GRO PASTURE HERD PERFORMANCE

The Gateway Research Organization (GRO) Pasture has served as a demonstration and research site since its establishment in 1979. Initially used for steers, it transitioned to heifers in 1988 and has since provided producers with a collaborative opportunity to graze replacement heifers while supporting research, demonstration, and extension activities.

The pasture covers 160 acres, divided into 16 paddocks of approximately 10 acres each. A central dugout, water system, corral, and loafing area provides the necessary water supplies and handling facilities. The dugout is replenished by spring runoff and an artesian well. In 2019, internal cross fences were modified, and cell--design demonstrations were implemented to showcase a variety of grazing systems and paddock layouts that producers might consider for their own operations.

Different grazing systems are used across the pasture to showcase their management requirements, labour needs and impacts on forage utilization. These systems and paddock layouts are illustrated in the following map, and further data and observations on grazing are covered in the Adaptive Multi- Paddock Grazing report in the next pages.

GRAZING SEASON OVERVIEW:

Pasture conditions in the spring of 2025 were affected by some overgrazing and low fall moisture the previous year, resulting in slower early-season grass growth. Consequently, turnout was delayed from mid--May to early June to allow additional forage development before grazing began. During the season, lower--than-normal precipitation limited forage regrowth after the first rotational grazing. As a result, the decision was made to end the grazing season earlier than expected, with cattle being sent home following the second rotational grazing.

Entry Dates:
- May 27, 2025: 9 heifers
- June 3, 2025: 90 heifers
- July 4, 2025: 2 bulls

Exit Date: August 26, 2025: all cattle

Rainfall:
- Pasture (June – September): 134mm
- Nearby weather station (May-October): 227mm

HERD PERFORMANCE:

The group of heifers out at the pasture in 2025 was a mix of different breeds with some being previously bred and others being bred at the pasture. A total of 99 heifers were turned out, although only 90 heifers are included in this report's performance analysis due to the removal of statistical outliers, missing /inaccurate weights from take in or take out and mortality.

Despite there being issues with collecting weight data, the weight gains observed were close to what

would be expected; with an average daily gain of 1.83 lbs./day, averaged across 90 heifers. In drier growing conditions, grass growth is slowed, but the nutrients tend to be of better quality and higher density, and as a result, better gains can be observed in drier growing conditions.

Trait/Weight Split	< 850 lbs.	> 850 lbs.	All
No. Head	52	38	90
Average Weight (Take In)	716.4	1066.7	862.2
Average Weight (Take Out)	930.1	1142.7	1019.9
Total Gain	213.7	76.0	155.5
Average Daily Gain	2.51	0.89	1.83
BCS (Take In)	2.88	3.14	2.99
BCS (Take Out)	3.66	3.61	3.64
BCS Change	0.78	0.47	0.65

To provide further insight into the weight gains on pasture, the data was grouped based on heifer intake weight. Heifers weighing less than 850 lbs on take-in were placed into one group, and those over 850 lbs were placed into another group. It was inferred that the lighter group were of more British influence (Angus, Speckled Park, Shorthorn, etc.) and those in the heavier group were of Continental influence (Simmental, Charolais, Limousin, etc.).

The group with a smaller weight at take-in saw much higher gains in the short grazing season than the group that was over 850 lbs. This accelerated gain could contribute to the compensatory growth mechanism. The heifers less than 850 lbs would have likely had slower growth over the winter than the larger heifers, allowing them to be able to have fast gains and better feed conversion when put out to pasture.

In 2025, GRO staff introduced body condition scoring (BCS) as an additional data point to provide further insight into heifer development. This also provided more hands-on training opportunities for summer staff during processing.

A 1-5 scoring system with 0.5 increments, based on guidelines from the Beef Cattle Research Council (BCRC) was used. A score of 3 is ideal, with 1 being extremely thin and 5 being obese.

To maintain consistency:

- The same evaluator performed both assessments; take-in and take-out
- Visual assessment focused on tail head, hooks and pins
- Physical evaluation included palpation of spine and ribs
- Due to time constraints handling livestock and scale safety limitations, not all the recommended touchpoints were assessed, but the scoring still provided useful comparative data.

GRO PASTURE HERD PERFORMANCE CONTINUED

BREEDING AND HEALTH OBSERVATIONS:

The bulls were turned out on July 4, but one bull developed lameness within a few weeks and was removed from pasture. A third bull was introduced to ensure adequate breeding coverage. There was increased competition observed after the new bull was brought in and one pushing incident resulted in damage to a water trough.

Three heifers died during the season – two while on pasture and one shortly after returning to a contributor's farm due to poor condition. One animal on pasture was confirmed through a post-mortem autopsy to have died from pneumonia. The remaining animals could not be autopsied due to time constraints. All affected animals were treated according to veterinary recommendations, but illness progressed rapidly.

Pregnancy checking was conducted at take-out, although it was earlier than ideal. Of the 95 heifers checked, 9 were identified as open, resulting in a 90.5% pregnancy rate.

One producer later reported that 2 of the originally open heifers were confirmed pregnant later, suggesting that the earlier than planned pregnancy checking at take-out may have influenced the initial results. Accounting for these animals would increase the pregnancy rate to 92.6%.

Target pregnancy rates for replacement heifers are around 90%, with over 95% being excellent and under 85% considered to indicate issues with nutrition, or reproductive health. Considering these parameters, the GRO Heifer Pasture herd was right on target, indicating that current management practices at the pasture and contributor’s farms are supportive of healthy, reproductive heifers.

FUTURE RECOMMENDATIONS:

There are many ideas of projects, and demonstrations to try at the heifer pasture that could help producers with knowledge and tools to implement at their operations. On the technology side, there is traction being made on deploying an auto-scale at the pasture to record weights every time the animal comes to get mineral and there is high interest in virtual fencing and artificial intelligence applications in cameras and tags. There is also potential for trials with conducting feed analysis testing on clippings throughout the year and changing the mineral placed in the auto-scale to potentially match animal requirements and feed deficiencies better.

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