

Intensive finishing of late-maturing, suckler-bred steers

Simon Marsh, Principal Lecturer, Harper Adams University

Harper Adams University (HAU) has recently undertaken a study to compare the projected margins of late-maturing, spring-born, suckled steers compared to intensively finished bulls.

The model was based on the targets shown in the table below.



Table 1: Targets for intensively finished bulls and late-maturing suckled

	Bulls	Steers	
Feed	Cereals	Cereals	Silage
Start weight (kg) at 7 months old	330	310	310
Slaughter age (months)	14	13	14
Slaughter weight (kg)	650	560	585
Daily liveweight gain from birth (kg)	1.42	1.30	1.26
Daily liveweight gain from weaning (kg)	1.52	1.39	1.31
Carcase weight (kg)	380	325	335
Carcase daily gain from birth (kg)	0.89	0.82	0.78
Carcase class	U=2=	R+4=	R=4=
Concentrates (kg)	1,750	1,450	980
Silage (kg DM)	360	270	925
Feed conversion ratio (kg DM:kg gain)	5.88	6.13	6.46



A base carcass price of £3.42/kg, with a 5p reduction for bulls, was used to calculate the gross margin per cow. The results are shown in Table 2.

Table 2: Gross margin per cow for bulls and steer systems

System	Bulls	Steers	
	Cereals	Cereals	Silage + Cereals (50:50 DM)
Gross margin per cow (£)	603	568	570

The results of the modelling exercise showed that the gross margin per head was slightly higher for the bull system compared to steers fed either the silage or cereal-based rations. If there is a limited market for bulls, then consider finishing them as steers which is a viable option. However, the key factor for success when finishing steers off a silage system is ensuring the silage fed has a high metabolisable energy (ME) content (11.0+). An additional benefit of the steer system is the animals are easier to handle and manage compared to bulls.

In terms of meat quality, it is well recognised that quality prime beef can come from steers, heifers and young bulls. For young bulls, a maximum slaughter age of 16 months is recommended, together with additional post-mortem maturation of bull meat to safeguard tenderness. Regardless of gender, meat toughness tends to increase with slaughter age.

Selling calves at eight months of age (one month after weaning) was also modelled and showed that steers weighing 350kg liveweight at £2.60/kg and heifers weighing 320kg at £2.30/kg equated to a gross margin per cow of £530.

Further information on finishing beef animals can be found in BRP manual [Feeding Growing and Finishing Cattle for Better Returns](#).