



Dairy Beef Progeny Test Interim Report

September 2019

B+LNZ Genetics

Dairy Beef Progeny Test

Since 2016, there has been 86 bulls tested in B+LNZ Genetics Dairy Beef Progeny Test (DBPT) and some top bulls have been identified. These bulls are well suited for mating with dairy cows, based on birth weight and gestation length, while still producing calves that offer more value for the beef finisher.

The progeny test measures Birth Weight of the calf, Gestation Length from AI mating, whether cows have required calving assistance and the days for the calf to grow to a weaning weight of 90kg on the dairy farm. Weaned calves are moved to the finishing farm where they are grazed in large groups under commercial farming conditions. Live weights are recorded throughout their life and carcass traits are recorded at processing.

Birth Weight

Based on industry data, bulls with Birth Weight of 36kg or less produce calves that are similar to, or lighter than, those produced by an average Friesian bull when bred over crossbred cows. All sires in the programme were on the lighter half of their breed for the Birth Weight EBV. Average birth weights per sire ranged from 32.2kg to 44.1kg. This indicates there is risk of very heavy calves at birth when using unrecorded bulls because these could lie in the heavy half of the breed.

Gestation length

The average Gestation Length of the bulls was 281 days, slightly better than the dairy breed average of 282 days. The bull with the shortest Gestation Length in the progeny test shaved 5 days off the dairy average, coming in at 277 days, while the bull with the longest Gestation Length had an average of 289 days. Bull selection has a big impact on Gestation Length and therefore, on days in milk for the dairy cow. Shorter gestation in bulls used for mating later in the season also helps cows calve earlier the following season, and may increase the likelihood of them staying in the herd.

Cohort 3 and Cohort 4 results

Calves in the third cohort have been weighed up to 10 months of age, so an early "yearling" weight is presented. There was a range of 56kg between the best and worst bull for yearling weight; at \$3 per kg liveweight, this is a difference of \$168 of value. There were 23 sires (27%) that produced calves lighter than average at birth and heavier than average at yearling weight.

Calves from the fourth cohort are being born at Renown now, in spring 2019. Results from these sires will be added to the dataset as they come to hand. A fifth mating with new bulls will take place in October 2019.

The top 5 all-round dairy-beef bulls

AB Code	Sire	Breed	n	Birth Weight (kg)	Gestation Length (d)	Yearling Weight (kg)
717054	RISSINGTON C200	Angus	35	32.2	278.7	270
717133	STABILIZER 165303	Stabilizer	33	34.0	278.9	271
717117	GLENSIDE CRUMPY	Simmental	36	35.7	279.3	272
717113	BLUESTONE 160022	Hereford	28	35.7	279.9	266
717121	ARDO AJAX 5014	Hereford	37	32.7	281.3	267
Average of progeny-tested bulls				37.1	281.3	263
Range of progeny-tested bulls				32.2 – 44.1	276.8 – 289.1	237 - 293

These 5 bulls are well suited for dairy cow mating with Birth Weight below 36kg and Gestation Length shorter than 282 days. They are also a great option for dairy beef calf finishers with above average Yearling Weights. Interestingly, the project is identifying suitable bulls from a variety of breeds providing more choices for dairy farmers and beef finishers. Identifying more bulls like these is an ongoing objective for this project.

Note: Shalom Waigroup 319/07 (Angus) also met the performance criteria, but had relatively few progeny (because he was used at Limestone Downs with a different objective where fewer progeny per sire were required). Further progeny from this sire will be generated in the coming mating.

Understanding the Sire Report

This listing provides an indication of how the sires are performing within the DBPT and can't be directly compared against BREEDPLAN EBVs. For selection purposes it is strongly advised that BREEDPLAN EBVs and selection indexes be used primarily. They are the highest accuracy information to use in selection as they consider all available industry data. They also account for information from all known relatives and genetic correlations between traits as well as being able to be compared across cohorts and the breed population.

Interpreting the progeny performance listing

Trait = The average performance of sires' progeny. This is calculated using a least square means (LSM) model which adjusts calving traits for herd, sex of calf and year, and rearing traits for management group and age of calf based on actual birth date.

Trait	Unit	Definition	Ideal
Birth Weight	Kg	Weight at birth recorded on steer and heifer progeny	Less than 36kg (Friesian average)
Gestation Length	Days	Number of days from insemination until calving	Less than 282 days (Friesian average)
Yearling weight	Kg	Weight at 10-12 months recorded on steer and heifer progeny	Heavier than 263kg (Cohort average)

Bars = A visual expression of the average value for that sire. A larger Birth Weight or longer Gestation Length will have a longer green bar. Note: shorter green bars are more favourable. Whereas, a larger Yearling Weight will have a longer blue bar and is more favourable.

Highlighted cells

Acceptable average Birth Weight (less than 36kg) and Gestation Length (less than 282 days) are highlighted pale green. Above average growth to Yearling Weights (greater than 263kg) are highlighted pale blue.

SireCode	Sire	Breed	n Calves	Birth Weight	Gestation Length	Yearling Weight
717054	RISSINGTON C200	Angus	35	32.2	278.7	270
717133	FOCUS STABILIZER 165303	Stabilizer	33	34.0	278.9	271
717117	GLENSIDE CRUMPY	Simmental	36	35.7	279.3	272
717121	ARDO AJAX 5014	Hereford	37	32.7	281.3	267
717113	BLUESTONE 160022	Hereford	28	35.7	279.9	266
715088	SHALOM WAIGROUP 319/07	Angus	13	35.9	280.9	277
715061	BLUE MOUNTAIN BRILLIANZ O5	Angus	21	39.1	279.2	264
716043	EARNCLAUGH TUSOCK 144307	Angus	31	36.8	279.7	268
714046	FOCUS PROGRESSION 110178	Angus	12	34.8	280.5	262
712171	FOCUS PROTÉGÉ 110002	Angus	12	36.2	278.3	285
714004	GLANWORTH WAIGROUP 1213	Angus	21	36.4	279.8	263

For example: 715061 Blue Mountain Brillianz O5 in the table above has good results for Gestation Length and Yearling Weight (cells highlighted pale green and pale blue). Birth weight is not highlighted as it is heavier than the Friesian average (36kg).

Summary of adjusted progeny averages

SireCode	Sire	Breed	n Calves	Birth Weight	Gestation Length	Yearling Weight
717054	RISSINGTON C200	Angus	35	32.2	278.7	270
717133	FOCUS STABILIZER 165303	Stabilizer	33	34.0	278.9	271
717117	GLENSIDE CRUMPY	Simmental	36	35.7	279.3	272
717121	ARDO AJAX 5014	Hereford	37	32.7	281.3	267
717113	BLUESTONE 160022	Hereford	28	35.7	279.9	266
715088	SHALOM WAIGROUP 319/07	Angus	13	35.9	280.9	277
715061	BLUE MOUNTAIN BRILLIANZ O5	Angus	21	39.1	279.2	264
716043	EARNSCLAUGH TUSOCK 144307	Angus	31	36.8	279.7	268
714046	FOCUS PROGRESSION 110178	Angus	12	34.8	280.5	262
712171	FOCUS PROTÉGÉ 110002	Angus	12	36.2	278.3	285
714004	GLANWORTH WAIGROUP 1213	Angus	21	36.4	279.8	263
716073	GRAMPIANS LOTTERY K13	Angus	21	38.8	278.6	237
715103	KAKAHU 13059	Angus	13	36.7	281.2	254
715058	KAKAHU FOR BOND 13007	Angus	16	37.0	281.1	264
715060	KAKAHU JUBILANT 13054	Angus	5	38.0	279.3	272
710016	MATAURI REALITY 839	Angus	15	36.6	277.4	265
712080	MATAURI RESOLUTION F030	Angus	19	36.5	279.5	259
715105	MEADOWSLEA F540	Angus	4	37.3	277.3	
715102	MT LINTON 13041	Angus	21	34.6	281.2	256
708031	PINEBANK 1/06	Angus	18	36.3	278.7	264
711067	RENNYLEA EDMUND E11	Angus	18	38.1	279.7	263
708057	SEVEN HILLS 161-06	Angus	10	37.7	279.9	268
715104	SEVEN HILLS 173-06	Angus	15	35.6	276.5	248
717114	SEVEN HILLS 85/15	Angus	32	33.9	280.5	263
703057	SHALOM WAIGROUP 101/01	Angus	10	35.6	283.1	257
716058	STORTH OAKS ANGUS PRIME K5	Angus	24	34.7	278.4	243
715038	STORTH OAKS EVEREST J20	Angus	22	36.3	278.0	269
714042	STORTH OAKS H41	Angus	15	39.3	279.8	278
715099	STORTH OAKS J29	Angus	16	35.9	279.9	261
717128	STORTH OAKS K122	Angus	34	34.4	279.1	261
716084	STORTH OAKS K134	Angus	13	41.2	278.9	286
716086	STORTH OAKS K154	Angus	15	39.7	280.7	269
717127	STORTH OAKS L26	Angus	38	33.3	278.8	253
717125	TE MANIA LIMITLESS 15380	Angus	29	35.1	281.2	263
717124	TE MANIA MULLER 16305	Angus	6	37.5	276.8	273
702140	TE MANIA UNLIMITED U3271	Angus	22	36.1	282.1	265
717126	TE WHANGA 16-039	Angus	26	32.9	278.5	248
713089	THOMAS UP RIVER 1614	Angus	14	36.4	279.0	264
715098	TOTARANUI 13007	Angus	16	37.2	279.1	260
712005	TURIHAUA LIBERATION C27	Angus	23	37.4	281.3	260
710091	WAITANGI D213	Angus	16	34.6	282.7	257
704170	WOODBANK BLACK POWER	Angus	14	39.7	280.6	262
717129	KAKAHU 140506	Charolais	29	38.9	282.7	293

Summary of adjusted progeny averages

SireCode	Sire	Breed	n Calves	Birth Weight	Gestation Length	Yearling Weight
715106	ARDO ACHILLES 120	Hereford	14	36.6	283.7	263
716017	ARDO BISMARCK 4256	Hereford	36	35.2	281.1	247
711022	ARDO EZICALVE CASPIAN	Hereford	16	36.3	282.5	244
715086	ARDO FARGO 1154	Hereford	13	35.6	284.5	256
716098	BEECHWOOD DOUBTLESS	Hereford	14	37.6	280.6	262
714037	BEECHWOOD TURK	Hereford	20	36.4	281.1	267
715091	BLUESTONE 080014	Hereford	21	38.5	282.3	269
714003	BLUESTONE 120061	Hereford	13	37.6	280.2	253
716087	BLUESTONE 140015	Hereford	21	39.8	278.1	256
716088	BLUESTONE 140027	Hereford	11	37.2	276.3	259
666325	BURNFOOT PLAYBOY	Hereford	17	40.4	283.5	246
715101	COLRAINE CODE WORD 13 139	Hereford	16	36.5	282.5	268
717115	CRAIGMORE IKE 140260	Hereford	27	35.1	284.4	250
716016	CRAIGMORE OPIUM 10214	Hereford	15	38.1	280.8	243
715073	FLAGSTAFF BIG RED E8	Hereford	11	40.2	283.5	274
715084	FLAGSTAFF DYNAMO G6	Hereford	20	36.5	278.1	263
715092	KAIRAUMATI COAL FACE 1482	Hereford	12	38.8	284.2	261
715108	KOANUI BEDFORD 4081	Hereford	13	39.5	282.4	280
716097	KOANUI BRITON 2044	Hereford	39	36.2	284.5	269
703131	KOANUI ROCKET 0219	Hereford	44	36.8	283.5	266
715093	KOANUI UNANIMOUS 0408	Hereford	17	38.7	283.5	280
715107	LIMEHILLS AWESOME X117	Hereford	16	44.1	286.9	286
715082	LIMEHILLS STAMPER 20719	Hereford	18	40.6	285.1	266
717066	LIMEHILLS STREAKER 150368	Hereford	26	36.9	284.2	267
715095	MARANUI HICK 11-62	Hereford	7	38.6	286.4	276
715094	MATAPOURI KOA 09 99	Hereford	14	37.4	287.0	252
717118	MONYMUSK HENRY 120012	Hereford	22	37.4	280.8	261
715089	OKAWA MARSHALL 0109	Hereford	9	41.3	289.1	267
716044	ORARI GORGE MISCHIEF 120083	Hereford	12	38.8	281.8	250
705090	OTAPAWA SPARK 3060	Hereford	24	38.8	280.9	262
715090	OTENGI WISCO 23	Hereford	6	39.6	286.2	272
666931	PLATFORM QUEBEC	Hereford	14	38.1	285.9	249
715087	RIVERTON BALTIC 09 183	Hereford	18	37.0	284.4	270
814104	SHRIMPTONS HILL 130168	Hereford	31	36.9	282.9	260
714043	TE TAUMATA DELUXE 12520	Hereford	14	38.9	281.7	254
715085	WESTHOLM KOALA K13	Hereford	20	35.0	282.3	269
710087	WIRRUNA DAFFY D1	Hereford	19	39.3	286.3	253
712049	WIRRUNA ECHUCA E99	Hereford	16	37.4	283.2	273
717116	PIWAKAWA KAGAN	Limousin	23	37.2	286.1	260
716014	TORRISDALE KAKANUI K123	Murray Grey	33	35.8	280.5	258
716105	HIWIROA PATRIACH 14044	Shorthorn	27	36.0	278.1	261
717122	JANEFIELD ED	Simmental	23	38.3	283.9	267
717132	FOCUS STABILIZER 165287	Stabilizer	29	35.1	282.2	280

Acknowledgements

The DBPT project is a partnership across two properties, the C. Alma Baker Trust NZ Ltd's Limestone Downs at Port Waikato and Pamu's Wairakei Pastoral Estate at Taupo.

Industry partners: Massey University, beef breed societies.
PhD students Natalia Martin & Lucy Coleman

Participating herds: Thank you to the numerous bull owners and nominators that have entered the progeny test. For sire information please visit our website:
www.blzgenetics.com/progeny-tests

Contact

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