

Using MSA to refine production

Northern NSW beef producers, Tom and Cathy Amey, have used Meat Standards Australia to refine their yearling production enterprise over the last nine years. Carcasses from the last mob they sold to a local operator all made the grade, a trend that they hope to continue.

The Amey's first sought MSA accreditation to attract premium beef prices.

"I was consigning cattle to an operator that gave a premium for MSA graded cattle," Tom said.

"Now we expect 20 cents a kilo more for MSA-graded yearling compared to those that don't grade, and I think that will continue. MSA-graded yearlings come with an eating quality guarantee."

Using MSA feedback

Through MSA, Tom can now access a larger range of carcass statistics over the internet (eg rib fat depth, meat colour and eye muscle area) that is useful for sire assessment and selection.

"What's really interesting is that MSA gives you a tremendous lot of information; it's very good feedback," he said.

"I use the information to focus on the production issues. I was having grading problems due to low rib fat levels, so I changed the sires. From the feedback, I can see that what I've done is working."

"I've been using it for about nine years and it's been an overall benefit. There's a lot more things determining eating quality than just the age of the animal and how long it's been fed."

Getting the mix right

Starting with a mixed crossbred herd 32 years ago, Tom has made strategic changes to his herd structure and breeding program to improve beef quality and increase production efficiency over the years.

Initially, he was joining Hereford-Holstein heifers to Hereford sires to produce calves with a mean carcass weight of 172kg at nine months.

After studying a successful crossbreeding project at the Grafton Agricultural Research and Advisory Station in the mid-1990s, Tom came up with the idea of using Brahman-Holstein replacement heifers. He sourced them and joined them to Hereford sires to produce calves with a mean carcass weight of 181kg at nine months.

Then Tom made three more important decisions. He swapped to Charolais sires, began to creep feed steers with grain two months prior to turn-off and he sought MSA accreditation. Production increased significantly, producing calves with a mean carcass weight of 200kg at nine months, and he started to collect a premium for cattle that made the grade.

Meeting MSA specifications

Since joining MSA, Tom has continued to change the way he does things to increase compliance with the MSA specifications.

Cattle being consigned to MSA must comply with the specifications or they will be downgraded to non-MSA product, and Tom won't receive a premium. Many factors

can downgrade a carcass, including rib fat (less than 3mm), fat distribution (uneven distribution over the loin, butt and forequarter) and pH (5.71 and above).

Feeding a high energy ration for 3–4 weeks prior to turn-off ensured that muscle cells had a high glycogen content and helped to address fat coverage, but around 20% of the Charolais-cross steer calves were still not grading due to low rib fat



Tom Amey with some of his calves in the background that came from first-cross Brahman heifers and a Murray Grey sire.

Photograph courtesy of The Land.

levels or uneven fat distribution.

To improve MSA compliance rates, Tom turned to Murray Grey sires for a solution.

He was attracted to Murray Greys by the promise of extra fat coverage. He'd received feedback that his end users – the North Coast retail butchers who are supplied whole bodies by an operator at the Northern Co-operative Meat Company – valued the extra fat in the chillers. (A minimum of 3mm rib fat reduces temperature variation throughout the carcass during chilling, counteracting the onset of cold shortening.)

Around this time, Tom's supply of replacement heifers ceased and he decided to breed his own. He joined a mob of Murray Grey-Holstein and Angus-Holstein cows to a Brahman bull.



Producer information

Producers: Tom and Cathy Amey

Location:
Simpkins Creek and Dyraba, NSW

Property area: 466ha

Enterprise: Beef cattle

Goal:

To increase the percentage of steers gaining MSA gradings

Livestock:

250 breeders plus 225 yearlings turned-off annually

Pastures:

Tropical grasses and legumes with some ryegrass, oats and vetch

Soil types:

Sandy loams through to medium clays

Annual rainfall: 1,016mm

Tom is extremely pleased with the results. The carcass feedback is good and MSA compliance rates are very high; no non-compliant carcasses due to rib fat or fat coverage, only occasional hiccups with pH. Many of the causes are out of Tom's control, such as post-farm gate factors.

The change to Murray Grey sires has brought additional benefits. Tom said that the calves were very reliable; easier to finish and eating around 25% less grain. He's recording lower birth weights and shorter gestations, which is easier on the cows. And in terms of temperament, the calves seem more relaxed than the previous Charolais-cross calves.

Joining MSA

Becoming accredited with MSA was not at all challenging for the Ameys. Tom said that it reinforced the gentle livestock handling they already practised, and they became more aware of nutrition and stressors that can affect meat quality.

Tom is mindful to get consignments of cattle off to the operator as quickly as possible, ensuring they have a full belly and minimising the time to slaughter.

"I bring the sale animals into closer paddocks so they can be easily yarded and trucked with minimum stress. It's important to have them fully fed to make sure that they have a decent pH for grading," he said.

"Recently, we had a week of rain and it knocked the cattle around. The animals we turned-off did not grade as well (due to high pH) as those in the previous week, which was a week of good weather."

Tom concluded that becoming accredited to supply MSA cattle had been a good move.

"I've been using it for about nine years and it's been an overall benefit. There's a lot more things determining eating quality than just the age of the animal and how long it's been fed."

Now, Tom has joined the first-cross Brahman heifers to Murray Grey sires. He is still creep feeding grain and the calves have mean carcass weights of 195kg at nine months, with an extra 2–3mm of rib fat.

More information

- Tom Amey
Phone: 02 6664 7347
Email: ameyag@nor.com.au
- Meat Standards Australia
Phone: 1800 111 672
Web: www.mla.com.au/msa

Tips & Tools: MSA beef information kit

The MSA beef information kit describes how producers can comply with the MSA scheme and explains the key factors which influence meat eating quality. The kit can be ordered from www.mla.com.au/publications or by phoning 1800 675 717 and selecting option 3.

The kit includes all the MSA Tips & Tools listed below:

- What is MSA?
- MSA requirements for handling cattle
- How to supply beef in the MSA system
- The effects of tropical breeds of beef eating quality
- The effect of marbling on beef eating quality
- The effect of pH on beef eating quality
- How MSA beef is graded
- The effect of the pH temperature decline on beef eating quality
- How tenderstretch affects beef eating quality
- How ageing affects beef eating quality
- The effect of cooking on beef eating quality
- Fat distribution and eating quality
- Selling cattle through a MSA saleyard
- The effect of growth promotants on beef eating quality
- Maximising eating quality with tropical breed cattle

