Polled goals improve animal welfare

Dairy farmer: Condon family

Region: Illawarra, New South Wales

Topic: Breeding for polled cattle

There's one farm job Paul Condon loves to get done early. For him, the sooner it's completed, the better. It gives him more time for other jobs, but most importantly he has better animal welfare outcomes.

"The mantra I use is that I dehorn at conception," the NSW dairy farmer explained.

"Every animal that's born on farm has an opportunity to be polled, either with PP bulls (true polled bulls) or single P (polled carrier bulls). They all have an opportunity to be polled."

The quest to breed polled cattle started 10 years ago when Paul discovered a book titled *Dairying in Australia*. It was written in 1950 and had a chapter which said, "the best dehorner was a polled bull". Intrigued, Paul began investigating polled animals.

Now, the Condon's milking herd is about 75% polled while about 90% of the entire herd – including young stock – is either a true polled or polled carrier.

Paul, his wife Maxine and parents Frank and Carol operate Sea Breeze Holsteins at Gerroa, south of Wollongong in NSW. They milk 110-120 registered Holsteins year-round.

When the Condons first started breeding for polled animals there were only two polled Holsteins sires available on the Australian semen market.

"When I started looking for bulls they (the breeding and herd improvement industry) didn't know much about polled and what bulls were available. Now you will find all AI companies have a fairly good handle on polled," Paul said. "There was a time when I knew every polled bull in Australian ... I can't keep up now, there are so many available."

In the April 2020 Australian Breeding Value (ABV) release there were more than 100 polled Holstein bulls with DataGene's Good Bulls status.

Breeding animals without horns has been one of the Condon family's primary objectives.

Initially, Paul selectively mated individual cows to polled sires but as the range of polled bulls increased, he expanded his use of the genetics.

Now sexed semen for true polled (homozygous) bulls is used across most of the herd and maiden heifers to increase the number of polled females bred.

Carry-over cows get joined to dairy-beef semen.

Surplus heifers are generally sold to the export market, however, there's been some interest in polled heifers on the domestic market.

To increase the number of polled females bred, Paul Condon uses sexed semen for true polled bulls across most of the herd and maiden heifers.

"We did have one sale to a breeder who specifically wanted polled," Paul said. "We sold a line of heifers to him."

Occasionally the Condons use horned bulls to mate certain cows, because of their other favourable breeding characteristics, but this hasn't affected the number of polled animals in the herd.

Mating a horned bull to a true polled cow or heifer still produces a polled calf because the polled gene is dominant.

Paul does not believe his breeding has ever been disadvantaged by using polled bulls.

"There's an old saying 'all cows have got a mother, it is not just the sire'," he said.

"I haven't suffered anything from fertility, production or type from using polled bulls, I have strong cow families and have confidence in them."

The herd averages about 6,500 litres/cow/lactation from a dryland pasture diet sourced from a 32 ha milking platform and a protein pellet ration of 6 kg/day/cow.

Calf management has become easier since using polled genetics. Nine out of 10 calves are born polled, reducing the need for disbudding.

"I think it is an advantage obviously from the animal welfare side of things; polled is a natural state," Paul said.

"That's the thing about the polled gene it is a dominate gene, it's been around for a while in modern cattle. The polled trait goes back to the early 1900s in North America, where they have records for it, and before that it goes right back to Holland."

Polled genetics has also delivered another benefit to the Sea Breeze herd – a dash of colour.

"There are a lot of Red Holsteins in polled genetics," Paul said. "Once I bred one of those (Red Holsteins) I got a bit of bug and now we have a few red and white Holsteins."

Paul uses DNA testing (genomics) to check the polled status of animals – whether they are true polled or a polled carrier. The test is also a registration requirement for identifying true polled dairy cattle.

Paul Condon and his daughter Molly with two of Sea Breeze Holsteins early polled progeny in 2014.

Starting the polled journey, Paul set some specific breeding goals.

The first was to breed the polled gene into each of the Sea Breeze Holstein cow families.

"I did that pretty quickly, especially when I was using PP (true polled) bulls because it's a dominate gene," he said.

"Then my next goal was to breed homozygous (true polled) cows, and that's not that easy to do. I've got a few at the moment, three and a heap that are possible Homozygous that I haven't tested."

The final, is to breed a polled Holstein which is classified as 'excellent' by the breed society. With a few carrying a Very Good (VG) classification – just behind the excellent classification - he's hoping the next step isn't too far away.

Polled genes in Australian dairy cattle
- True polled: PP – homozygous dominant
- Poll carrier: Pp – heterozygous
- Horned: pp – homozygous recessive

More info: DataGene fact sheet 20: Breeding polled cattle.

DataGene
Solutions for Herd Development