Balancing Breeding Objectives

The fertility of the Northern Beef herd is in the spotlight and the need to improve it remains the focus of many operators.

Productivity in terms of kilograms weaned per cow mated is a function of the genetics for fertility and good nutrition.

Queensland's North-Western prominent beef cattle vets, Ian Braithwaite and Sandi Jephcott pregnancy-test tens of thousands of cattle each year. They are at the front-line of the Northern Australia Beef Industry, observing what leading producers are doing in their business to stay at the top of the profit curve. Ms Jephcott has seen the changes over the decades and feels there is a day of reckoning coming.

'The Cash Cow research proved that the large framed cattle are less fertile than those with moderate frame. Excessively big framed cattle have no place out here. Some of the beef businesses have lost sight of the nutritional constraints that their cattle herd experiences.'

'Using genetics is now seen as a panacea for profit building rather than using a genetics package that is complimentary to good business management,'

Ms Jephcott explains that for some of these new-trending breeds to express desired market traits they require good nutrition from the last trimester of pregnancy, right up until, as weaners they are transferred to backgrounding properties and as yearlings or older, they reach the required feedlot entry weight. But without good nutrition, they do not express their genetic potential and the product is downgraded.

"Furthermore, some popular breeds may lack weight, so the cull bulls and cows are rejected from the meatworks – thereby missing out on a huge proportion of conventional income." She says.

'The modern Santa maybe ideal for this country.' Ms Jephcott said. 'The modern Santa is one that has objective measurements, has been bred for fertility, and is a moderate animal that can walk the distances away from water to get maximum production in terms of weaners and weight gains.'

'Unfortunately, the old types of Santas gave the breed a bad name, but there are really fertile Santa herds out there now and I would love to see them back up here in large numbers.'

'I use Santa bulls in my own operation near Roma which targets the domestic steer and heifer feedlot specs so I select bulls that have high 400-day Breedplan weight. I also select for Breedplan fertility traits, such as DTC and scrotal size.

Once I have shortlisted the draft on objective data, I look at structure, temperament and general appearance." She said.

'The Santa is adapted for this country, with a mix of Bos Taurus and Bos Indicus which have a combination of being adapted to the environment and meeting market specifications such as MSA.' She said.

'The purebred Bos Taurus breeds currently being used in the dry tropics of Northern Australia are only walking up to a maximum 2 km from water and this is damaging the environment and worsening the nutritional profile.'

Ms Jephcott and Mr Braithwaite agree that the greatest progress they are seeing is in those herds where the focus remains on productivity and adhering to those decisions.

'Ordinary things done consistently, produce extraordinary results' says Mr Braithwaite.

'We have seen tremendous results with the herds up here, with a focus on selecting bulls with objective data for fertility.' Mr Braithwaite said.

Mr Braithwaite says the criteria he recommends when buying bulls is to insist on a BBSE including semen morphology by a reputable vet, dam calving history and scrotal circumference above threshold size.

'In Northern Australia about 90% of production is underpinned by good nutrition. Fertility cannot be expressed without good body condition in the breeders.' Mr Braithwaite said.

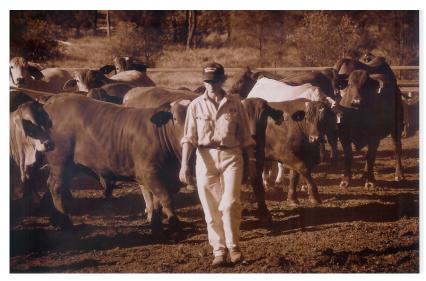
'We think a minimum of 50% Bos Indicus content is needed to adapt to walking large distances from water to feed in order to maintain body condition score in the breeders.' he said.

'Maiden heifers drive these new production systems and can make up to 30% of the total breeder herd numbers. Using proven performance bulls (pedigree / BBSE) with the right nutrition, 85% conception rates in these two-year-old heifers is very achievable. Large numbers of 1st round weaners from these matings have an enormous impact to the bottom profit line of the business.'

Mr Braithwaite says, 'We need fertility but don't need to get too complicated and we probably don't want to be tied up focussing on single traits – even an excessive focus on days to calving may have implications down the track with shorter gestation lengths or other unforeseen implications,' He said.

'A good friend of mine, the late Dr Brain Burns said, "Genetics is like a balloon full of water – you push on one side and something else gives."

Excessive attention to specific traits or numbers is fraught with unknown risks. We are breeding for survivability and productivity and I think we can get the balance right if we keep it simple with bulls selected on a BBSE incorporating semen morphology and above threshold scrotal circumferences, tropical adaptability, moderate frame size, and dam history.'



Dr Sandra Jephcott BVSc MSc MBA