

Creating a resilient, profitable beef herd

There has never been a better time to have a highly productive yet low cost beef breeding operation. At a recent seminar in Wagga Wagga, NSW, American rancher and seedstock producer Kit Pharo explained to an enthusiastic audience how to create a low-maintenance, resilient, more profitable breeding herd, as **Pamela Lawson** reports.

Kit and his family run a commercial and seedstock beef cattle production business in the Central High Plains of eastern Colorado, USA. This area receives about 300mm of annual rainfall and experiences harsh, snowy winters.

In the 1980s, Kit saw the beef industry in the USA increasingly aiming for higher and higher weaning weights and maximising production as kilograms produced per cow. This was resulting in bigger and bigger breeding cows requiring substantial inputs to stay in production.

Breeding resilience: Like its US parent company, Pharo Cattle Australia aim to produce bulls that are efficient, resilient and profitable. Photo: Kate Usmar

Kit and some like-minded fellow ranchers wanted to buck this trend and produce cattle that could survive in their harsh environment with no supplementary feeding or extra care. The Pharo Cattle Company (PCC) was formed and began selling low-maintenance bulls in 1991. They now sell over 1000 bulls annually to North American beef producers as well as semen to Canada, Mexico, South America, South Africa and Australia. They have recently developed a partnership with Furracabad Station at Glen Innes, NSW to produce bulls in Australia under the name Pharo Cattle Australia.

NEW FOCUS

When the Pharo Cattle Company was formed, Kit had been quick to realise that the trend for higher weaning weights did not automatically increase profits. The opposite was true, as the associated larger cow size resulted in lower stocking rates and higher production costs. Kit knew he must change his production focus to maximising production (kilograms of beef) per hectare, rather than the traditional focus of production per animal.

In his recent seminar, Kit explained that stocking rate affects the profitability (or lack of) of a grazing enterprise more than

Size and shape: Each year, Kit evaluates and scores their bulls for a variety of traits, including disposition, body shape and thickness and muscling. Photo: Kit Pharo



any other factor. He also pointed out that smaller cows will always wean a higher percent of their own weight than their bigger counterparts, with lower input costs and requirements, so are therefore more profitable. This was shown by American researcher Kris Ringwall in trial results presented his 2008 Beef Talk, where cows weighing 550kg liveweight weaned calves weighing 275kg on average (49.7 per cent of cow weight) where as 750kg cows weaned 255kg calves on average (33.7 per cent) at the same weaning age.

FEED NEEDS

Kit then went on to explain that the most profitable ranchers (graziers) make the most efficient use of the available feed resources on their property. This is done by:

1. Using a Planned Rotational Grazing system;
2. Matching the annual animal production cycle to the forage cycle; and
3. Matching stock size and type to the available forage.

Planned rotational grazing is used to minimise the need for supplementary feeding, increase the persistence and diversity of desirable pasture plants and increase beef production per hectare. Kit has gradually changed the time his breeders calve each year to better match the available feed with the cows' requirements.

Cows must be on a rising plane of nutrition and be gaining weight in the lead up to calving. To ensure this, Kit has moved his herd's calving period of 45 days (30 days for heifers) to late spring. This mimics nature and is when the local wild ruminants (deer) have their fawns, as suggested in Dick Diven's research (see *Farming Ahead* 254, March 2013). This shift has reduced Kit's supplementary feed and associated labour costs by up to 70 per cent, has almost eliminated calving difficulties and calf deaths

and results in the herd weaning more total kilograms of beef. In a good season, Kit will not wean heifer calves until they are at least 10 months old (bull calves at 8-10 months old). This allows the rumen to fully develop, resulting in a 15 per cent increase in feed efficiency. The later weaning also allows the calves to learn survival skills from their mothers. In dry seasons, calves will be weaned much earlier to reduce cow feed requirements.

The third way to use feed resources most efficiently that Kit suggests is to match stock size and type to the available forage. This means having cows that are 'easy fleshing' (able to put on fat easily when feed becomes available), are moderate in frame size and have been shown to be early maturing and fertile breeders. According to Kit, his breeding cows must 'live within their means' with minimal inputs (available pasture plus salt and minerals) and wean a calf that weights at least 50 per cent of their own bodyweight each year. These ideas were echoed by Jon Wright in *Farming Ahead* 279 (April 2015), pages 95-97.

FUN FACTS

Kit shared with the audience some facts he had discovered through his own research, including that:

- At least 65 per cent of the annual costs associated with a breeding cow are spent on feed requirements (including sowing pasture);
- 70 per cent of what a cow consumes is for her maintenance requirements, and only 30 per cent is on production;
- Higher milking cows require more feed for maintenance, even when they are not lactating, and that this requirement will be passed on to their steer progeny too;
- Milk and fertility are antagonistic traits, as higher milking cows have higher maintenance requirements and are less likely to get back in calf;

- 85 per cent of a calf's ability to grow from birth to weaning is due to its genetic foraging ability rather than its dam's milking ability.

IDEAL ANIMALS

To create a low maintenance breeding herd, the main cow traits Kit focusses on are fleshing ability, fertility, frame score (aims for 3-4), mature cow weight (500-565kg) and breeding 'wedge shaped' cows which are smaller at their front end and become deeper and wider towards their hindquarters.

For the bulls produced, used and sold by Pharo Cattle Company, their desirable body shape is the reverse of cows, being thicker and broader at the front end and narrower towards their hindquarters. The PCC bulls are evaluated annually and scored to ensure they are still contributing towards the company's production goals. In addition to looking at each animals' Expected Progeny Differences or EPDs (equivalent to Australia's Estimated Breeding Values or EBVs) and liveweight, Kit evaluates and scores each animal for:

- Disposition (temperament)
- Fleshing ability
- Muscling
- Masculinity
- Thickness
- Hair coat (slick and shiny is better)
- Fly resistance
- Calving ease
- Longevity
- Maintenance energy requirements
- Foot and leg structure
- Preputial Prolapse (absence or presence of)
- Udder conformation (of daughters). **FA**

More information:

The Pharo Cattle Company:
www.PharoCattle.com
Pharo Cattle Australia:
www.pharocattle.com/australia