

Repronomics – 2023

Greetings everyone! Another year down and the project continues to grow and deliver. With single-step BREEDPLAN now implemented for all the breeds in the project, our data is the driving force of these genomic evaluations and we are now expanding our number of breeds.

The recent damaging bush fires at BP demonstrated the dedication, resilience and leadership of the staff in tackling a very challenging situation. Everyone involved should be proud of their efforts, and the way people pitched in and worked as a team was a pleasure to witness first-hand.



BP fire lights up the night sky

What are all these funny looking calves?

This calving season saw the largest change to the project design since its inception. Angus and Hereford Brahman cross calves have been hitting the ground at both Brian Pastures and Spyglass. This represents the expansion of breeds evaluated in the project and these F1's will be fully performance recorded alongside the existing breeds for all traits.

The Angus and Hereford sires used have mainly come from the Southern Multi-Breed project at Grafton (and from breed BIN projects) and will provide direct genetic linkage, where they have been compared as purebreds (including Brahmans) and the reciprocal Brahman crossbreds. The data will provide additional scope in the development of northern multi-breed EBVs and also build the genomic reference population data across states.



Hereford-sired BP #24 calf

Elite genetics in our NT herds

The NT Selection Line herds continues to show impressive rates of genetic progress and superior individuals continue to be identified with Brahman BREEDPLAN EBVs and new \$Indexes. Listed below are the latest EBVs for DRF52151 whose dam first calved as a 2 year old and has had five calves in a row. Her sire was the across-site Repronomics sire DRF16454. The paternal pedigree of DRF52151 goes back to the sire DRF15431 who was also used in early years of the project.

December 2023 Brahman BREEDPLAN																		
	Gestation Length (days)	200 Birth Wt (kg)	400 Day Wt (kg)	600 Day Wt (kg)	Mat Cons (kg)	Milk (kg)	Size (cm)	Calving (days)	Carcass Wt (kg)	Eye Muscle Area (sq cm)	Rib Fat (mm)	Rump Fat (mm)	Beef Yield (%)	IMF (%)	Percent Normal Sperm (%)	Flight Time (secs)	Shear Force (kgs)	
EBV	-1.9	-0.5	+17	+31	+43	+45	-3	+4.3	-23.5	+21	+2.6	+0.7	+0.9	+0.2	+9.1	+0.06	-0.27	
Accuracy	38%	68%	69%	69%	72%	69%	56%	64%	53%	61%	49%	51%	60%	36%	44%	53%	65%	54%
Breed Avg. EBVs for 2021 Born Calves Click for Percentiles																		
EBV	-0.5	+2.5	+19	+27	+38	+43	-2	+0.9	-1.9	+22	+2.7	+0.3	+0.5	+0.6	+0.1	+0.9	+0.01	+0.01

Traits Analysed: 200WT,FLT,Genomics

SELECTION INDEX VALUES		
Market Target	Index Value	Breed Average
Central Production Index (\$)	+\$ 100	+\$ 26
Live Export Index (\$)	+\$ 113	+\$ 27

Latest EBVs - DRF52151

Welcome the arrival of Droughtmaster single-step

October 2023 saw the release of BREEDPLAN single-step EBVs for Droughtmasters. This major development was made possible off the back of the large volumes of data generated by this project and our sister project - the Northern Steer BIN (i.e. using our steers). The transition of the Droughtmaster evaluation to single-step now means all 3 breeds in the project are generating genomically enhanced EBVs that have increased accuracy and predictability. This will directly benefit the northern breeding sector, allowing them to produce more profitable progeny, especially for increased weaning rates.

Measuring the burps

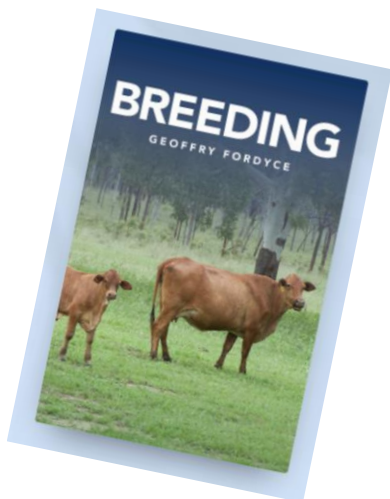
BP saw the arrival of the first GreenFeed methane sniffer units. This exciting recording development is in collaboration with QAAFI's Northern Methane Project, led by Ben Hayes. The units have been used to measure two groups of #22 heifers at BP before heading up to Spyglass to do two groups of their #23 heifers. Heifers in the trials have also been fitted with the Allflex collars.



Measuring methane #22 BP heifers

A novelist in our ranks

Our colleague and long-term ovarian scanner Geoffry Fordyce has turned his hand to writing a novel.....and it has just been published! Wow! This was quite unexpected, but after spending more than two decades crush-side with Geoffry he has always been up for telling a good yarn. It will be worth reading.....just in case some of the fictional characters have been "modelled" off some real-life people we might know! All the best with sales and if anyone needs a "stocking stuffer" I'm sure it will be an entertaining read.



Geoffry's new novel "BREEDING"

Comings & goings

Firstly, thanks to Steve Andersen who has retired from Spyglass. Steve was manager at the beginning of the project and came back for a second dig. All the best to Steve and Angela with your relocation to the south. Thanks to Celeste from Spyglass who has also moved on. Welcome new managers Joanne Conroy (BP) and Paul Gangemi (Spyglass). Thanks Brad Taylor for filling in at BP. This year we have 2 new techies at Spyglass - welcome Dana Walkington and Greta Dunne. Also thanks to Brad Hough who came back to help with calving. Big congrats to Maggie on the birth of her son William.

Finally, Vale Steve Barwick. Steve was a long standing colleague of mine at AGBU. Steve helped design the original Repronomics project and is the "grandfather" of BREEDPLAN \$EBVs. His patience, intelligence and friendship will be missed.



RIP Steve

Thanks everyone

Next year promises to be another full year with lots of recording to finish off this second phase of the project. Our work and scientific achievements will be showcased at Beef 2024 Rockhampton in May. We continue to work on a renewal of the project and hopefully I will have some announcements in the coming weeks.

All the best over the holiday season and see you in the New Year.

.....cheers Johnno