THESIS

HEREFORD CATTLE

by

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The major object in raising cattle is for profit, and thewfinal destiny is the block, so let us consider the breed that will come nearest meeting those requirements.

In taking up Herefords let us take a glimpse of their origin.

That they are an old English breed is probably true. McDonald and Sinclair in their famous history of Hereford cattle state; "The Herefords are originally a self coloured race of cattle like the Devons and Sussex and that they were derived from the same source."

Marshall who saw the breed on its native pastures in 1788, described the color as "a middle red with a bald face," the last being esteemed characteristic of the true Hereford breed.

One of the first efforts to assign to a specific cause the the superior quality and characteristic color of the Hereford breed was made by Mr. Thos. Knight, who asserts that Lord Scudmore introduced into the county of Hereford from Flanders, a number of red cattle with white faces prior to 1670 and that they attributed superior qualties to the breed. That they were of good class ere this is proven by John Speed a noted agriculturist (editor) in 1627, when he mentiones the excellent condition of the cattle in Herefordshire. England.

It is also thought by some that the white cattle of Wales had been crossed with the native breed as their prevalence in the adjoining county of Brecknock has been satisfactorily established. If such is the case, it is almost a certainty that they were the cause of the appearance of animals with white markings which doubtless

assisted the early improvers in fixing a white face as a dominant characteristic.

Another writer, Mr. T. Rowlandson in 1853 in the Journal of the Royal Agricultural Society of England, gives a description of the breed and from it may be quoted; "The old Herefords are said to have been brown or reddish brown and it is only within the last eighty or ninety years that it has become the fashion to breed for the white face." The history of the instruduction of the latter we are assured; the gentlemen who furnished the statement says he was informed by Mr. P. Tully that the introduction of the white marked cattle was accidental and occurred in the stock of that gentleman's (Tulley) ancestors, who lived at Huntington in Holmer, in the following manner; That about the middle of the last century the comman came to the house, announcing as a remarkable fact that the favorite cow had produced a white-faced bull calf. This had never been known to have occurred before and as a curiosity it was agreed that the animal should be kept and reared as a sire. The progeny of this sire became celebrated for their white faces.

Then the intercrossing with the white cattle of Wales; the crossing with the white faced Flemish cattle and the methodical use of the white faced bull of the Huntington herd, all tend to fasten the white as characteristic of the Hereford cattle which ultimately came to possess the power and uniformity of a fixed family current.

On the other hand it brings good evidence that the Hereford is the representative of a widely diffused and ancient race, which, to-day accounts for his great propotency. Marshall gives a description of a Hereford ox that was acknowledged, by later writers, Campbell,

Lawrence, and Youatt, as the best that could be given and will give an adequate ieda of the quality of a Hereford ox of that time, 1788.

The general appearance full of health and vigor, and wearing the marks of sufficient maturity -- provincially "oxey," not steerish or still in too growing a state to fat. The countenance, pleasant, cheerful, open; the forehead broad; the head small; the chap clean; the eye full and lively; the horns bright and tapering, and spreading; the neck long and tapering; the chest deep; the bosom broad and projecting forward; the shoulders -- bone thin, flat, full, and no way protuberant in bone; the chine full; the loin broad; the hips standing wide and level with the spine; the quarters long and wide at the nache; the rump even with the general level of the back, not drooping nor standing high and sharp above the quarters; the tail slender and neatly haired; the barrel round and roomy; the carcass throughout being deep and well spread; the ribs broad, standing close and flat on the outer surface, forming a smooth even barrel; the hindmost large and of full length; the round bone, small, snug, not prominent; the thigh clean and regularly tapering; the legs upright and short; the bone below the knee and houch small: the feet of middle size; the cod and twist round and full: the flank large; the flesh everywhere mellow, soft and yielding pleasantly to the touch, especially on the chine , the shoulders, and the ribs; the hide mellow and supple, of a middle thickness and loose on the nache and huckle; the coat, neatly haired, bright and silky: its color a medium red, with bald face, the last being esteemed characteristic of the true Hereford breed.

It was in 1742 that Benj. Tompkins, Sr., of Canon Pyon,
Herefordshire, England, began the systematic improvement of Herefords, and in 1808 we have record of B. Tompkins, "Jr." making a
sale of the full calf, Wellington, for \$1,400 and in 1819 the sale
record wherein 28 head 28 head of Tompkin's herd were sold at an
average of \$745 per head. This is merely showing the results of
Benj. Tompkin's (Sr) good work on the breed.

Shortly after this, 1817, Henry Clay of Kentucky, imported the first Hereford into America, and in 1839 the importation began by Wm. H. Sotham, one of the early champions of the breed, and has been kept up constantly by T. L. Miller, T. F. B. Sotham, and many others, introducing into the breed new strains and superior individuals.

It was not until 1881 that the American Hereford Cattle Breeders' Association was formed by T. L. Miller, and since then the growth of the Herefords in America has been very rapid until today practically one-fourth of the registered beef cattle are Herefords, this estimate including Shorthorns, Galloways and Angus.

To convey an idea of the advance which has been made in recent years will quote a few interesting Hereford dates and why:

1891-- Two year old Hereford steer, Hickory Nut, exhibited by

W. S. Van Natta, was champion at the American Fat Stock Show. At the age of 954 days his weight was 1629 pounds. 1896 -- The Hereford steer, Jack, was grand champion at the Madison square Garden stock show. The Hereford steer, Jack, was also champion at the American Fat Stock Show in 1897, weighing as a two-year old, 1830 pounds. In 1900 -- The pure-bred Hereford steer, Old Times, #94035, exhibited by T. F. B. Sotham, was grand sweepstakes steer of the First American Royal Live Stock Show at Kansas City.

weighing 1645 pounds, at twenty five months. Thus it will be seen that the Herefords are speaking for themselves at our stock shows.

That the demand justifies the breeder is readily shown by their appearance in the sale ring, a few instances which I will note. Taking the year of 1902 as a year of good financial conditions, I give the results of the large sales.

Jan 28-30:

A sale of Herefords under the management of T. F. B. Southam, held at Kansas City, resulted in 184 head bringing an average of \$341.70 per head.

Feb. 25-27:

Combination sale at Kansas City, 135 head averaged \$286.45.

March 25-26:

Hereford sale of So tham, and others, resulted in an average of \$323.25 for 148 head.

May 13-14:

Sixty-two head of Herefords sold at Indianapolis, Indiana, averaged \$392.35 each.

May 22-23:

At Chicago, eighty-three (83) head averaged \$323.00.

Sept. 16:

Clem Graves, of Bunker Hill, sold forty-three (43) head, which averaged the extroardinary sum of \$1007.00 per head.

October 16:

At Indianapolis, Indiana, 104 head averaged \$407.00 each.

At Kansas City, 96 head averaged \$304.00.

These sales show definitely that a premium price is being Hereford paid for breeding stock. What has been the cause of such prices? you may ask, and why such popularity in the last twenty-five years? Experience has taught the breeder, the feeder, the shipper, the packer, and the retailer, that cattle with certain characteristics are more profitable than those without them. These characteristics may be summed up as follows: Adaptability; Constitution; hardiness; vigor; prolificacy; prepotency; correct type; thrift; early maturity; scale; docility; digestive capacity; quality; finish; and uniformity.

The adaptability of the Hereford is a very strong feature upon which may be placed considerable weight. The geographical distribution shows a very wide range, from Great Britan, the home of the Hereford, to Australia, New Zealand, Argentine; Canada, and the United States; from Maine to Washington, to and including Mexico. This shows clearly that the climatic adaptation is great. Plumb says; "No breed equals the Hereford for withstanding the vicissitudes of the great ranges where winter cold and scarcity of feed frequently occur. The thick coat of hair, the robust constitution, and easy keeping qualities of the breed make it unusually suited to such conditions."

The Herefords adaptation to feed lot conditions is recognized by all. That they are the banner breed for the production of baby beef is clearly demonstrated by D. W. Black, of Ohio, whose exhibit at the International Live Stock Exposition at Chicago in

1905 of a carload of grade Hereford steers besides being champions in their class, dressed out 65.1 per cent, which is the record for yearling steers. Mr. Black also in carload exhibits, took the grand championship at the Lousiana Purchase Exposition show in 1904 with a carload of Herefords, besides his two winnings at the International.

Mr. W. J. Herrin of Illinois won the grand championship on car lot at the International in 1903 on Herefords. Always have they stood well as feeders and the claim that Hereford cattle will make faster gains than any other breed and develop up to "baby beef" weight quicker, is again demonstrated as correct by the London Live Stock Journal, showing the average daily gains of the prize winning cattle at the recent Smithfield Show, the International of England.

Herefords Steers not exceeding two years old --

Rank	Age in days	Weight	Average daily
first	685	1529	2.23
second	671	1687	2.51
third	691	1595	2.30
fourth	593	1267	2.13
Steers	s above two and	not over th	ree
first	938	1944	2.06
second	1036	1898	1.83
third	1067	1784	1.67
fourth	726	1850	2.54
reserve	1024	1830	1.78

	Heifers n	ot over three y	ears old			
			Weight	Average daily		
	first	1074	1657	1.54		
	second	1035	1972	1.90		
	third	880	1587	1,80		
		Shorthorns.				
Steers not exceeding two years old						
	first	686	1454	2.11		
	second	699	1539	2.20		
	third	702	1479	2.10		
	fourth	650	1497	2.30		
	reserve	635	1295	2.03		
Steers above two and not over three years						
	first	1011	2032	2.00		
	second	993	1835	1.84		
	third	1005	1820	1.81		
	fourth	1024	1887	1.84		
Heifers not over three years old						
	first	1059	1806	1.70		
	second	906	1680	1.86		
	third	1067	1840	1.72		
	fourth	1044	1480	1.41		
	reserve	1060	1866	1.76		
		Angus				
Steers not over two years old						
	first	689	1437	2.08		
	second	708	1580	2.23		
	third	674	1470	2.18		

Analyzing the above table we find that the average daily gains made by Hereford steers under two years of age was 2.29 pounds; for Shorthorns in the came class was 2.14 pounds; and for Angus in the same class was 2.13 pounds. The average daily gains in the two-year-old class for Herefords, 1.98 pounds; for Shorthorns, 1.87 pounds; and for Angus, 1.90 pounds. In the class for heifers the average daily gains were: Herefords, 1.75; Shorthorns, 1.69; and Angus, 1.60. If figures ever demonstrate facts or are to be relied upon to sustain theories, surely the above showing upholds the contention of the Hereford breeder that his cattle make more beef in shorter time than any other breed and for will keep on making profitable gains as long a time as any.

The use of registered Hereford bulls of good individuality is being advocated more year by year. This anyone can see
as he scans the papers not only in sections where land is high
priced but also in sections where it is cheap and sparsely settled.

While commendable progress has been made, the percent of purebred cattle, taking the country as a whole, is very low. This is
due to the promiscuous mixing of the several breeds and has kept
a large percent of our cattle from being uniform. The man who
desires to grade his cattle for beef producing purposes if he
hopes to meet with reasonable success must adhere to one breed.
The minute he mixes the blood of any two well established breeds,
there is at once a strife for supremacy in the improved blood
strains and wherever such strife occurs, the character of the
offspring cannot be foretold, but will often be inferior to both
dam and sire.

A pure bred Hereford female may be bred to a Shorthorn bull and the cross is almost invariably valuable, but we can go no further. If for example we breed a cross-bred female to a cross-bred sire or even to a registered sire belonging to a breed represented in the cross, bred female, the affinities are broken up and the resulting progeny will often be inferior to the propert scrub. These statements are born out again and again by farmers throughout the country and also by carefully conducted scientific investigations. This should certainly cause us to adhere to one breed.

That "like begets like" is certainly true with the Hereford, being of a large, robust prolific breed of aged purity the Hereford

sire's stamp is indelible.

Hereford characteristics are nearly all desirable. It is often stated that the Hereford has undergone more of an evolution than any other breed, making more improvement. The lack of developement of the hind quarters has been bred out to such an extent that they can seldom be criticized, while the front of the animal with its uniformity and beautifully laid shoulders are equalled by few and surpassed by none.

Another criticism that the Herefords have invoked has been their milk producing qualities. This is deficient in some strains of the breed but as a whole they are good suckers as is demonstrated by the relative size of Hereford calves and yearlings.

Taking all in all, they are as breeders with their unquestioned constitution, hardiness and vigor, together with their prolific and prepotent properties, in the first rank. As rangers their hardiness has installed them where other beef breeds have failed. As feeders their thrift, early maturity, scale docility, and digestive capacity have demonstrated their value to feeders, while practical demonstrations on the black for years have given them an exceptionally high rank on their fine grained and nicely marbled meats and high per cent of dressed meat to carcas.

Another point that must be added in their favor is the demand, which according to a table compiled from the leading live stock journals tells us that in 1907 the average of 27 sales, 1250 head was \$121.50 against 1906, 24 sales, 1366 head, \$126.30; in 1905, 24 sales, 1179 head averaged \$115.35; in 1904, 28 sales, 1481 head averaged \$117.10.

It is thus seem that the Herefords are holding their own regardless of the "dull cattle days" which some breeders are crying. One reason for this is that the great western cattle country, including one-fourth of the U. S., and all of Old Mexico, are buying Herefords for the ranges and will continue to do so for a century to come. This fact, thgether with the demand for highly finished products by other countries, and the advance in real estate throughout the U. S., calls for a better quality of cattle will no doubt see the Herefords commanding top prices in the future.