# Additional Longhorn Cattle Management Records From Wichita Mountains Wildlife Refuge

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Halloran and Shrader (1960) outlined herd history, management methods, and horn and weight data for the longhorn cattle on the Wichita Mountains Wildlife Refuge in Comanche County, Oklahoma. Since this study, additional data have been accumulated. It is the purpose of this paper to add this unpublished information to the accessible record.

The origin of the present herd was a group of longhorns assembled in Texas by Messrs. Will C. Barnes and John H. Hatton and shipped during 1927 to what was then the Wichita National Forest. Various authors, including Hatton (1927) and Barnes (1927) differ as to the numbers in the original herd. This is doubtless due to several factors including calves born after shipment, losses and the exclusion of steers in some counts. Records have been searched to clear these obscure points.

A Forest Supervisor's report of January 25, 1930 contains much data. In August 1927 thirty longhorns were received. This herd consisted of three bulls ,three steers, twenty cows, and four calves (two bulls and two heifers). One cow was trampled in shipment, and died shortly after un-Later, one of the bulls died, and another original herd bull (black in color and not used for breeding) was sold 15 October 1931. Soon after arrival, four more calves were born. One of these was stillborn. Five calves born in the 1927-28 period were of poor longhorn type. and were traded for five cows (Table I). A check was made to determine the number of the original herd that could be considered herd foundation animals. The present branding and record system was not started until 1931. Because of this, certain facts on the history of the herd are not available. However, a review of the record indicates that one bull, nineteen cows, and one of the 1927 bull calves, formed the original herd foundation. A list of these, including brand numbers and descriptions for all but four of the cows, is on file at refuge headquarters.

There has been much interest shown in the numbers of animals added to the herd after the original introduction (Barnes, 1927; Hatton, 1927) The card record that is kept of every animal was searched for this material. The invaluable aid of Claud A. Shrader, herd manager since 1950 who has long been associated with both the records and the cattle on the range is gratefully acknowledged.

TABLE I
Bulls Added to Herd After Original 1927 Introduction

Dates	No.	Former Owner	Source of Animals	Notes			
8/12/31	2	Bought through Zunigas Y. Cia Laredo, Texas	Monterey, Mexico	\$16.00 ea. in Mexico; \$118.72 FOB Cache, Okla. One of these w/Jersey-like horns not used. (Brand No. 84).			
1941	10	J. C. Clower, Laredo, Texas	Mexico	One of these, a white- brindle, was sire of twin cows.			
May 1936	2		Mexico	Secured by Supt. Harry French			
1949	1	I. G. Yates	Marathon, Texas	Raised by I. G. Yates			
11/51 - 5/53	8	I. G. Yates	Marathon, Texas	Three raised by I. G. Yates; five of unknown origin.			
Total	23*						

<sup>\*</sup>One of 8/12/31 bulls not used. See above.

TABLE II

Cows Added to Longhorn Herd After Original 1927 Plant

Date	No.	Former Owner	Source of Animals	Notes
7/28	3	J. F. Howenstine		Traded three 1927 and 1928 heifer calves of original herd for these. Two additional 1927-1928 calves were traded to the same man at the same time for two cows. Shortly after the trade the cows died.
1946	12	J. C. Clower	Mexico	Clower owned Kimball Ranch at head of Lake Lawtonka, Comanche County, Okla. One of these cows was bred in Mexico. The calf became herd bull No. 20B.

Total 15\*

<sup>\*</sup>Calf of one 1946 cow used as herd bull. See above.

If the twenty-one foundation animals of the original 1927 shipment are added to the bulls and cows bought and traded (plus one calf, see Table II) of Tables I and II, it is seen that fifty-nine animals constituted the foundation stock for the present herd.

Very little information has been available on longhorn calf weights. Table III summarizes this information for calves born in the spring of 1960, and retained in the herd.

TABLE III

Longhorn Calf Weights

Weighed November 8, 1960

Туре	No.	Average Weight (lbs.)	Weight Range (lbs.)		
Bull Calves	5	453	395-485		
Heifer "	17	386	325-435		
Steer "	32	415	300-505		
Total	54				

Also, there has been a dearth of information on longhorn cow weights and horn spreads. Table IV summarizes information on these subjects. The "tip-to-tip" horn length measure is the so-called "pole measure", (Halloran and Shrader, 1960).

TABLE IV

Longhorn Cow Weights and Horn Measurements

Age In	No.	Av. Wt. (lbs.)	Weight Ranges	Tip-to-Tip Horn Length				
Yrs. \	Weighed			nges	No. Measured	Measurements (Inches)		
1	10	590	420- 655	lbs.	9	131/2	to	241/2
2	4	735	660- 845	**	4	23	,,	29 1/2
3	2	905	895- 915	**	2	24	,,	26
4	2	830	765- 855	"	2	27	,,	28
5	2	905	765-1045	"				
6	2	958	845-1070	**	2	27	to	30 1/2
7	2	955	870-1040	,,	ī	47		/•
8	7	869	755- 980	"	5	29 1/2	to	391/2
9	i	795		**	ĭ	41		/2
10	$ar{2}$	908	840- 975	**	ī	38		
11	<u> </u>	765	_	**	<u>ī</u>	40		
13	ĩ	765		**	ī	38		
14	_			**	ī	39 1/2		
15	4	1005	975-1025	"	3	34	to	371/2
16	3	920	815-1005	**	3	271/2	"	40
17	ž	935	930- 940	**	2	36	"	36
Totals	45				38			

Cow weights in Table IV rise to a peak of 1070 pounds at six years. Most of the weights were taken in the fall when the cattle are in better condition and their age was 1½-years, 2½-years, etc. However, some of the weights were taken in the spring when these grass-fed cows were not as heavy. Therefore, to simplify the table, the age in each case is listed

as a whole number. The greatest tip-to-tip horn spread was a 7-year-old cow that measured 47 inches. In refuge records, brand numbers of the cows and calves recorded in Tables III and IV are listed with their weights and measures.

Little specific data are available concerning body size of mature steers. On 13 December 1939 a 10-year-old steer, raised on the refuge, was butchered. The head and hide was donated to West Texas State College, Canyon, Texas. The following body measurements were taken by Biologist Charles H. Rouse after the hide was removed.

Length: Neck to Tail Tip: 114 inches Height at Shoulder: 64 "Greatest Body Girth: 93-%"

The Wichita herd is essentially a "show" group. Thousands of people visit the refuge annually to see and photograph the longhorns. In order to maintain a herd of this nature it is necessary to hold adequate breeding stock, and at the same time have steers of various ages to display size, color, conformation and horn growth. Table V illustrates this point by recording herd composition following the 1960 September auction sale.

## TABLE V

## Longhorn Herd Composition January 1, 1961

Class	Number
Yearling Bulls	6
Bulls Over One Year of Age (2 to 9 yrs.)	12
Yearling Cows	22
Cows Over One Year of Age (2 to 16 yrs.)	125
Steers (1 to 16 yrs. of age)	187
Herd Total	302

With one exception, all births of this herd have been single. Twin heifers were born in 1943. Each was light roan in color and, through the years each brought thirteen calves. The twins were sold in 1960.

The herd is brucellosis-free due to long-continued vaccination by veterinarians of the Agricultural Research Service. According to refuge records, preliminary testing and some vaccinations were started in 1944. This program became a regular part of management as found in the January to April, 1945 narrative report, "Although no abortions have been noted among longhorns up to the beginning of 1945, vaccination of the 1944 calf crop was begun as a precautionary measure in January."

#### LITERATURE CITED

Barnes, Will C. 1927. On the trail of the vanishing longhorns. Sat. Ev. Post, 15 Oct. 1927: 9, 121, 122, 127.

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