

Blue Rapids 1271 calved August 22, 1878, bred by T. L. Miller, Beecher, Ill.

Imp Belmont 7825 (6304) calved April 21, 1880, imported by Gudge & Simpson.

Edmund 6553, calved October 30, 1882, bred by N. & H. Abbe, Elyria, Ohio.

Imp Conductor 3874 (5836), calved September 19, 1878, imported by N. & H. Abbe, Elyria, Ohio.

Fancy Lad 17238, calved June 9, 1884, bred by Gudge & Simpson, Independence, Mo.

Silver Lord 37262, calved June 9, 1889, bred by Gudge & Simpson.

Slick 3rd 57489, calved April 25, 1893, bred by H. & N. Abbe, Elyria, Ohio.

Roy Wilton 79035, calved December 6, 1897, bred by Geo. O. Holcomb, Troy, Penn.

Elyria's Java 103456, calved January 18, 1900, bred by C. A. Stannard, Emporia, Kansas.

Perusal of the pedigrees of the herd sires used by Walter Morgan indicates that he sought the best blood lines available and those who knew him personally have stated that he was an excellent judge of cattle and insisted that his herd sires be not only well bred but also good individuals.

His early sires carried a strong infusion of the blood of Sir Richard 2nd who at long last has become recognized as one of the greatest sires used in America. When the value of Anxiety 4th blood began to manifest itself, Mr. Morgan switched to this line of breeding and used two sons and one grandson as head herd sires from 1885 to 1898. These bulls were Fancy Lad 17238, Silver Lord 37262 and Slick 3rd 57489.

When it became necessary to select a successor to Slick 3rd 57489 as head herd sire Mr. Morgan felt that since his cow herd was carrying a high percentage of Anxiety 4th blood that an outcross might be desirable and after a careful search selected the bull Royal Wilton 79035 who had four close up crosses of Sir Bartle Frere 6419 and two of Garfield 7051. This bull was bred by George O. Holcomb of Troy, Pennsylvania, but purchased from C. A. Stannard of Emporia, Kansas. Royal Wilton did not disappoint Mr. Morgan.

Mr. Morgan retired as an active breeder of Hereford cattle in 1904 but he retained ownership of some half dozen cows and bred them to bulls owned by F. W. Preston, a son-in-law. The last Herefords registered as bred by Walter M. Morgan were the bulls Lee 364467 calved April 10, 1910, and Stuart 367400 calved June 9, 1910.

W. A. Morgan, a son 16 years of age when the Morgans came to Kansas was an important factor in the success of the Morgan Hereford herd in his earlier years as a helper and in later years as a partner. He retired from the partnership in 1900.

The Kansas Farmer of September 4, 1902, states that "Marshall county is known as the 'Herefordshire of Kansas.' Over 60 herds of purebred Herefords being owned there. The owners have an organization known as the Marshall county Hereford Breeders Association." Those familiar with the facts recognize in this statement the handiwork of Walter M. Morgan who was responsible for the establishment of more purebred herds of Hereford cattle in Kansas than any other breeder of his time.

Mr. Morgan was a quiet unassuming type of person—anything but high powered promoter type—yet his achievements as a breeder, his success in the show ring, his character, his forthright method of dealing with the public, and that intangible something that drew prospective breeders to him and commanded their confidence are major factors

responsible for what might be termed his silent leadership in the Hereford ranks of Kansas.

Walter M. Morgan died September 18, 1916 and the father of the Hereford industry of Kansas was laid to rest in the beautiful little cemetery at Blue Rapids, Kansas.

## Project Commercial No. 65—Performance of Steers Sired by Bulls of Different Sizes.

### COMPARISON OF HEREFORD STEERS SIRED BY SMALL, MEDIUM AND LARGE SIZE BULLS

A. D. Weber, A. G. Pickett, D. L. Mackintosh

(Preliminary report—not for publication)

The Kansas, Oklahoma, and Ohio Agricultural Experiment Stations are cooperating in this study, which is supported by grants from the American Hereford Association. In October, 1948, each station received 96 steer calves from the following commercial herds: Bar 13 Ranch, P. K. Ranch, and O. M. Wallop, Sheridan, Wyoming; and M. C. Simpson, Volborg, Montana.

These steer calves, sired by small, medium, and large size bulls are being compared at each of the three stations under three standard systems of feeding and management.

System I involves immediate full feeding for 225 days.

System II represents a deferred full feeding program in which the steers calves are wintered well, grazed without grain from May 1 to August 1, and then full fed in dry lot 100 days.

System III has for its objective the production of two-year old grass fat steers without the feeding of grain. Phases under this system include: wintering as calves without grain; grazing as yearlings a full season without supplemental feed; wintering as yearlings without grain; grazing as two-year olds without supplemental feed and selling as slaughter cattle directly off pasture.

Marketing and carcass data will be obtained on all of the steers handled under each of the systems. At the conclusion of the experiment, a joint report will be issued by the three cooperating stations.

The work has not progressed far enough to indicate trends or to justify any discussion of the results obtained. The accompanying table is included in this circular merely to indicate the experimental procedures that are being followed, and to conform to an established custom of the Kansas Agricultural Experiment Station whereby those in attendance at Livestock Feeders Day are given an opportunity to see all of the experimental cattle and are furnished preliminary reports on unfinished tests.

TABLE I. A COMPARISON OF HEREFORD STEERS Sired BY SMALL, MEDIUM AND LARGE SIZE BULLS

(Preliminary Report—Not For Publication)

November 29, 1948 to April 18, 1949—140 Days

1—System of Feeding and Management.	I Immediate Full Feeding			II Deferred Full Feeding			III Wintering and Grazing Two Seasons		
	1	2	3	4	5	6	7	8	9
2—Lot Number									
3—Size of Sires	Small	Medi'm	Large	Small	Medi'm	Large	Small	Medi'm	Large
4—Number of Steers Per Lot	10	10	10	10	10	10	10	10	10
5—Initial Weight Per Steer	430	444	452	427	441	451	427	442	454
6—Grain Per Steer	286	312	314	198	207	227	132	132	154
7—Final Weight Per Steer	716	756	766	625	648	678	559	574	608
8—Daily Gain Per Steer	2.04	2.23	2.24	1.41	1.47	1.62	.94	.92	1.10
9—Daily Ration Per Steer:									
Ground Shelled Corn	8.22	8.66	8.66	3.81	3.81	3.81	3.81	3.81	3.81
Soybean Meal	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Silage	10.02	10.02	10.02	19.58	19.70	19.83	19.48	19.94	19.80
Prairie Hay	2.07	2.06	1.98	3.09	3.60	3.91	5.25	4.69	5.07
Ground Limestone	.10	.10	.10	.....	.....	.....	.....	.....	.....
Salt	.01	.02	.01	.....	.....	.....	.....	.....	.....
10—Feed Required per 100 Lbs. of Grain:									
Ground Shelled Corn	402.65	388.81	386.01	269.69	257.97	235.24	.....	.....	.....
Soybean Meal	97.90	90.00	89.42	70.70	67.63	61.67	106.06	106.06	90.90
Silage	490.73	449.83	445.38	1385.10	1332.12	1223.56	2068.29	2115.53	1800.32
Prairie Hay	101.60	92.69	88.50	219.98	243.67	241.18	557.80	498.03	461.10
Ground Limestone	4.54	4.07	4.49	.....	.....	.....	.....	.....	.....
11—Cost of Feed Per 100 Lbs. Gain	\$ 15.70	\$ 14.92	\$ 14.74	\$ 15.23	\$ 14.85	\$ 13.70	\$ 14.76	\$ 14.49	\$ 12.63
12—Appraised Value Per Cwt. May 7, 1949									

FEED PRICES: Ground Shelled Corn, \$1.35 per Bu.; Soybean Meal, \$75.00 per ton; Prairie Hay, \$15.00 per ton; Silage, \$6.50 per ton.

Project 253-2—Factors Influencing Profitable Grass Utilization and Sound Pasture Management. Wintering, Grazing, and Fattening Heifers.

FATTENING HEIFERS FOR THE SUMMER OR EARLY FALL MARKET

A. G. Pickett - Ed F. Smith

Experiment IV - 1947-1948

INTRODUCTION

The previous tests with heifer calves have been completed. Pasture was not used in these tests but instead, heifer calves were fed a full feed of grain, three-fourths feed, one-half feed, one-fourth feed and no grain, respectively with silage and a protein supplement. As a result of these tests it was determined that for heifer calves which are to be full fed grain in the dry lot or which are to be grazed 75 to 100 days and then full fed grain for approximately 100 days, two to two and one-half pounds of grain in the winter ration will produce enough flesh to result in U. S. Good carcasses after 100 days of full feeding, yet not too much flesh to justify grazing 75-100 days before full feeding. Beginning with this, the fourth test, a study was initiated to determine the best way to utilize bluestem and brome grass in fattening heifers.

Experimental Procedure

- Lot 1 - Wintered with grain, cottonseed meal, silage and prairie hay; grazed without grain on bluestem grass April 27 to July 15 (78 days); full fed in dry lot July 15 to October 12 (90 days.)
- Lot 2 - Wintered with grain, soybean meal, silage and prairie hay; grazed without grain on bluestem grass April 27 to July 15 (78 days); fed 1.5 pounds of cotton seed meal on bluestem grass July 15 to Oct. 12 (90 days); full fed on bluestem grass Oct. 12 to November 9 (28 days); full fed in dry lot November 9 to January 8 (60 days).
- Lot 3 - Wintered with grain, linseed meal, silage and prairie hay; grazed without grain on bluestem grass April 27 to July 15 (78 days); full fed on bluestem grass July 15 to October 30 (108 days.)
- Lot 4 - Wintered with grain, dehydrated alfalfa pellets, silage and prairie hay; full fed in dry lot April 27 to July 31 (95 days.)
- Lot 5 - Wintered with grain, dehydrated brome grass, silage and prairie hay; full fed on brome grass pasture April 27 to July 31 (95 days.)
- Lot 6 - Wintered with silage, prairie hay and mustard seed meal; grazed without grain on bluestem grass April 27 to July 15 (78 days); full fed dry lot July 15 to October 30 (108 days.)
- Lot 7 - Wintered with silage, cottonseed meal and prairie hay; grazed without grain on bluestem grass April 27 to July 15 (78 days); fed 1.5 pounds cottonseed meal July 15 to October 12 (90 days); full fed on bluestem grass October 12 to November 9 (28 days); full fed in dry lot November 9 to January 8 (60 days.)
- Lot 8 - Wintered with silage, prairie hay, cottonseed meal and dehydrated brome grass; grazed without grain on bluestem grass April 27 to July 15 (78 days); full fed on bluestem grass July 15 to October 30 (108 days.)