UNIVERSITY RESEARCH TRIAL
DATA & KEY FINDINGS

MASTERHAND® MILLING

TRIAL 3 - OKLAHOMA STATE UNIVERSITY — BESSIE, OK

The 2021-2022 grazing trial at Bessie was a new design testing supplementation rate throughout the summer grazing season. Three treatment groups included an unsupplemented control, a low supplement rate at 2 lbs. per head per day and a high supplement rate at 4 lbs. per head per day.

2021	*GROUP 1 - NO SUPPLEMENT CONTROL* *GROUP 3 - SUPPLEMENTED 4LBS/HD/DAY* *GROUP 2 - SUPPLEMENTED 2 LBS/HD/DAY*					
GRAZING DATA	**IN WEIGHT**	**END WEIGHT**	**DAYS ON GRASS**	**ADG EARLY SUMMER**	**ADG LATE SUMMER**	**ADG TOTAL**
GROUP 1	545	716	145	0.93	1.40	1.20
GROUP 2	544	815	145	1.88	1.86	1.87
GROUP 3	547	854	145	2.2	2.04	2.12

FEEDLOT DATA	AVG IN WEIGHT	AVG OUT WEIGHT	AVG DAYS ON FEED	AVG DAILY GAIN	CONVERSION FACTOR	CONSUMPTION
GROUP 1	699	1419	190	3.65	5.74	2.86%
GROUP 2	793	1545	192	3.79	5.80	2.78%
GROUP 3	826	1514	184	3.65	5.98	2.60%

CARCASS DATA	AVG HOT WEIGHT	PRIME	CHOICE	SELECT	OTHER	CAB
GROUP 1	892	4.13%	82.24%	17.76%	0%	26.39%
GROUP 2	984	3.09%	80.86%	13.42%	5.73%	11.81%
GROUP 3	973	0.0%	75.74%	24.26%	0.0%	2.14%
	HOT CARCASS YIELD	**YG 1**	**YG 2**	**YG 3**	**YG 4**	**YG 5**
GROUP 1	62.86%	9.34%	53.34%	33.26%	4.06%	0.0%
GROUP 2	63.69%	5.26%	25.09%	57.32%	9.01%	3.31%
GROUP 3	64.27%	1.94%	26.13%	60.30%	11.63%	0.0%

UNIVERSITY RESEARCH TRIAL
DATA & KEY FINDINGS

MASTERHAND® MILLING

TRIAL 3 - CONTINUED — BESSIE, OK

2022	*GROUP 1 - NO SUPPLEMENT CONTROL* *GROUP 3 - SUPPLEMENTED 4LBS/HD/DAY* *GROUP 2 - SUPPLEMENTED 2 LBS/HD/DAY*					
GRAZING DATA	**IN WEIGHT**	**END WEIGHT**	**DAYS ON GRASS**	**ADG EARLY SUMMER**	**ADG LATE SUMMER**	**ADG TOTAL**
GROUP 1	584	776	136	1.79	1.06	1.41
GROUP 2	580	847	136	2.23	1.65	1.92
GROUP 3	584	882	136	2.23	2.21	2.23

FEEDLOT DATA	AVG IN WEIGHT	AVG OUT WEIGHT	AVG DAYS ON FEED	AVG DAILY GAIN	CONVERSION FACTOR	DMI
GROUP 1	789	1513	169	3.88	6.28	24.39
GROUP 2	840	1491	168	3.56	6.81	24.27
GROUP 3	856	1506	163	3.52	6.91	24.35

CARCASS DATA	AVG HOT WEIGHT	PRIME	CHOICE	SELECT	OTHER	CAB
GROUP 1	972	0%	85.%	14.7%	0%	26.5%
GROUP 2	959	0%	91.9%	8.1%	0%	9.7%
GROUP 3	968	0%	74.2%	25.8%	0%	19.4%
	HOT CARCASS YIELD	**YG 1**	**YG 2**	**YG 3**	**YG 4**	**YG 5**
GROUP 1	64.24%	5.9%	38.2%	41.2%	11.8%	2.9%
GROUP 2	64.32%	12.9%	43.5%	35.5%	6.5%	1.6%
GROUP 3	64.27%	0%	38.7%	58.1%	3.2%	0.0%

KEY FINDINGS

MORE FEED, MORE GAIN

Group 3 cattle fed at a higher rate throughout the season consistently had higher average daily gains in both years.

DIMINISHING RETURN

While cattle fed more gained more, a point of diminishing return begins to be apparent as the increase in gain is less between Group 2 and Group 3.

FEED EFFICIENCY

While unfed cattle showed signficant compensatory gain in the feedlot, Group 3 cattle still yielded a larger carcass with fewer days on feed.

> I've always liked using distillers grain as a supplement, but having it in cube form gives you a lot more flexibility. I think **there's a lot of power in feeding these distillers cubes** in the summer. **Increasing stocking rate, increasing gain, and nearly doubling gain per acre certainly has economic power.**
>
> **DR. PAUL BECK** OKLAHOMA STATE UNIVERSITY