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College of Agriculture
and Bioresources
DEPARTMENT OF ANIMAL AND POULTRY SCIENCE
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# Dairy Research and Teaching Facility

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# 2025 Dairy Info Day

- 105-110 Cows
- Bulk Tank
  - 42.1 L/cow/day
  - 4.17% fat
  - 3.37% protein
  - 5.97% LOS

**STAGE OF LACTATION PROFILE**

| Stage (Days) | Cows | Test Day Production M kg | Lactation Average | | | | Somatic Cell Count | Daily Fat Yield |
|---|---|---|---|---|---|---|---|---|
| | | | Milk kg | Current BCA | | | | |
| | | | | M | F | P | | |
| 1 – 44 | 15 | 43.9 | | | | | 103 | 1.79 |
| 45 – 99 | 17 | 50.9 | 13277 | 277 | 283 | 285 | 43 | 1.84 |
| 100 – 199 | 36 | 44.8 | 13261 | 297 | 305 | 308 | 121 | 1.69 |
| 200 – 305 | 31 | 42.7 | 13534 | 312 | 314 | 320 | 120 | 1.58 |
| Over 305 | 7 | 36.0 | 13887 | 285 | 294 | 289 | 101 | 1.48 |
| Dry | 22 | – | 11993 | 271 | 295 | 285 | – | – |
| | | | | | | ALL | **103** | **1.68** |

**LACTATION GROUP PROFILE**

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## Parlour

- 60% milking herd
- 43.0 kg/day
- 180 DIM

## AMS

- 40% milking herd
- 48.65 kg/day
- 160 DIM
- 2.5 visits/day

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# Update: 2x day milking

- Considering going back to 3x milking to slow down milk leaking to help prevent mastitis
- Separate groups for fresh cows for minimum 3 weeks post calving
  - Training eligible heifers to the robot
  - Previous robot cows return robot 3 days post calving

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# Calves

- Calves are fed 4 litres >25 BRIX colostrum within 2 hours of birth, and within 12 hours for second feeding
- Calves are fed transition milk for 3 days before being fed whole milk x2/day
- Kept feeding calves up to 8 kg/day, heavier feedings

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# Research Activity

## 2024/2025

- Improving characterization of barley grain in diets for dairy cattle (part 1 completed and results will be presented today, part 2 ongoing)
- Hybrid rye silage for dairy cattle (completed and results will be presented today)
- Complex forage blends (completed and results will be presented today)
- Evaluation of triple fermented products (ongoing)
- Partial mixed ration and pellet allocation in an AMS (ongoing)
- Characterization of uterine microbiome and its modulatory factors in postpartum cows (ongoing)

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# Research Activity

## Future Projects

- Replacing barley grain with milling-type oats in high-producing lactating dairy cows (February, 2025)
- Evaluating a new rumen bypass Choline (March, 2025)
- DFC Cluster - Developing an on-farm model to identify cows eligible for extended calving intervals based on individual peak milk yields and lactation persistency
- Dietary factors influencing urea recycling (TBD)
- Complex forage blends part 2 (TBD)
- Evaluating alfalfa based weaning strategies for calves (TBD)

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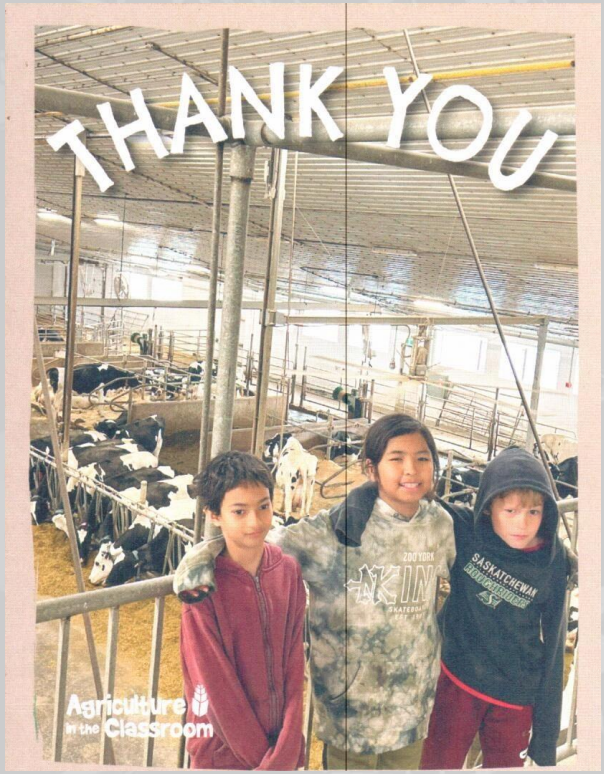
# Gallery

- 1000+ people walked through since September 2024
  - Vetavision, Ag in the Classroom, Schools (grades 1-12), University students, Government, 4-H clubs, etc.
- All pre-arranged tours are now guided
- Bulk tank training
- Expecting many more tour requests this spring/summer!



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# Class Participation

- ANBI 110 – Introductory Animal Bioscience
- AGRIC 112 – Introduction to Livestock Systems
- AGRIC 212 – Livestock Systems
- ANSC 315 – Animal and Poultry Nutrition
- ANSC 460 – Advanced Dairy Management
- ANSC 863 – Nutritional Consulting
- VLAC 493 – Ruminant Management

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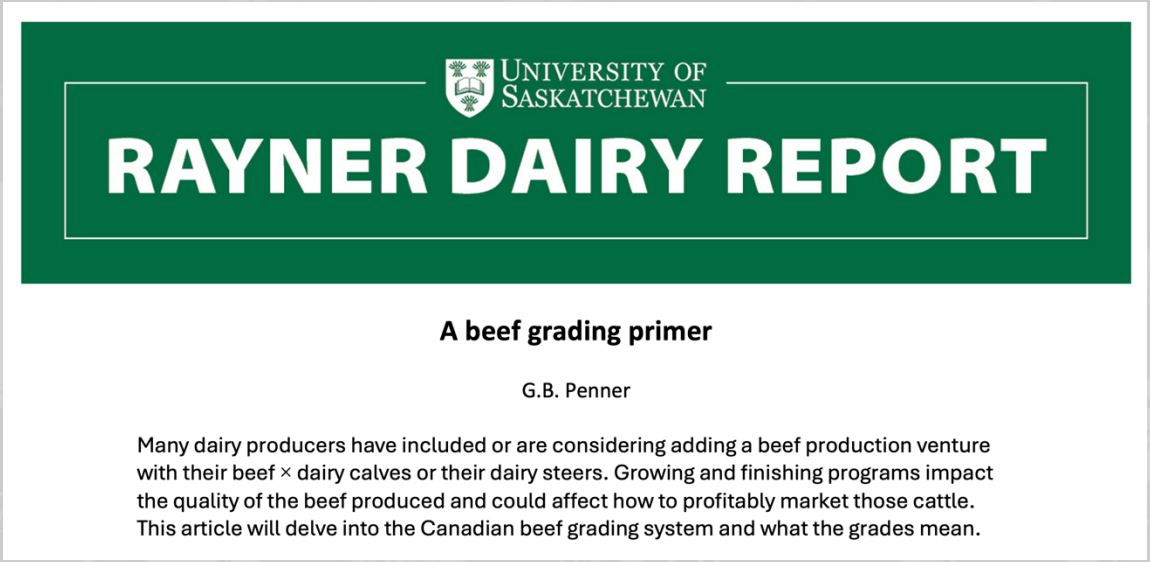
# Other activities

- Monthly article in the SaskMilk Newsletter
- Happy to receive article suggestions: greg.penner@usask.ca



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# Facility Upgrades

- Legend rubber mats for cows on the AMS side
- New space heaters throughout barn
- Kubota tractor for feeding
- Bobcat
- Old dairy demolition, yard maintenance

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# Visitors and Feedback are Welcome