



A Simmental surprise in Tully performance figures



Shane Murphy looks over the intake data of beef bulls and steers in Tully since 2012

Since 2012, the ICBF has been testing commercial cattle in Tully. Over this time, 1,849 steers or bulls from a major beef breed have been tested.

Much of this has been to improve the data going into the Euro-Star indices, particularly in relation to terminal traits such as carcase weight, carcase conformation and, most importantly, feed intake.

A quick analysis of the data gives great insight into how each breed performed. While not exact, as animal ages vary, average daily gain (ADG) at each stage is beneficial information.

Looking at Table 1, we see the steer intake information and kill performance. Most breeds have a significant data pool of in excess of 100, with the exception of the Hereford and Belgian Blue breeds.

One point to note in this data pool is that the Simmental breed average age is 48 days less than the next nearest, that of the Charolais breed. This is particularly important when compared with the Blue breed, which is on average 80 days older than the Simmental.

That said, the Simmental breed still clocked up an R= average grade and got within 16kg in carcase weight of the Charolais.

Table 2 perhaps emphasises this point more. Assuming a birth weight of 42kg for all breeds, Simmental had the highest daily gains; pre-trial, on-trial and overall from birth.

Compensatory growth always needs to be considered when looking at the results of the trials.

In basic terms, if animals have not achieved their optimum growth pre-trial, they have more capacity for higher thrive on trial.

Because the Simmentals had the highest pre-trial growth, they would have also had the lowest capacity for compensatory growth.

When you look at the carcase weight gain figures for steers, you can see that the Simmental breed also achieved the highest at 0.63kg/day. The other breeds ranged from 0.57kg/day to 0.61kg/day.

It must also be noted that the Simmental breed had the best feed efficiency, which could also be associated with the younger age.

That said, if left on trial for longer, the

Table 1: Steer liveweight and kill performance

| Sire breed | Sample no | Start age | End age | Slaughter age | Initial weight | Final weight | Carcase weight | Avg grade | Avg fat score |
|--------------|-----------|-----------|---------|---------------|----------------|--------------|----------------|-----------|---------------|
| Simmental | 112 | 486 | 579 | 583 | 520.16 | 660.26 | 361.82 | R= | 3= |
| Charolais | 126 | 534 | 627 | 631 | 549.94 | 670.24 | 377.89 | R+ | 3= |
| Hereford | 28 | 535 | 621 | 624 | 524.89 | 655.14 | 352.09 | R- | 4- |
| Limousin | 204 | 537 | 628 | 632 | 527.85 | 649.77 | 370.14 | R+ | 3= |
| Angus | 116 | 543 | 634 | 636 | 540.17 | 661.54 | 355.97 | R- | 4- |
| Belgian Blue | 24 | 566 | 661 | 664 | 564.08 | 673.54 | 387.89 | U- | 3= |

Table 2: Steer daily gain performance along with feed efficiency and terminal index

| Sire breed | Pre-trial ADG | On-trial ADG | Total ADG | Carcase weight DG | Feed efficiency | Terminal index |
|--------------|---------------|--------------|-----------|-------------------|-----------------|----------------|
| Simmental | 0.99 | 1.51 | 1.07 | 0.63 | 9.44 | 73.65 |
| Charolais | 0.96 | 1.32 | 1.01 | 0.61 | 10.57 | 89.53 |
| Hereford | 0.91 | 1.5 | 1 | 0.57 | 11 | 34.09 |
| Limousin | 0.91 | 1.36 | 0.98 | 0.6 | 9.9 | 88.75 |
| Angus | 0.93 | 1.39 | 0.99 | 0.57 | 11.19 | 51.92 |
| Belgian Blue | 0.93 | 1.21 | 0.97 | 0.59 | 13.07 | 91.99 |

Table 3: Bull liveweight and kill performance

| Sire breed | Sample no | Start age | End age | Slaughter age | Initial weight | Final weight | Carcase weight | Avg grade | Avg fat score |
|--------------|-----------|-----------|---------|---------------|----------------|--------------|----------------|-----------|---------------|
| Simmental | 210 | 375 | 475 | 480 | 499.75 | 703.75 | 402.2 | U= | 3- |
| Belgian Blue | 166 | 378 | 483 | 486 | 482.93 | 684.11 | 415.97 | U+ | 2+ |
| Charolais | 266 | 380 | 482 | 486 | 495.77 | 694.88 | 411.9 | U= | 2+ |
| Limousin | 506 | 383 | 485 | 489 | 474.28 | 667.79 | 396.51 | U= | 3- |
| Angus | 79 | 390 | 488 | 492 | 464.15 | 653.43 | 375.47 | U- | 3= |
| Hereford | 12 | 419 | 518 | 522 | 499.33 | 678 | 382.98 | U- | 3+ |

Table 4: Bull daily gain performance along with feed efficiency and terminal index

| Sire breed | Pre-trial ADG | On-trial ADG | Total ADG | Carcase weight DG | Feed efficiency | Terminal index |
|--------------|---------------|--------------|-----------|-------------------|-----------------|----------------|
| Simmental | 1.22 | 2.06 | 1.39 | 0.85 | 6.94 | 78.5 |
| Belgian Blue | 1.17 | 2.01 | 1.33 | 0.86 | 6.78 | 100.95 |
| Charolais | 1.2 | 2.08 | 1.36 | 0.86 | 6.75 | 96.24 |
| Limousin | 1.13 | 1.97 | 1.29 | 0.82 | 6.49 | 95.06 |
| Angus | 1.09 | 1.96 | 1.25 | 0.77 | 6.8 | 59.04 |
| Hereford | 1.09 | 1.86 | 1.23 | 0.74 | 7.5 | 62.02 |



Simmental topped steer carcase weight DG.

breed could have seen its carcase weight, along with carcase grade, increase significantly.

Bull performance

If you look at the bull performance in Tables 3 and 4, you can see that trial age is much more even, with the exception of Hereford. When you look at the continental breeds, there are only eight days between all breeds.

Here we see the Simmental breed topped the initial and final liveweights.

Looking at carcase weight, the increased kill-out of Belgian Blue meant that it topped the table. That said, due to a heavier liveweight, the Charolais breed was only 4kg behind Blue. Carcase grades and fat scores remained even enough among continental breeds.

On-trial weight gain was topped by the Charolais breed, which put on 2.08kg/day. This was closely followed by the Simmental breed at 2.06kg/day and the Blues at 2.01kg/day. However, when looked at total average daily gain, the Simmental breed again came out on top.

Carcase weight again was very consistent among the top bulls, with the Charolais and Blue breeds gaining 0.86kg/day, while Simmental achieved 0.85kg/day.

What's interesting to look at is the average terminal indices which follow these records.

Looking at the data, we see the Simmental steer average was €15 to €18 behind the other continental breeds. This increased further when we look at the bull average. Simmental stood at €78, while the next-nearest continental breed was Limousin at €95.

This is why the headline leads with Simmental surprise, as, despite topping a number of key trials, their indices remain much lower than that of other continental breeds.

The Simmental breed is renowned for its replacements, but with so much going for it on the terminal side, is it time the indices reflected that?