

### GRAZING ALFALFA - A REALITY

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Alfalfa offers an excellent opportunity to beef producers for receiving excellent performance. Exciting results have been seen for the past two years on the Thomas Farm (Registered Polled Hereford). A total of 1063 pounds of beef per acre produced this year, with similar results seen in 1986 - a total of 874 pounds of beef produced in 1986.

The 1987 demonstration began on April 24, with a stocking rate of six head per acre through June 1 and a gradual reduction the remainder of the year. Both bulls and heifers were grazed together until July 7. (In the 1986 demonstration, bulls were given first access to the paddocks with heifers used as clean-up grazers.) After July 7, only bulls were used as grazers.

#### THOMAS FARM DEMONSTRATION

Date*	ADG.		Stocking Rate/acre	Lbs. of Beef/acre
Apr 24 - Jun 1	2.83	Bull	2.25 (6 hd/ac)	241.96
Apr 24 - Jun 1	2.18	Heifer	3.75 (6 hd/ac)	310.65
Jun 1 - Jun 23	1.23	Bull	1.75 (4.5 hd/ac)	47.35
Jun 1 - Jul 7	1.90	Heifer	2.25 (4.5 hd/ac)	158.17
Jun 23 - Jul 7	1.35	Bull	.50 (2.75 hd/ac)	24.97
Jul 7 - Aug 25	2.08	Bull	2.75	<u>280.28</u>
			Total	1063.38

\*Cattle grazing on alfalfa

A systematic approach was used in grazing the paddock to mimic the usual harvest management. Eight paddock areas were used, with a three to five day duration on each paddock. There was an average of thirty-two days before returning to an original paddock. The thirty-two day recovery period ensured a satisfactory level of productivity and an opportunity for a more persistent stand life.

Temporary electric fences were used to subdivide areas (one-half acre per paddock). Cattle were supplemented with Rumensin and fed a daily ration of two pounds shelled corn per day. The field consisted of alfalfa (Buffalo), some ladino clover, and orchardgrass. Fertility levels were maintained according to soil test recommendations.

Before cattle were moved to a new paddock, samples were taken for dry matter and height. Results of these samplings are listed in the following charts.

The alfalfa paddocks were grazed down to approximately two inch stubble. Paddocks were grazed from three to five days which

meant a rapid utilization of plant material. Stocking rates ranged from 6 to 2.75 head per acre or a stocking density of twenty-four to eleven head per acre.

The following is information on the performance of cattle on the Thomas farm, and also the paddock information with alfalfa height and dry matter throughout the grazing period.

<u>Paddock Number</u>	<u>Date</u>	<u>Grazing days</u>	<u>Alfalfa Height</u>	<u>D.M.</u>	<u>Cattle #</u>	<u>Stocking Rate</u>
1	Apr 24-29	5	11"	1719	24	6
2	Apr 29-May 2	3	18"	1090	24	6
3	May 2-5	3	18"	2053	24	6
4	May 5-9	4	19"	1186	24	6
5	May 9-13	4	23"	2523	24	6
6	May 13-16	3	26.5"	2675	24	6
7	May 16-19	3	28"	2739	24	6
8	May 19-22	3	26.75"	2790	24	6
1	May 22-25	3	20.25"	1208	24	6
2	May 25-28	3	20.5"	1061	24	6
3	May 28-31	3	20.75"	<u>1299</u>	24	6
				20,343		

\*\*A total of 20,343 lbs. of Dry Matter was available to cattle during this period of time (April 24 - May 31).

\*\*A total of 2,210.46 lbs. of live weight gain was made over this period of time.

\*\*Bulls averaged - 2.83 lbs. per day over this period.

Heifers averaged - 2.18 lbs. per day over this period.

\*\*9.2 lbs. of available Dry Matter to receive 1 lb. live weight gain.

<u>Paddock Number</u>	<u>Date</u>	<u>Grazing days</u>	<u>Alfalfa Height</u>	<u>D.M.</u>	<u>Cattle #</u>	<u>Stocking Rate</u>
4	May 31-Jun 4	4	21.5"	1515	18	4.5
5	Jun 4-7	3	18"	1133	18	4.5
6	Jun 7-11	4	15.5"	910	18	4.5
7	Jun 11-15	4	15.25"	372	18	4.5
8	Jun 15-19	4	14.75"	905	18	4.5
1	Jun 19-22	3	13.75"	943	18	4.5
2	Jun 22-26	4	16"	1119	11	2.75
3	Jun 26-Jul 1	5	17.75"	1577	11	2.75
4	Jul 1-6	5	19.75"	<u>1801</u>	11	2.75
				10,275		

\*\*A total of 10,275 lbs. of Dry Matter was available to cattle during this period of time (May 31-July 6).

\*\*A total of 888.33 lbs. of live weight gain was made over this period of time.

\*\*Bulls averaged - 1.23 lbs. per day (June 1-June 23)

1.35 lbs. per day (June 23-July 6)

Heifers averaged - 1.90 lbs. per day

\*\*11.56 lbs. of available Dry Matter to receive 1 lb. live weight gain.

<u>Paddock Number</u>	<u>Date</u>	<u>Grazing days</u>	<u>Alfalfa Height</u>	<u>D.M.</u>	<u>Cattle #</u>	<u>Stocking Rate</u>
5	Jul 6-10	4	22.5"	1537	11	2.75
6	Jul 10-14	4	22.25"	2160	11	2.75
7	Jul 14-18	4	19.75"	2593	11	2.75
8	Jul 18-21	3	18.5"	1920	11	2.75
1	Jul 21-25	4	19.25"	1801	11	2.75
2	Jul 25-29	4	24.5"	2568	11	2.75
3	Jul 29-Aug 2	4	19.5"	2188	11	2.75
4	Aug 2-6	4	21.5"	1488	11	2.75
5	Aug 6-11	5	16"	1199	11	2.75
6	Aug 11-14	3	17.5"	1512	11	2.75
7	Aug 14-19	5	18"	2401	11	2.75
8	Aug 19-22	3	11"	<u>1512</u>	11	2.75
				22,879		

\*\*A total of 22,879 lbs. of Dry Matter was available to cattle during this period of time (July 6-Aug. 22).

\*\*A total of 1144 lbs. of live weight gain was made over this period of time.

\*\*Bulls averaged - 2.08 lbs. per day over this period.

\*\*19.91 lbs. of available Dry Matter to receive 1 lb. of live weight gain.

#### CONCLUSIONS

1. Alfalfa grazing offers an excellent opportunity for farmers if managed correctly.
2. Use a simple rotational system using eight or so subdivisions. The alfalfa needs a sufficient rest period equivalent to that of cutting.
3. Alfalfa grazing can produce excellent gains (over three pound per day) and produce in excess of eight hundred pounds of beef per acre compared to cool-season grass at four hundred pounds of beef per acre.