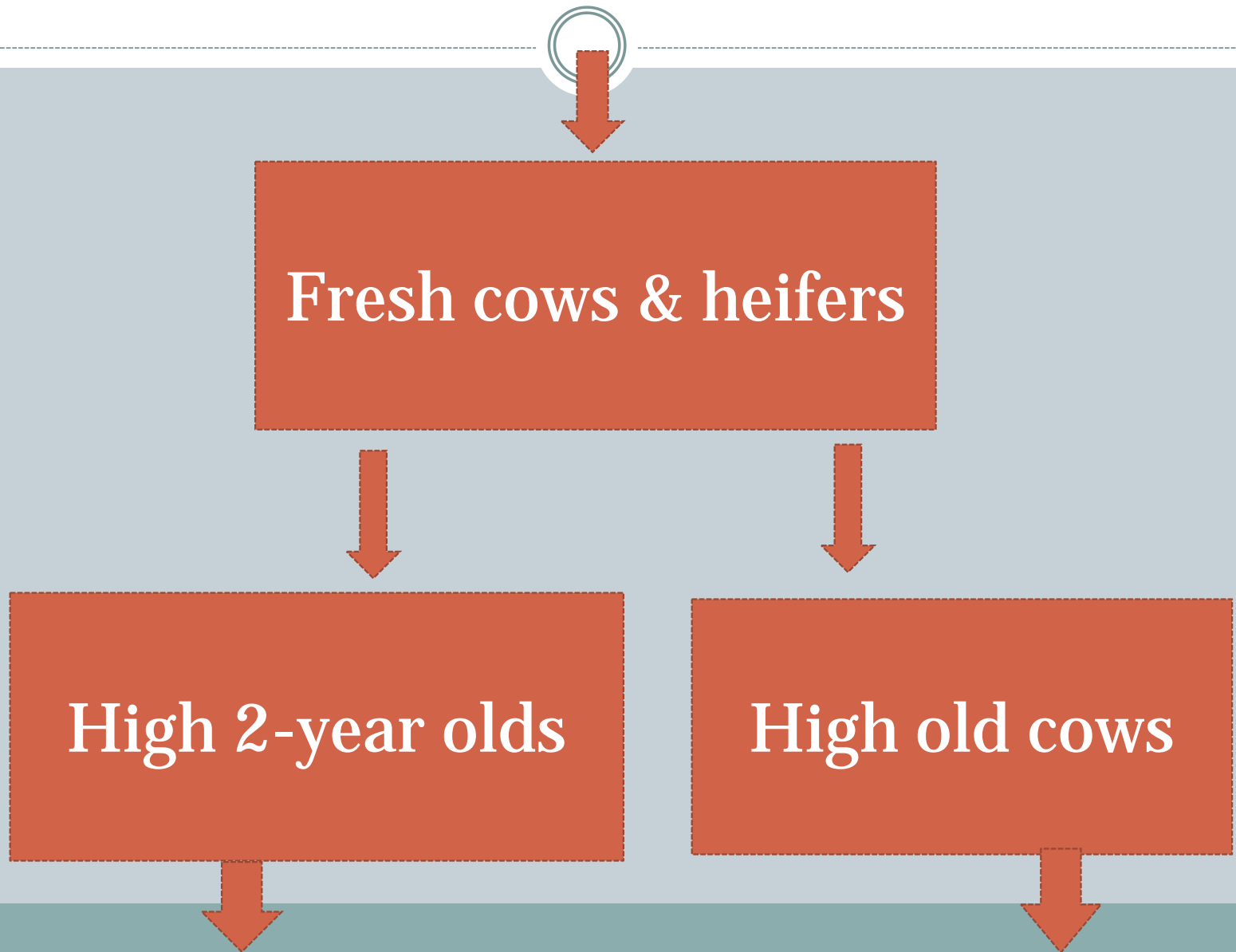


Cost /Kg Dry Matter

- Haylage 20.9 cents/ Kg DM (1,25 kr./kg ts)
- Corn silage 11.55 cents/ Kg DM (0,69 kr./kg ts)
- Dry shell corn 14.3 cents/Kg DM (0,86 kr./kg ts)
- Protein mix 56 cents / Kg DM (3,36 kr./kg ts)
- Cottonseed 26 cents/ Kg DM (1,56 kr./kg ts)

They are our actual costs for growing, harvesting and storing the crops in 2017. For the 3 purchased feeds (Shell corn, protein mix, cottonseed), the costs are calculated as delivered to the farm.

Grouping flow #2



Fresh cows & heifers



- 90 % stocking rate, 2-rows
- 24.36 KG Dry matter intake (1,43 kr./ kg ts)
- \$5.80/cow/day feed cost (34,20 kr.)
- 18.48 % crude protein
- 0-21 Days in milk

Fresh cows & heifers



High 2-year olds (2 groups)



- 120 % stocking rate (2-rows)
- 27.45 KG Dry matter intake (1,41 kr./ kg ts)
- \$6.47/cow/day feed cost (38,80 kr.)
- 18.04 % crude protein
- 21-130 Days in milk

High old cows (5 groups)



- 115 % stocking rate (2-rows)
- 29.15 KG Dry matter intake (1,35 kr./ kg ts)
- \$6.58/cow/day feed cost (39,50 kr.)
- 17.05 % crude protein
- 21-150 Days in milk



© Cybil Fisher

Grouping #3



Low heifers




Low cows

Low heifers (2 groups)



- 120 % stocking rate (3 rows)
- 25.45 KG/cow/day (1,38 kr./ kg ts)
- \$4.85/cow/day feed cost (35,10 kr.)
- 14.62 % crude protein
- 130+ Days in milk

Low cows (2 groups)



- 100 % stocking rate
- 27.27 KG/cow/day (1,14 kr./kg ts)
- \$5.20/cow/day feed cost (31,20 kr.)
- 14.62 % crude protein
- 150+ Days in milk

Red barn:
milking, dry

200 cows





Barn 2, 6 rows

340 cows



Barn 3: 8-row cross ventilated barn

500 cows







2. Milking speed

- 5.2 Minute average



Milking speed



Older cows, early lactation:

- 0 to 4 minutes (1)
- 4 to 7 minutes (3)
- more than 7 minutes (1)

Older cows, late lactation

- Less than 5 minutes (1)
 - 5 to 7 minutes (1)

Milking speed



2-year olds

- Less than 4 minutes (1)
- 4 to 7 minutes (1)

2-year olds late lactation

- Less than 4.5 minutes (1)
- More than 4.5 minutes (1)



New Milker Training



Milking Procedure

These 9 steps are critically important to milk quality and must be followed at all times.

1. Wipe off teats with a dry towel, do six cows at a time – 1 towel for 6 cows
2. Dip these six cows with pre-dip, starting at front end of line (nearest windows)
3. Strip 1 squirt of milk from each teat
4. Dry off each teat with clean, dry towel – 1 towel using both sides. Front teats first, then rear.
5. Attach milking unit starting with first cow you dried off and move down the line in this order to attach 6 units

By end of week one, the new milker will be able to milk 6 cows from any group with less than 120 second lag time from prep to attaching units in a clean, professional manner. If not, training will continue to perfect any key areas. Jordan to re-check & re-train with milkers at 30, 60 and 90 days after day 1. Progress reports may go in employee folders. After one week of training, employee will be expected to know:

- ☐ When to leave parlor to do laundry, how to SORT laundry and be sure all towels are DRY 100%
- ☐ When to fill dip cups during milking
- ☐ When to spray down sides of parlor
 - ☐ When to let cows enter and begin prepping after wash
- ☐ What groups to watch for cows that don't enter first stall
- ☐ Cleaning parlor after pen 4, "recipe" for cleaning solution in pails- brushes to use, surfaces to scrub
- ☐ Most important: milking 6 cows with less than a 120-second lag time.

Employee Signature _____

Jordan Matthews _____

Employee Name _____

Date Completed _____

Grouping strategies: lessons learned



- Overfed cows, costly!
- DIM better indicator to re-group than milk/cow/day
- Grouping by pregnancy status is NOT as effective for us as DIM or milk production

Summary



- One practice must integrate & complement other practices
- It's a puzzle in progress!



Great **P**eople
Great **C**ows
Great **R**eturns

