

Briefing paper to AHS/APHS – Summary of CRC research paper on NFI *
R.Freer. 27/6/05

Sire breed differences for Net Feed Intake in feedlot finished beef cattle

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Presented at the 16th AAABG conference, 26th Sept 2006

Individual daily feed intake and live weights were measured on 469 beef cattle representing 9 sire breeds joined to Brahman cows. The aim of the study was to estimate sire-breed differences for daily feed intake and net feed intake (NFI). The study was part of the Beef CRC research project.

Progeny from Brahman, Charolais, Limousin, Hereford and Santa Gertrudis sire breeds had significantly lower NFI compared to progeny of Angus, Shorthorn and Belmont Red sire breeds.

Table 1 - Sire-breed least square means for NFI – all sires breeds

<u>Sire-breed</u>	<u>NFI (kg/day)</u>
Brahman	-0.61
Charolais	-0.57
Limousin	-0.50
Hereford	-0.30
Santa Gertrudis	-0.27
Belmont Red	+0.01
Shorthorn	+0.16
Angus	+0.30

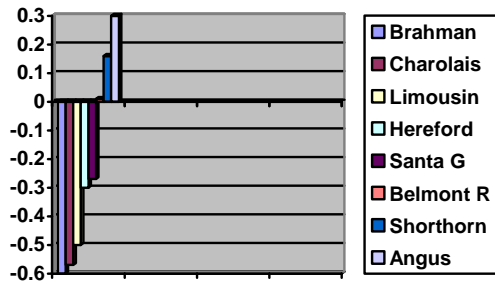
Table 2 - Sire-breed least square means for NFI – British sire breeds only

Hereford	-0.30
Shorthorn	+0.16
Angus	+0.30

Of the three British breed sire breeds compared, Hereford sired progeny had significantly lower NFI (were more efficient – ie, ate less feed/day) than either Shorthorn or Angus sired progeny.

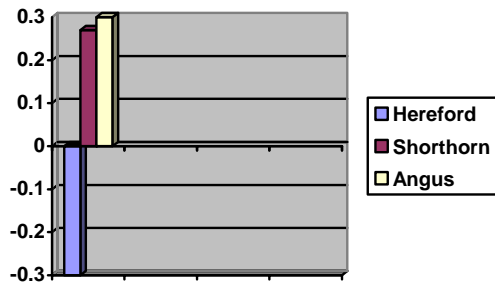
Of the nine sire breeds compared in this project Angus were the least efficient in terms of NFI.

Graph 1 – sire breed differences (all breeds) – Moore et al, 2006.



Graph 2 – sire-breed differences for NFI (British breed sires) – Moore et al, 2005.

Hereford sired progeny consumed significantly less feed/day than either shorthorn or Angus sires progeny.



* Net feed Intake (NFI) is the difference between an animal's *actual* feed intake and the *expected* feed intake of a breed average animal of the same live-weight and growth rate. At the same level of performance, animals with a low (negative) NFI will eat less than animals with a high (positive) NFI.