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Influence of Forage Species on Performance of Two- and Three-Year Old Cows and Their Calves

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Previous positive experiences with beef cow-calf performance on predominant alfalfa-orchardgrass pasture at the Feldun-Purdue Agricultural Center prompted the beginning in 2001 of a long term grazing study. The study will investigate the performance of young cows and their calves on alfalfa-low endophyte tall fescue or alfalfa-orchardgrass pastures. Days of grazing and amount of hay made from each forage type will also be measured. Eight paddocks are in each system. In 2001, performance of the cattle has been excellent and similar between the two pasture types since turnout in April. Bloat had to be carefully managed in early June because of the presence of white clover in some paddocks and the cool, wet environment. Hay production from each pasture type was 0.46 and 0.83 ton per cow-calf pair for the alfalfa-tall fescue and alfalfa-orchardgrass pasture, respectively. Dry weather in late July and August resulted in the feeding of hay while on pasture.

Forage Type	Low Endophyte Fescue/Alfalfa	Orchardgrass/Alfalfa
<u>Grazing System</u>	Intensive	Intensive
No. of Pairs	18	36
No. Acres	22.3	46.6
Stocking Rate	1.24	1.29
<u>Cows</u>		
Initial Wt. lbs, 4/17	1196	1189
Initial BCS, 4/17	5.0	4.9
142 Day Wt., 9/6	1301	1285
142 Day BCS,	5.6	5.5

Weight Change	105	96
BCS Change	0.6	0.6
Percent Pregnant	88	89
Calves		
Initial Wt. lbs, 4/17	204	203
142 Day Wt., 9/6	556	553
142 Day ADG	2.48	2.47
ADG since July 9	2.23	2.25
Feldun-Purdue Agricultural Center, Bedford, IN 'Martin' tall fescue 'Penlate' orchardgrass '53H81' alfalfa		

Influence of Grazing System on Cow and Calf Performance

Whether number of paddocks, two or eight, has an influence upon beef cow-calf performance and forage use is the objective of this long term research. The studies are being conducted at two locations that are managed as a part of research conducted at the Feldun-Purdue Agricultural Center. No hay was harvested from either location in 2001 because of less than desirable early spring forage growth. Dry weather in late July and August necessitated the need to feed hay at Oldham. Cow and calf performance has been acceptable, but cow weight change and calf gains at Oldham and gain of calves at Feldun-2 Paddock were less than desirable between July 8 and September 6. Forage availability may have been a factor in the performance of these animals during this two-month period. With good rainfall to date in September, it will be interesting to see whether more days of grazing will occur in the fall with the 8-paddock system as has occurred in past years.

Location	Feldun		Oldham	
Forage Type	-----Fescue/Clover-----			
Grazing System	2 paddock	8 paddock	2 paddock	8 paddock
No. of Pairs	30	43	24	45
No. Acres	45	61.4	36	67.6
Stocking Rate	1.5	1.43	1.5	1.5

Cows

Initial Wt. lbs, 4/11	1351	1365	1338	1341
Initial BCS, 4/11	5.1	5.3	5.1	5.3
148 Day Wt., lbs. 9/6	1377	1387	1384	1293
148 Day BCS, 9/6	5.3	5.6	5.5	4.9
Weight Change	26	22	46	-48
BCS Change	0.2	0.3	0.4	-0.4
Wt. Change since July	-28	-10	-7	-68
Percent Pregnant	97	88	96	100

Calves

Initial Wt. lbs, 4/11	192	186	193	190
148 Day Wt., 9/6	550	557	558	533
148 Day ADG	2.44	2.52	2.48	2.33
ADG since July 8	2.15	2.52	2.13	2.06

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