

HEREFORD

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100%

CHOICE & PRIME



## RELENTLESS COMMITMENT

U.S. Hereford breeders continue to significantly improve carcass quality while maintaining the breed's maternal superiority and production efficiency. Results from the American Hereford Association (AHA) National Reference Sire Program (NRSP) underscore the progress (see Table 1).

The data is from 300 steers born in June-July 2022 and harvested in February 2024 (six weeks later than normal due to weather). They were produced in the mainstay NRSP program at Olsen Ranches, Harrisburg, Neb. These calves were out of the Olsen's commercial Hereford cow herd, randomly mated via one-time AI to 14 different NRSP sires.

For proper context, the Olsens employ a low-input philosophy. Calves are born June-July, weaned October-November and then roughed on winter pastures with little to no feed supplement until the feeding trial in June. Likewise, cows receive no supplement except for during extreme weather conditions.

With low inputs in mind, the Olsens emphasize feed efficiency, place downward genetic selection pressure on mature cow size and milk, and use sires that are breed average for growth but above breed average for calving ease. Among sires that fit these criteria, they select for as much end-product merit as is available. In 1999, steers from the program averaged high Select/low Choice. This year, they averaged high Choice/low Prime.

**TABLE 1**

NRSP Feedlot Performance		
	Range	Average
ADG (lbs.)	3.96 to 4.62	4.3
DMI (lbs.)	23.7 to 28.3	26.2
Adj. F:G (lbs.)	5.73 to 6.48	6.1
HCW (lbs.)	792 to 900	858
REA (in. <sup>2</sup> )	13.3 to 14.4	13.8
BF (in.)	0.60 to 0.74	0.68
Upper 2/3 Choice (%)	82-100	97.6
Prime (%)	24-86%	51.1
Yield Grade	3.1-3.9	3.6

## PROGRESS BY DESIGN

The NRSP highlights breeders' longstanding commitment to identifying young sires with the genetic merit to meet and exceed the performance needs of commercial cow-calf producers, stockers and cattle feeders. NRSP was established in 1999 as a means of testing young sires early in life through comparison of their progeny within large multi-sire contemporary groups.

AHA is one of only two U.S. breed associations mandating whole-herd performance reporting for data to be included in the breed's genetic evaluation, which adds prediction accuracy. Since 2010, data includes individual feed intake for steers produced and fed as part of the NRSP.

In 2022, AHA also began collecting individual methane emissions and nitrogen excretion from steers produced through NRSP. This data is the lynchpin of a collaborative research project between AHA and AgNext at Colorado State University. The project explores genetic differences between sires for methane emissions and nitrogen excretion, associated heritability and the potential of creating a related genetic selection tool.

More than 300 bulls have been tested through NRSP. All data has gone into the breed's genetic evaluation since 1999. NRSP data is the breed's cornerstone for developing new selection tools, validating the efficacy of genomic tools and more. NRSP sires influence 7% of the more than 2 million AHA performance pedigrees.

