



Ayrshire New Zealand

World Ayrshire Conference 2020 Australia

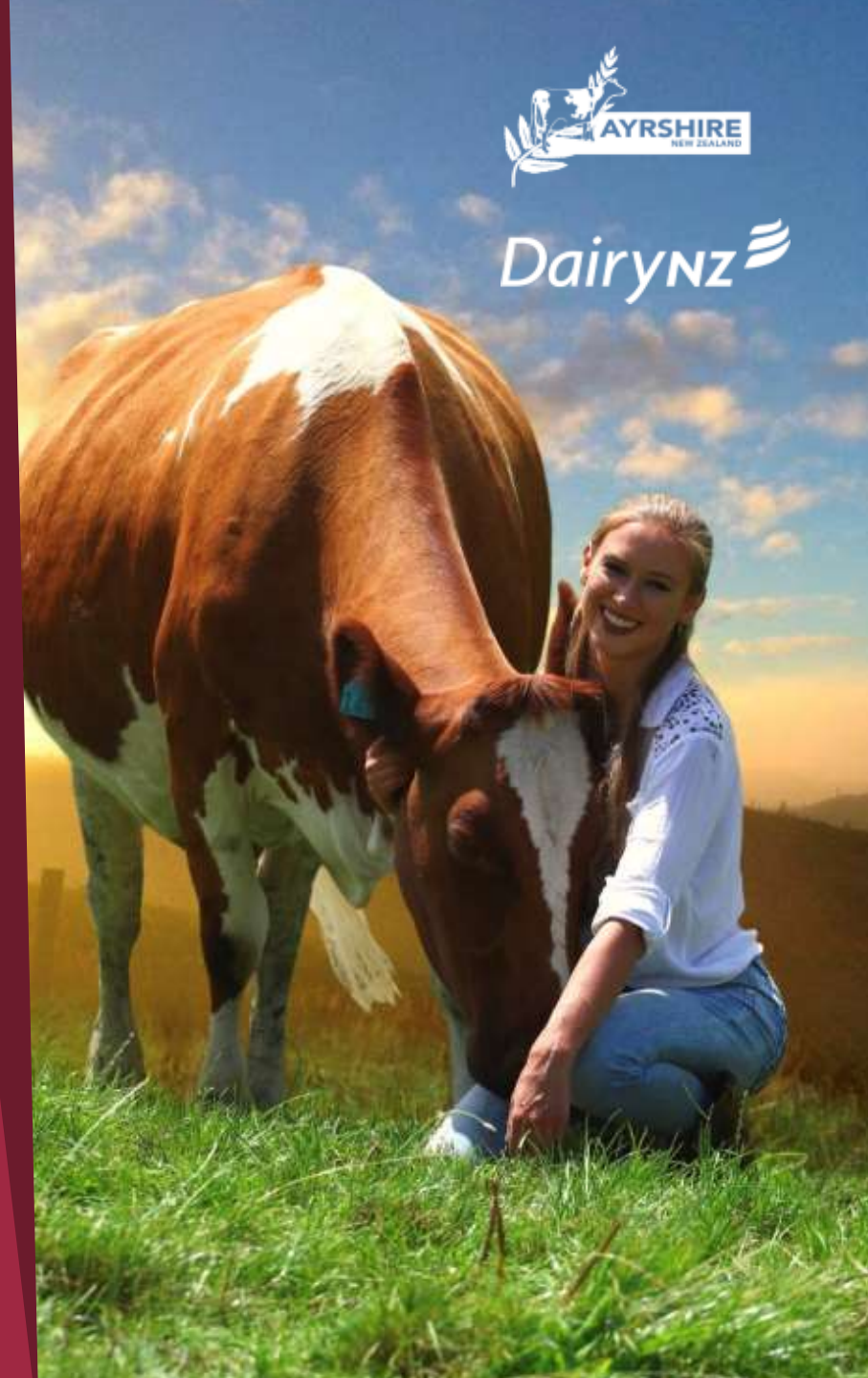


OUR HISTORY

- First Ayrshire bull 'Rob Roy' arrive on the 'Philip Lainge' 1848 with main body of the first Scottish settlers
- Founded in 1909, celebrated Centenary in 2009
- First Herd Book published 1910
- First magazine 'Bulletin' published 1937, now up to issue #172
- Volume 103 of the New Zealand Ayrshire Herd Book issued in December 2019



Dairynz 





PASTORAL FARMING IN NZ

- Temperate climate that lends itself to a pasture based grazing system
- Low input system
- Most calving during short period at end of winter (Aug / Sep)
- Peak lactation during period of high pasture production in Spring (Sep / Dec)
- Across breeds evaluation system 'Breeding Worth' based on ability to breed replacements that are efficient converters of feed into profit
- 2018/19 season 11,372 herds nationwide av. 435 cows per herd
- Average yield of 381 kg milksolids per cow
- Over 600 herds in NZ milk 1000+ cows
- NZ has 4.9m cows producing 21.2b litres of milk p/a

GOVERNANCE

Ayrshire New Zealand is divided into 4 geographical regions, each region is represented by at least one Director, there are a total of nine Directors. The Board of Directors is headed by the President. Each Director serves a three year term, but may make themselves available for re-election. There is no limit to the number of terms a Director may serve.

Ayrshire New Zealand is also the parent body to 13 Ayrshire Clubs nationwide.

An Annual General Meeting is held in June annually at varying locations.



The Ayrshire NZ Board of Directors 2019/20

ADMINISTRATION

Since January 2015, all administration for Ayrshire New Zealand has been undertaken by Jersey New Zealand under a Memorandum of Understanding between the two Associations.

- Each Association remains a separate entity – governance, finances, Conference, website & social media, magazines & publications, and core services
- Benefits to all members through synergies and efficiencies between Associations

Dairy Industry Good Animal Database (DIGAD)

In 2020, all breed societies will join DIGAD for the operation of all data access and provision of core services. This will see us move from a reliance on LIC for these services.



AYRSHIRE VISION

CORE IDEOLOGY

Core Values

- Genetic gain of the Ayrshire population
- Always look for the opportunity
- Maintain a financially sustainable business
- Foster camaraderie among Ayrshire Members

Purpose

Ayrshire New Zealand will develop, promote and maintain the Ayrshire breed as a credible option for New Zealand dairy farmers

AYRSHIRE VISION

ENVISIONED FUTURE

Ultimate Goal:

To be the number one dairy population among all breed, under the NZ payment system

Goals:

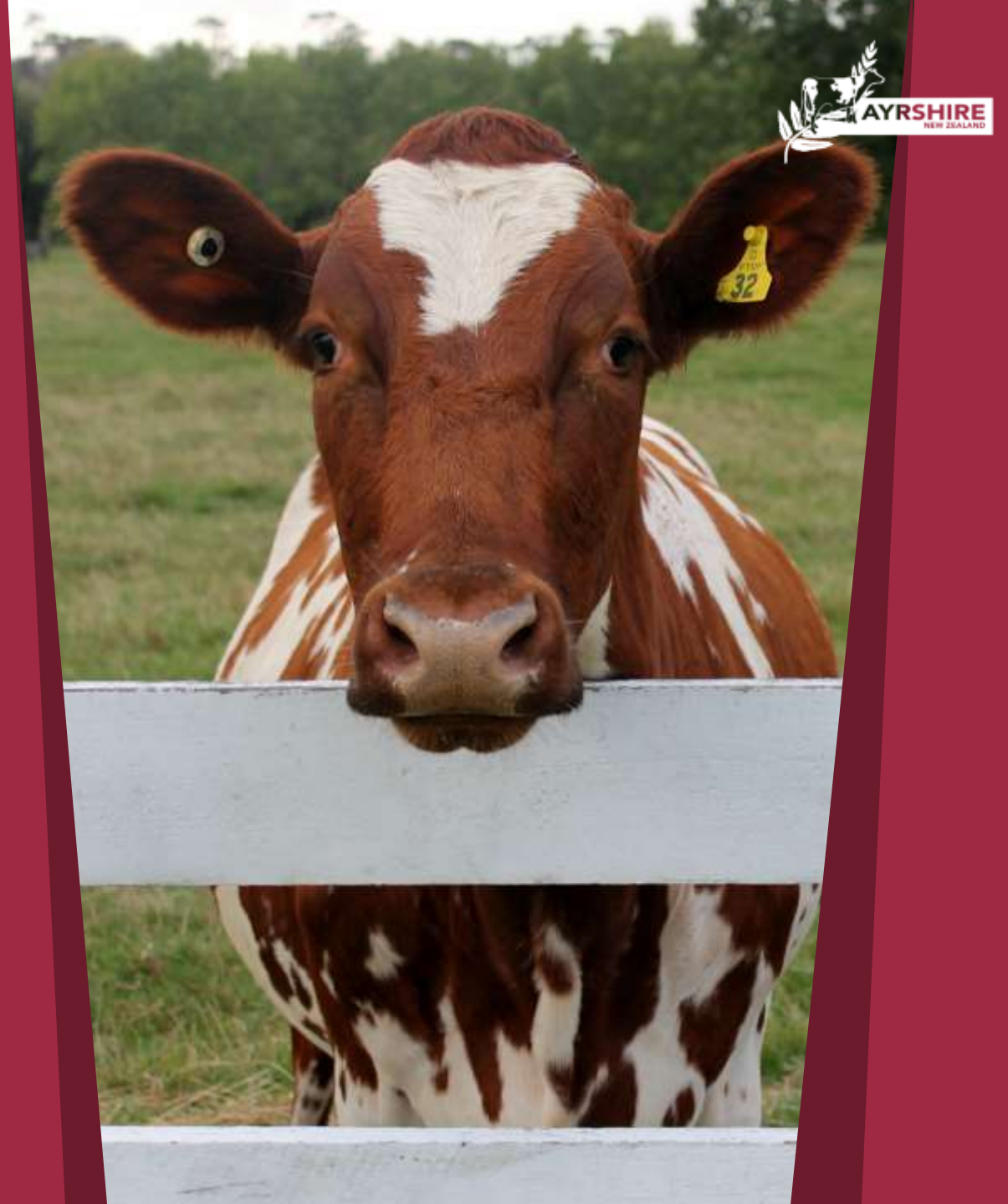
- Always maintain a professional image Ayrshire NZ will have united, vibrant members who are proud to belong.
- Ayrshire NZ members will be proactive and engaged in striving to achieve Association goals.
- Ayrshire NZ and its members are progressive and are perceived to be innovative.
- Ayrshire (A14+) will make up >1% of the national herd.
- Ayrshire BW/GW and PW will increase annually.
- Ayrshire cows will be financially rewarding for those who farm them
- Ayrshire cows will be included in national statistics and trials

AYRSHIRE VISION

ENVISIONED FUTURE

Key Performance Indicators (KPI)

- Membership: The Association membership will be 30% of farmers who have a proportion of Ayrshire in their herds.
- Registration: 40% of available animals will be registered
- Semen Sales: The Semayr / LIC partnership will have 50% of Ayrshire calves registered annually by Semayr bulls.



MEMBERSHIP

2019/20

325

2016/17

361

2018/19

335

2015/16

369

2017/18

348



BREED STATISTICS

NZ Dairy Statistics 2018/19

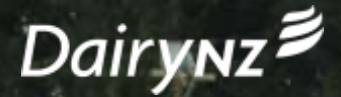
Ayrshires A14 & over	14,390
% of national herd	0.5%



BREED STATISTICS

Production Statistics 2018/19 (Herd tested cows)

	COWS	MILK	FAT	PROT	M/S	DAYS
Pedigree cows	10,897	4,955	217	180	397	262
Ayrshires A14+	14,370	4,081	177	146	323	223
National Herd	3.6m	4,359	206	167	373	271



CORE SERVICES

REGISTRATIONS

2018/19	2017/18	2016/17	2015/16	2014/15
3802	3915	4439	4926	5892

TOP & CLASSIFICATION

2018	2017	2016	2015	2014
4205	3428	3219	2803	2972



SEMAYR BREEDING SERVICES

SEMAYR
Breeding Services

- Established 1987, marketing division of Ayrshire New Zealand
- Between 1998 – 2010 average of 25 young bulls progeny tested
- Currently progeny testing 12-15 bulls per annum
- Bull marketed and distributed by Livestock Improvement Corporation

Ayrshire New Zealand owns a bull farm situated in Taranaki where all bulls are grazed while awaiting proof.



YOUTH

Ayrshire New Zealand operates a number of highly successful youth initiatives

- **Youth Committee.** Made up of both Board and youth members, oversees all youth activities.
- **Ayrshire Seminar.** Commercial and breed seminar aimed at 18 – 35 years and new breeders actively farming.
- **Youth Fund.** Provides subsidies for youth members with international opportunities.



YOUTH

- **Youth database.** For all youth (including non-members) with an interest in Ayrshire activities
- **Arran Trophy.** Ayrshire Young Judge Competition keenly contested at NZ Dairy Event annually.
- **Fredrickson & Greenlane Trophies.** Senior and junior young handler classes at North and South Island Championships.



STRATFORD NORTH ISLAND CHAMPS 2019



North Island Senior Champion
Brookview Dist Spirito – Brookview Genetics



North Island Reserve Senior Champion
Sunshine Burdettes Dale – RJ & NJ Lawson, Woodville

Most shows have cancelled their dairy sections over the last two seasons due to the Mycoplasma Bovis Eradication programme.

ALLTECH ALL NZ PHOTO COMPETITION



- Annual competition incorporating 9 classes including in-milk, young stock, haltered, unaltered, and herd scene.
- Judged by 3 judges
- Feeds World Ayrshire Photo Competition
- Graeme Knight Memorial Trophy presented in 2019 to the 'Judges Choice' overall Champion

Photo: 1st place 2 yr old & Graeme Knight Memorial Trophy winner
Kiteroa Cream Peyton ET
Kiteroa Ayrshires



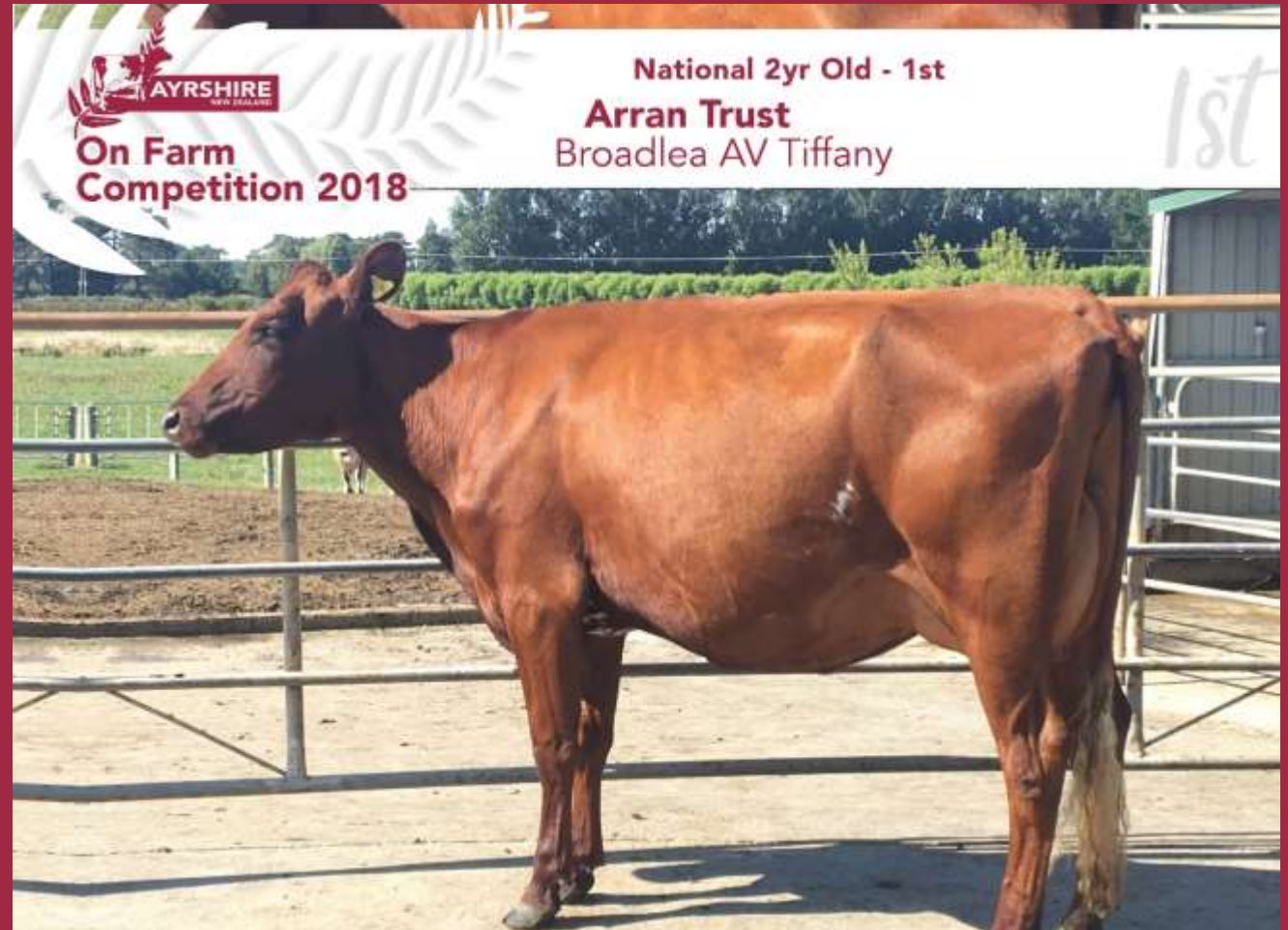
1st Place - G

Kiteroa Cream Peyton ET - Kiteroa Ayrshires

AYRSHIRE ON FARM COMPETITION



- Implemented early 2019 with 222 cows judged in 50 herds throughout NZ by one overseas judge.
- Very successful competition
- Moved to December judging in 2019 with 205 entries on 50 farms.
- Team class added Dec 2019, 18 team entries received that year./





EVALUATION

Our National Breeding Objective (NBO) in New Zealand is to breed dairy cows that are able to efficiently convert feed into profit.

Breeding Worth (BW) is the across-breed index that we use to rank cows and bulls according to their ability to meet this objective.

Breeding Worth explained

BW ranks bulls and cows on their expected ability to breed profitable and efficient replacements. BW is calculated by combining breeding values with the appropriate economic values.

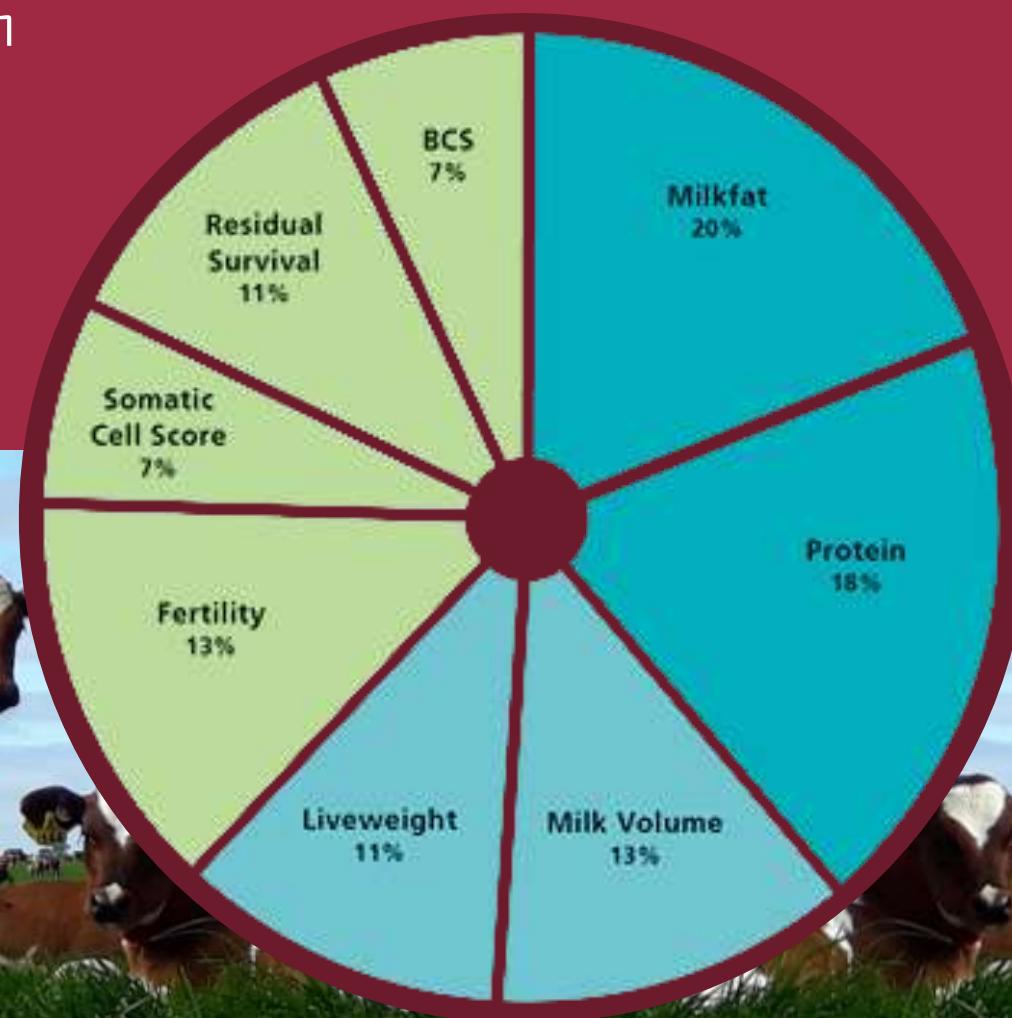
Breeding Values (BV): *An estimate of a cow or bull's genetic merit for a trait.* e.g. Will his or her daughters produce milk solids efficiently, and be robust herd members?

Economic Values (EV): *An estimate of the value of a trait to a NZ dairy farmer.*

EVALUATION TRAITS

Effective emphasis on the individual traits within Breeding Worth

2019



EVALUATION TRAITS

Robustness is calculated using the following:



Protein:

- BV is calculated using data collected during herd testing
- EV is calculated using a 5 year rolling average of the milk price



Milk volume:

- BV is calculated using data collected during herd testing
- EV is calculated using a 5 year rolling average of the milk price



Fat:

- BV is calculated using data collected during herd testing
- EV is calculated using a 5 year rolling average of the milk price



Liveweight:

- BV is calculated using cow liveweight data collected by farmers
- EV includes opportunity cost of feed, replacement heifer rearing costs and cull cow/bobby calf values

EVALUATION TRAITS

Production efficiency is calculated using the following:



Somatic cell score:

- BV is calculated using data collected during herd testing
- EV includes value lost through lowered survival, price penalties on milk supplied, costs associated with clinical mastitis



Fertility:

- BV is calculated using data collected during calving and mating
- EV includes value gained through increased survival, value gained through earlier calving dates: longer lactations



Residual survival:

- BV is calculated as the additional days a cow will survive in the herd, for reasons other than high merit in the BW traits, i.e. udder quality
- EV includes value gained through rearing less replacement animals



Body condition score:

- BV is calculated using mid-lactation BCS data collected by farmers
- EV includes value gained through more days in milk



EVALUATION EVOLUTION

Breeding Worth update: February 2019

EV's represent the value of different traits to New Zealand dairy farmers.

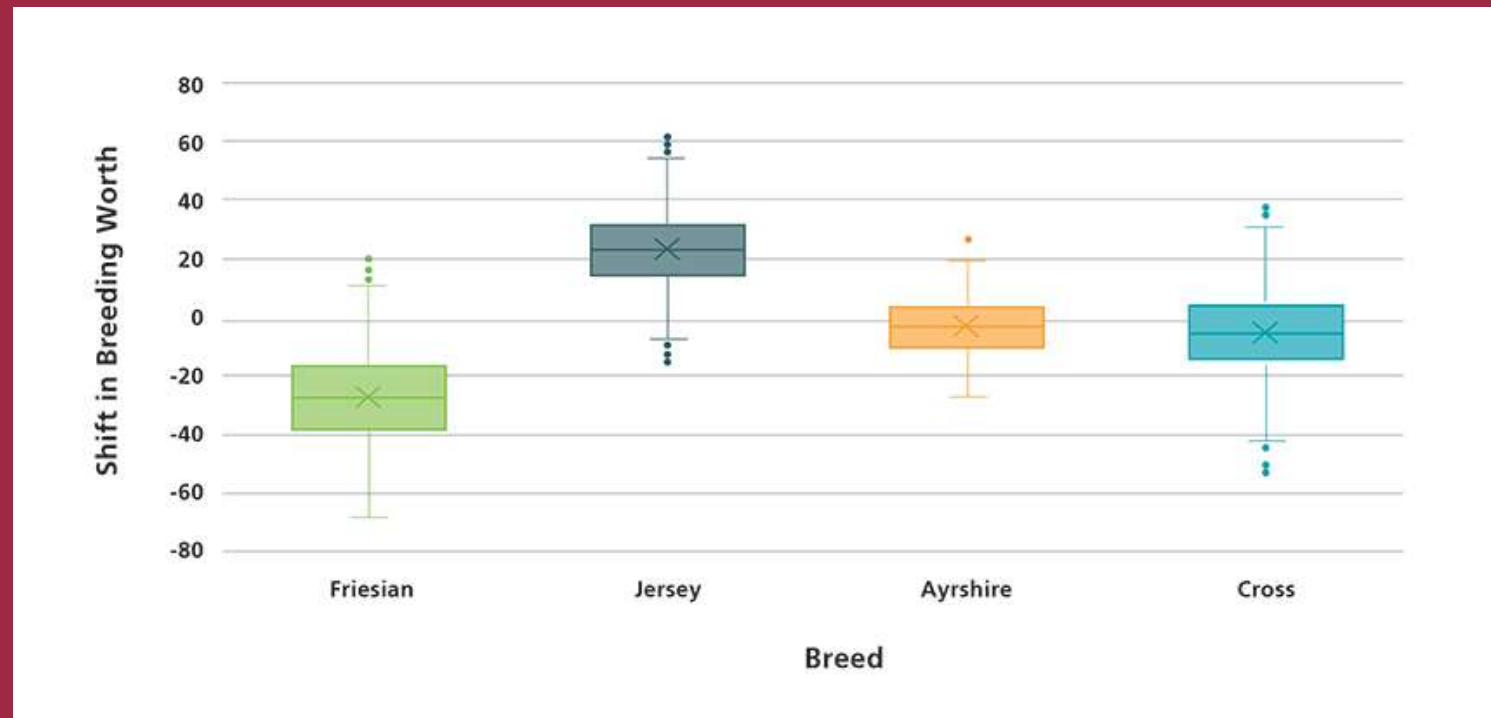
The economic values are applied on a 'profit per unit' basis. For example, one additional kg of protein creates \$6 of additional profit for a dairy farmer.

Calculations account for milk production, historical, current and forecast milk prices, income from culls, surplus cows and bobbies, the cost of generating replacements and general dairy farm expenses.

Economic values are updated every year to reflect changes in these values, ensuring Breeding Worth remains relevant in an ever changing market environment.

EVALUATION EVOLUTION

The BW of high fat sires has increased, and conversely the BW of high protein sires has decreased. For bulls born after 1999 with a BW Reliability of 75% and a BW 2018 of >0, Friesian bulls are the most affected, with an average shift of -\$27.7. Jersey, Cross-Bred and Ayrshire bulls have shifts of \$23.3, -\$4.8 and -\$3.4 (see graph).



FUTURE CHALLENGES

1. Inroads into national herd by Kiwicross cow
2. Marketing young Ayrshire Bulls
3. Breed promotion
4. Environmental sustainability and compliance pressures on dairy farmers.

