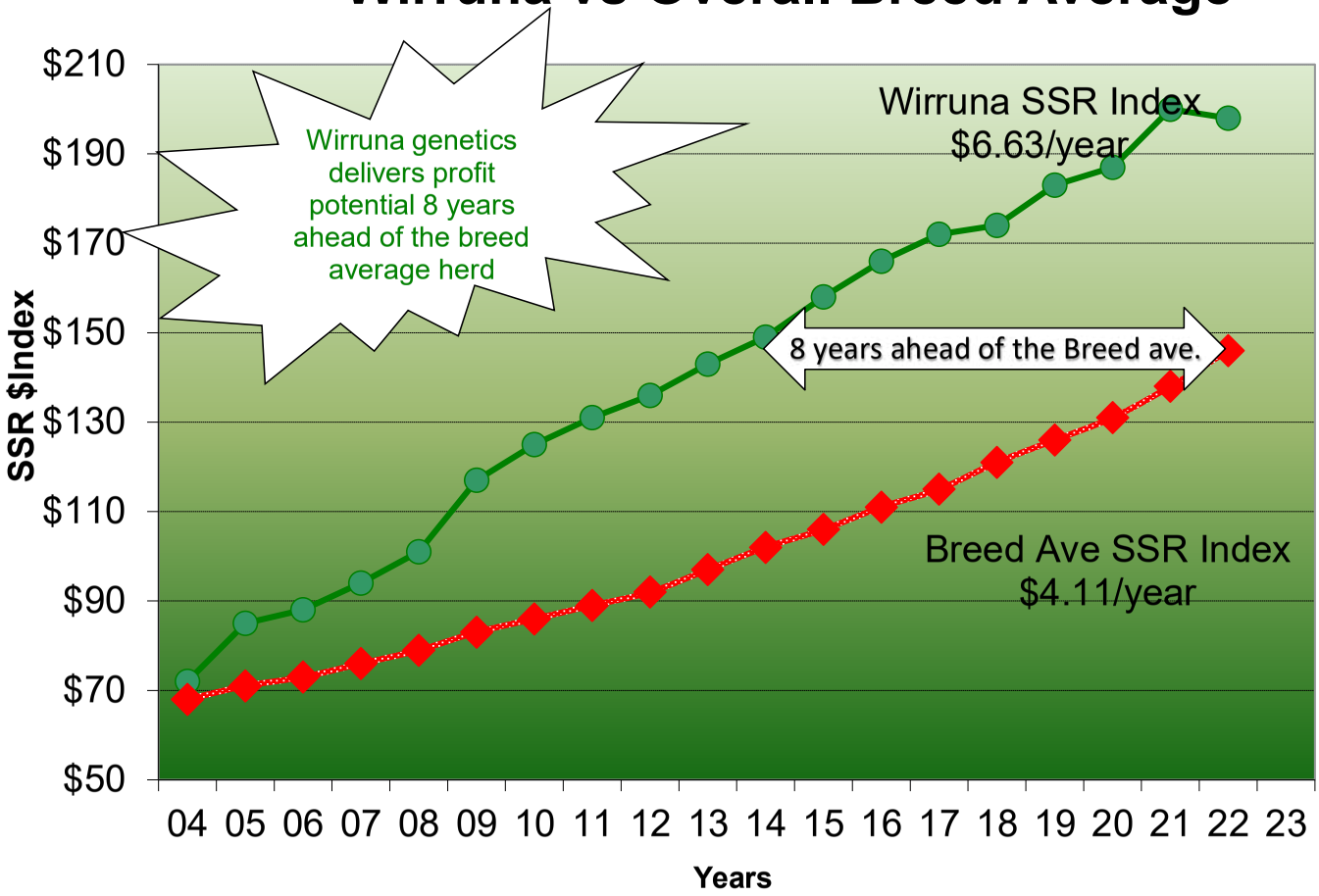
WIRRUNA
poll herefords

Autumn Bull & Female Sale

Using the Helmsman
Buying System

Thursday, March 2, 2023

Genetic trends - Southern Self Replacing Wirruna vs Overall Breed Average



WIRRUNA
poll herefords

Spring Bull & Female Sale

Offering....

78 x Poll Hereford Bulls
12 x PTIC Breeders as Individual Lots
72 x PTIC Breeders as Group Lots

USING THE HELMSMAN BUYING SYSTEM

To be held undercover at
"Spring Valley" Holbrook NSW

Thursday, 2nd March, 2023

INSPECTION FROM 10.00 AM - AUCTION: BULLS 1.00 PM

Ian & Diana Locke Mob: 0408 637 267
Email: ian@wirruna.com

Sale agent - Nutrien Livestock
Tim Woodham 0436 015 115
Peter Godbolt 0457 591 929
Matthew Pitzen 0428 362 030

Transport Co-ordinator - Joe Wilton
Ph: (02) 6027 3125
Mob: 0408 739 559

TELEPHONE BIDDING 1.00 PM
Sale shed mobile 1 (0408) 637 267
Sale shed mobile 2 (0419) 263 205

AuctionsPlus
Buy and Sell stock nationally

Please bring this catalogue to the sale to be sure of having one.

Contents

WIRRUNA
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Autumn 2023 Sale

We do appreciate your interest in our Autumn Bull & Female sale. Along with our Spring sale, you have the opportunity to tap into breed leading genetics and services offered at Wirruna. A genetic program recognized as one of the most disciplined breeding programs in the country focused on helping commercial beef producers improve their beef herd profitability.

Although the shine of last year's amazing cattle market may have tarnished a little, there remains very good market fundamentals for Australian beef producers. For most parts of the country, there has been very good season conditions and with the US beef industry entering a period of herd rebuild, as they recover from drought, the demand for Australian beef should find strong support.

The cattle breeding business is a long term venture and requires long term thinking. If you buy a bull offered to you in this catalogue, they do not have a significant bearing on your business income for another couple of years at least and can genetically influence your herd for another 15 years. The importance of buying the 'right' genetics that meet your breeding objectives cannot be overstated.

This sale includes older sires that have been used at Wirruna and a few have had semen collected & sell with a 50% semen share. There are some breed-leading sires in this group, including Wirruna Real Deal R105 and Wirruna Rockefeller R355 that have recently been selected for the HAL Super Sires program.

The 'S' bulls offered are 18 months old. These bulls represent some of the best genetics available in the country. They are independently assessed for fertility, including semen morphology and serving ability test, and structurally assessed by Liam Cardile so that they are screened to be ready to work in your herds.

As usual, this catalogue includes a complete set of performance, fertility, and structural information as you have come to expect from Wirruna Poll Herefords. This sale also includes an offering of surplus breeding females. For detailed information on the females, such as joining details, foetal sex information and EBVs, a supplementary female catalogue is available by accessing the Wirruna website or by contacting Ian Locke.

To assist you in making your bull selections, an on-line video of sale bulls is available on the Wirruna website (www.wirruna.com) from around 8th February, allowing you to preview individual lots and better prepare your selections for sale day.

We hope you will be able to come and enjoy our sale day or if not, operate remotely on AuctionsPlus. Please let us know if we can be of any assistance in making your selections.

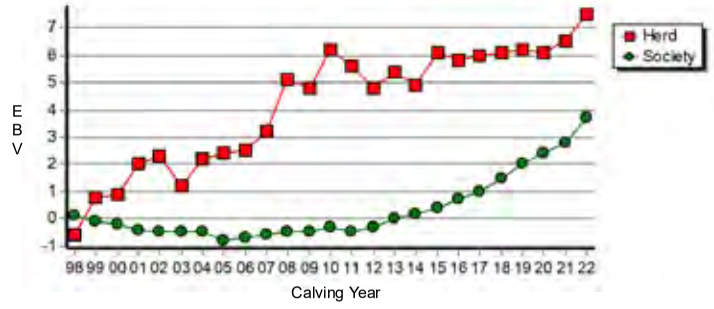
The Locke Family

GENETIC AUDIT OF WIRRUNA HERD

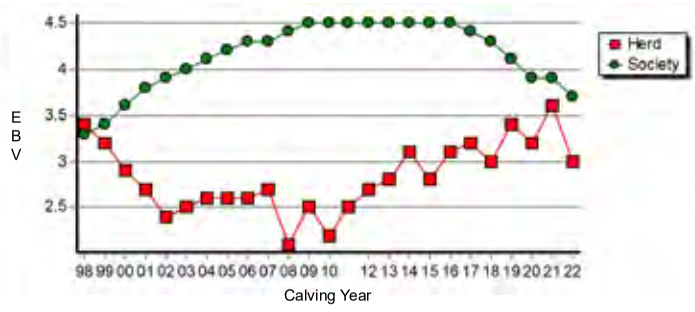
January 2023 Hereford BREEDPLAN

Graphs of Herd Compared with Breed Genetic Trends

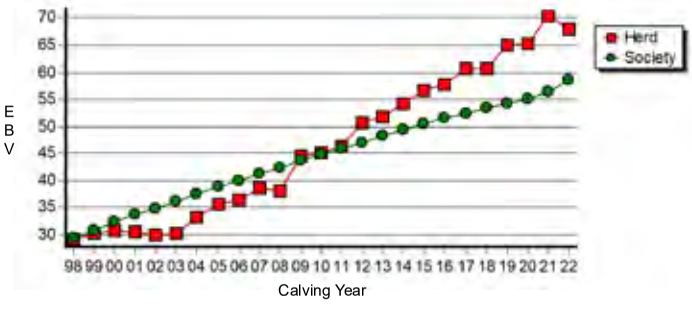
Calving Ease Dir (%)



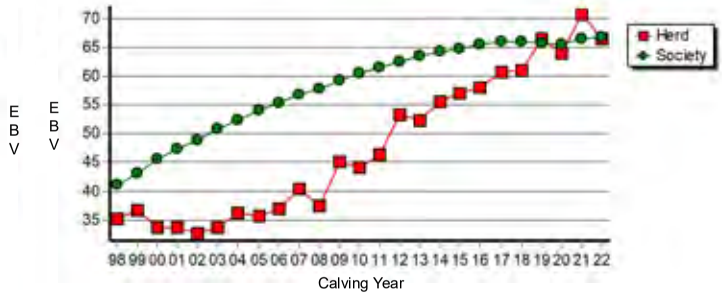
Birth Weight (kg)



400 Day Weight (kg)



Mature Weight (kg)

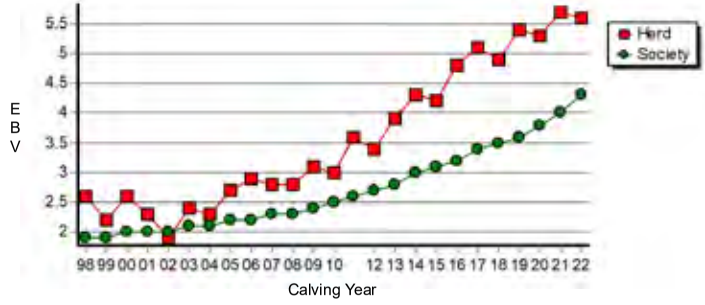


GENETIC AUDIT OF WIRRUNA HERD

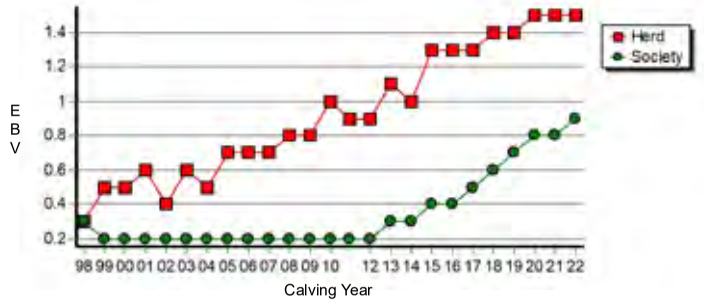
January 2023 Hereford BREEDPLAN

Graphs of Herd Compared with Breed Genetic Trends

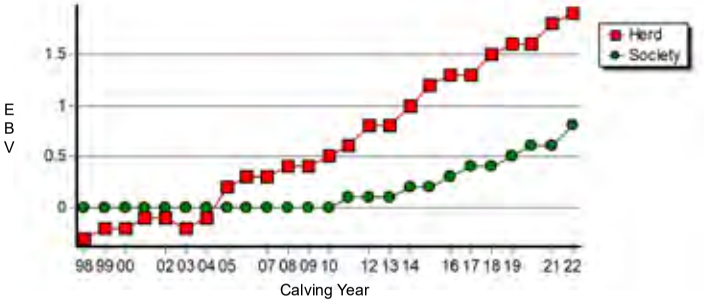
Carcase EMA (sq.cm)



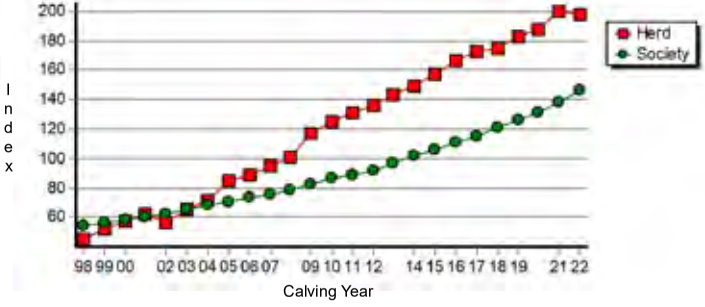
Carcase Rib Fat (mm)



Carcase IMF (%)



Southern Self-Replacing ($)



WIRRUNA
poll herefords

To assist you in making the correct selection for your herd, please note...

- **No** lots have been hoof trimmed or assisted at birth.
- **All bull lots** are genomically tested, full parent verified and free of know genetic diseases.
- **All bulls are up to date with Vibrio, Pestivirus and 7 in 1 vaccinations. Additionally, all lots are individually tested negative as pestivirus carriers.**
- All bulls have been examined for **structural soundness** and **muscle scores** have been assessed by Liam Cardile of Beef Excel on December 6, 2022.
- All bulls were also assessed for **fertility** by Vets of the Holbrook Veterinary Centre including:
  - VET Reproductive health/Fertility examination
  - SEMEN Progressive Motility % (PM% Minimum standard >30%)
  - SPERM Normal Morphology % (NM% Minimum standard >70%)
  - WPHS also test Serving ability
- The ultrasonic scanning for fat depth, eye muscle area and **intra-muscular fat** was done September 20, 2022 (at 13 months) by Liam Cardile **(Accreditation Status No. 1033).**
- **Level of Feed Supplementation.** A 10% ration of pellet & silage supplementation has been provided in the 3 months leading up to sale.
- A quick reference list of all sale bull EBV's is summarised in the middle of this catalogue, along with the average EBV's for animals born in 2020.
- A whole farm Biosecurity Plan is in place overseen by Vets of the Holbrook Veterinary Centre. This can be made available for inspection upon request. Wirruna Poll Herefords maintain the highest herd health status with regards to Johnes Disease (J-BAS 8) and necessary herd testing to retain access to all states, including WA.
- **Transfer of Registration.** Bulls are registered with the Herefords Australia Ltd and the transfer of registration can be arranged by request of the purchaser. Lots not registered are clearly identified.
- **NLIS.** As a client service Wirruna will transfer the NLIS tag to your PIC following delivery. Please provide your PIC to the sale agent.

Completeness of Performance

Wirruna Poll Herefords

★★★★★

'5' STAR BREEDPLAN RECORDER

The 'Completeness of Performance' herd rating system has been introduced to assess the quantity of pedigree and performance information that has been submitted to BREEDPLAN by individual seedstock herds. A simple 1 to 5 scale star rating is calculated based on the proportion of calves and number of performance traits recorded. Herds with a '5' star rating are considered to be gold standard and are recording 'complete' performance information.

WIRRUNA
poll herefords

Quality Beyond Genetics

The ***Wirruna Poll Hereford*** herd has come a long way since it was founded in 1949. When Richard Locke succeeded his father as principal of the stud in the early 1970's, he was frustrated by the stud industry's concentration on showing cattle rather than being aligned to the needs of commercial cattleman. Although ***Wirruna*** cattle achieved notable success in the 'show ring', the stud made fundamental change in direction in 1972 to Performance Testing focused on selecting a herd based on high performance and high fertility under commercial (grass-fed) stress conditions.

Today's cow herd at ***Wirruna*** comprises 600 registered females and is the result of decades of careful trait selection for improved milk, carcase performance and growth rate, without substantial increases in birth weight and with no compromise to temperament, structural soundness & fertility. With selection for fertility being our highest priority, we continue to screen out animals that do not perform under high stocking rate pressure, well above district average. Every cow that exists in the ***Wirruna*** herd does so because she had a live calf at 2 years old (resulting from a 6 week joining) and has continued to raise a live calf through to weaning every year with no exceptions and no favourites.

The quality inherent in a ***Wirruna Bull*** is a result of being a product of this exceptional cow herd. Our history of over 70 years selection and over 17,000 animals recorded on Group Breedplan give clients confidence that ***Wirruna Bulls*** are accurately described and offer reliable and predictable performance that will meet their breeding objectives. All sale bulls are serving ability tested and examined by an independent veterinarian for structural and breeding soundness.

Wirruna believes that modern seedstock production goes beyond just good genetics. Seedstock producers must focus on servicing a wide range of client needs that extends well before and well after the point of sale. ***Wirruna*** offer an unequalled guarantee, are tested free (J-BAS 8) for Johne's Disease, subscribe to the Seedstock Producers Code of Practise and offer a level of client and back-up service that helped us to be named the **1995 National Seedstock Producer of the Year, and more recently, the 2002 NSW Seedstock Producer of the Year.** Quality assurance is important to us and complements our commitment to offering a quality product.

We are dedicated to seedstock excellence.

The Locke Family

Mission Statement

"Wirruna is dedicated to seedstock excellence. Our 'Quality Beyond Genetics' approach is to provide fully described & predictable genetics, genuine back-up service and add-on client services aimed at helping clients to achieve long term beef herd profitability."

Wirruna Breeding Objective

"Wirruna's breeding objective is to breed Bulls that are fully described and have the genetic & physical ability to meet market specifications and breeding objectives of the client. Keeping in mind that a balance is required where the female portion of the progeny are required to be highly fertile and efficient."

The major strategies to achieve this objective are listed as follows:

- The Wirruna herd should be a role model for profitable commercial beef herds in southern, higher rainfall zones of Australia. With emphasis on fertility, the cow herd, under high stocking rates will set optimum productivity levels based on per hectare, rather than per head parameters to promote efficient low maintenance cattle.
- Cattle to be run under strict commercial stress conditions with no grain feeding for production.
- Produce cattle of moderate birth weight with optimum growth, carcase quality and muscularity that meet market specifications.
- Performance test to accurately describe growth, carcase and fertility traits.
- Maintain inherent structural soundness and docility.
- Endeavour to reduce the risk of product failure to the Bull buying client.
- Strive to make the bull sale a beginning of a relationship, ...not the end of one.

Quality:
"Fitness for Purpose"

Sale Arrangements

AuctionsPlus: This sale is interfaced with AuctionsPlus and will be conducted live on-line in real time. You must be registered with AuctionsPlus to bid online, so visit the website www.auctionsplus.com.au to register at least 24hrs beforehand.

We are also encouraging the option to bring your smart-phone or tablet on sale day to place on-line bids from the inspection yards or sale barn.

Sale Agent: Nutrien Livestock have been appointed the selling agent and settlement will occur through them. All lots will be governed by the usual sale terms & conditions, available on sale day and displayed on AuctionsPlus.

Rebate: **2% rebate is allowed for outside agents**, introducing buyers in writing at least 12 hours prior to the commencement of the sale and settling within 7 days of the date of invoice.

Introductions should be in writing, emailed to vendors at office@wirruna.com.

GST: The auction will be conducted on a GST exclusive basis. **GST will be added to the sale price.**

Transport: Daily flight services to Albury & Wagga Wagga. Holbrook also has an all weather strip.

Accommodation: Excellent accommodation is available in Holbrook and Albury.

Catering: A light lunch will be available.

Delivery: Unless prior arrangement has been made with the vendors, cattle may remain at "Spring Valley" for no longer than one week from the date of sale - in all cases, every care would be taken, but the risk remains with the purchaser. Cattle purchased for interstate destinations will be held free of charge until regulation tests have been completed. Insurance facilities will be available.

Guarantees: All bulls are sold on a credit or money-back guarantee. This condition is valid only for a period of **twelve months** after date of sale and the vendor receives notification of infertility, not caused by injury, together with a certificate from a registered veterinarian on or before that date. All bulls, for which claims are made under these guarantees, are to be delivered free of charge by the purchaser to any place mutually agreed upon. More information on the Wirruna Guarantee is provided on page 19.

Cattle would be free to go to all states of Australia subject to the necessary tests required by the State of destination. Should any animal fail to pass a required test the purchaser shall have the right to either cancel the sale or have a replacement animal made available.

Quality Assurance

HELMSMAN - A CLIENT FRIENDLY BUYING SYSTEM

An alternative to the traditional stud auctions is the Helmsman buying system. First used at the "Helm View" Sale in March, 1990, the design arose out of concerns that the traditional auction system served the needs of agents and vendors well but neglected the needs of bull buyers, "the customers".

It combines the best features of both the auction system and sale by private treaty: you get first pick and pay market value without any pressure:

1. Prospective buyers need to **register prior** to the start of the sale, indicating their trading details and whether or not they have been introduced by an agent. Each is given a buyer number.
2. The sale cattle are on display as usual, with all relevant Breedplan, fertility and carcass information present in your catalogue.
3. When the sale commences, all sale lots are on the market simultaneously. You may bid on any lot, regardless of lot number. You can also bid on multiple lots at once. A large, easy-to-read board will be located nearby, displaying lot number, buyer number and bid value (or Reserve Price). This allows you to see at a glance whether your bid still stands or has been overbid.
4. Bids are written on a card and presented to a "runner", and the board is up-dated. A "Sale Presenter" will announce each bid as it is recorded.
5. You may open bidding on any bull at it's reserve price and further bids in multiples of the minimum bid amount will be accepted. Minimum bid amounts are:
   - Bull lots $1,000
   - Individual female lots $500
   - Group female lots $200
6. A bid once submitted and recorded cannot be retracted, and the person submitting such bid will be responsible for it until it is overbid.
7. All cattle are for sale simultaneously for a period of 20 minutes. Further bidding will then result in one minute extensions until a full one minute "no bid" period which will conclude the sale.
8. The sale is interfaced with AuctionsPlus with the Helmsman system meshing perfectly with the simultaneous on-line auction in real time. Remote & on-site bidding is available via your computer, ipad or smart phone. For those not able to attend the sale, you should register within 24 hours prior to the sale in order to bid.www.auctionsplus.com.au or Phone 02 9262 4222.

   AuctionsPlus
   Buy and Sell stock nationally
9. In an effort to help the sale reach a timely conclusion, Wirruna Poll Herefords reserves the right to double the minimum bid amount once the sale has been running for 1.5 hours. The option would be announced by the sale commentator and would also include the minimum bid amounts on AuctionsPlus.

THE BENEFITS

1. You have more time to consider lodging a bid. You can place genuine bids on any bull of your choice at any time during the sale period.
2. You have the opportunity to re-assess each lot during the sale period and move freely between one lot and another depending on what you could afford without any pressure to make an instant decision.
3. You take home the cattle you want, irrespective of lot order.
4. If you need more than one bull, Helmsman gives you a better chance to average your purchase costs.
5. There is a better opportunity to arrange the shared purchases of a lot if your budget is exceeded.

Using Performance Information

Wirruna Poll Hereford Stud was a foundation member of the **National Beef Recording Scheme** in 1972 and has over 17,000 cattle recorded on **Breedplan**.

Breedplan is a performance evaluation program that describes the genetic profile of an animal for a number of commercially important traits. An estimate of the animals *'breeding value'* is given an **EBV** *(Estimated Breeding Value)*, a figure that compares the animal to the breed benchmark of zero *(0)* for each trait. A positive EBV *(+)* is higher than breed benchmark whilst a negative *(-)* EBV is lower than the benchmark.

The EBVs presented in this catalogue **are December 2022 GROUP BREEDPLAN EBV's** and can be directly compared with only December 2022 **Group Breedplan EBVs** of other **Hereford & Poll Hereford** herds. To evaluate the performance profile of a bull, its EBVs can be directly compared with the EBVs of other bulls and against the current breed average EBV for each trait as shown below.

GROUP BREEDPLAN EBV'S (kgs) *(Figures are breed average for calves born 2020)*								
C Ease Direct	**C Ease** Dtrs	**Gest Length**	**Birth Weight**	**200 Day Growth**	**400 Day Weight**	**600 Day Weight**	**Mat Weight**	**200 Day Milk**
+2.5	***+2.1***	***-0.7***	***+3.9***	***+33***	***+55***	***+77***	***+65***	***+17***

The EBV is the best estimate of an animal's genetic merit for that trait.
Accuracy figures for each EBV are given. This percentage (%) accuracy reflects the likelihood of the EBV changing as further performance information about the animal becomes available. The higher the accuracy figure, the smaller is both the chance and likely magnitude of change.

EBVs are calculated for the following traits.

CALVING EASE Calving Ease (CE) EBV's are based on CE scores, birth weight and gestation length information. More positive EBV's are favourable and indicate easier calving.

DIR. Direct calving ease indicates how this animal influences the birth of its progeny.

DTRS. Daughters calving ease indicates how well the animal produces daughters that have easier calving.

BIRTH

Gestation Length GL EBV (days) is based on AI records. Lower (-ve) GL EBV's indicate easier calving and increased growth after birth.

Birth Weight BWT EBV (kg) is based on measured birth weight of animals, adjusted for dam age. The lower the birthweight EBV of a sire, the lighter is the birthweight potential of his progeny and lower the likelihood of a difficult birth. High birthweight is generally associated with increased calving problems in heifers.

High birthweight EBV bulls can be used on mature cows without any problems. Wirruna recommend joining heifers to bulls with birthweight EBVs at or below breed average ie. Preferably **below of EBV +4.3 and positive calving ease EBV's.**

Easy-calve

Bull lots in this catalogue that are suitable for joining to heifers in typical low dystocia herds are denoted with an 'Easy-calve' logo.

GROWTH

200 Day Growth Indicates weight advantage at 8 to 10 months of age. Place emphasis on this EBV if you are selecting cattle to finish for earlier markets, keeping in mind the maturity pattern required for the trade you are targeting.

400 Day Weight Indicates weight advantage at yearling age. Place emphasis on this EBV if you are producing steers destined for the domestic and/or yearling steer market, plus improve the growth of your yearling heifers to improve conception rates.

600 Day Weight Indicates weight advantage beyond yearling age. Place emphasis on this EBV if you are breeding for the heavy weight end of markets or want to extend the growth potential of your progeny. High EBVs for 600 Day Wt indicates a later maturing sire whose progeny will reach optimum finish at a heavier weight when compared to a lower EBV Bull for that trait.

Mature Weight Mature Cow Weight EBV (kg) is an estimate of the genetic difference in cow weight at 5 years of age. Smaller, or more moderate EBV's are generally more favourable.

Wirruna has argued strongly for the development of this EBV, as the race for high growth traits has been to the detriment of retaining fertile, efficient low maintenance cows within the breed.

200 Day Milk MILK EBV (kg) reflects extra calf weight at weaning due to the milking and mothering ability of a bulls daughters.

If you wish to improve milk in your female herd, select bulls with well above breed average EBV for this trait. Be aware that there is a trade-off between milking ability and fertility when conditions get tough. If you are selecting a bull as a terminal sire and will not be retaining his daughters then select the best growth bulls within the desired maturity type and disregard the milk EBV.

CARCASE

Wirruna have used ultrasonic scanning to assess muscle and fat since 1990. Intra-muscular fat (IMF) measurements have been measured since 1998. The carcase EBVs generated are a useful tool that will gain in accuracy and importance as more generations are scanned and analysed. With the increasing emergence of value based marketing of beef, carcase quality & meat yield are major factors influencing boning room profitability and ultimate producer returns. **Wirruna** is currently placing significant emphasis on carcase traits in sire selection.

GROUP BREEDPLAN EBV'S (kgs) (Carcase) *(Figures are breed average for calves born 2020)*						**MUSCLE SCORE**
Carcase Weight	**EMA (cm^2)**	**Rib Fat (mm)**	**P8 Fat (mm)**	**RBY %**	**IMF%**	**Range A ☛ E**
+51	***+3.8***	***+0.8***	***+1.0***	***+0.8***	***+0.6***	

Carcase Weight CWT EBV (kg) estimates the genetic difference in carcase weight at a standard age of 650 days.

EMA Eye Muscle Area EBV (cm^2) estimates genetic differences in the eye muscle area at the $12^{th}/13^{th}$ rib site of a 300kg dressed carcase. More positive *(+)* EBV's indicate better muscling on animals.

Fat Depth Rib and Rump Fat EBV (mm) estimates the genetic differences in fat depth at the $12^{th}/13^{th}$ rib and P8 site in a 300kg dressed carcase. More positive EBV's indicate more subcutaneous fat and earlier maturity.

Two fat EBV's are available as there is variation between animals regarding fat depth at the two sites. These EBV's are important if you want to change the fattening pattern of progeny and fat has a positively influence on fertility rates in heifers.

RBY% Retail Beef Yield Percent EBV (%) represents total (boned out) meat yield as a percentage of a 300kg dressed carcase. A more positive EBV indicates higher percentage yield for the 300 kg carcase size.

IMF% Intra-muscular Fat Percent EBV (%) is an estimate of the genetic difference in the percentage of intra-muscular fat at the $12^{th}/13^{th}$ rib site in a 300kg carcase. Depending on market targets, larger more positive values are generally more favourable.

Muscle Score Sandy Yeates (formally of NSW Dept of Ag) has shown that well-muscled steers *(C, C+, B- to B)* attract a greater premium than lesser muscled steers *(less than C)*. In fact, an average premium of $80 was paid for B muscled steers above C muscled. Animals with high muscle score have a higher proportion of their carcases made up with hindquarter cuts and have more even fat distribution requiring less fat trim. As muscle score increases, so too does dressing percentage and carcase yield.

However, improving muscularity in the herd is a slow process as extremes must be avoided.

FERTILITY

Wirruna bulls are subject to a breeding soundness evaluation (structure and fertility) by independent veterinarians of Holbrook Veterinary Centre. Wirruna only offer bulls that are fertile and structurally sound.

As with many genetic traits, fertility cannot be physically seen when inspecting a bull. Consequently, Wirruna measure various facets of fertility to assist clients to make an informed bull choice.

FERTILITY INFORMATION *(Figures are breed average for calves born 2020)*		
Scrotal Size EBV (cm)	**DC EBV (days)**	**Scrotal Size (cm)**
+2.1	-3.0	>32 cm

Scrotal Size EBVSS EBV (cm) is an indicator of male fertility in regards to semen quality and quantity. Also positively associated with female fertility, a higher (positive EBV) indicates higher fertility.

Days to Calving DC EBV (days) is an indicator of female fertility based on time between the cows first exposure to a bull and when she subsequently calves. Cows that calve late in the season or fail to calve are penalized. This is more useful as a sire trait. Lower (-ve) EBV's are preferred indicating short days to calving for the sires daughters.

Scrotal Size Testicles are examined for firmness, conformation, congenital defects and size. All bulls must have **firm testicles** that measure at least **32 cm by 18 months** of age.

Serving Ability All sale bulls are assessed on their ability to physically serve. Wirruna strongly recommend that you get your sires tested annually.

The highest risk of bull failure is in his first season. Mating your bull to 80% of his mating potential initially is advised to reduce this risk. We suggest a mating load of up to 40 for virgin bulls.

The Hereford GROUP BREEDPLAN Estimated Breeding Values contained in this sale catalogue were compiled by the *Agricultural Business Research Institute* (ABRI) from data supplied by the breeders. Neither Herefords Australia Ltd nor the ABRI oversee or audit the collection of this data.

The EBV's in this catalogue are December 2022 Group Breedplan. With monthly updates, EBVs can and do change as more data is submitted. This can mean that updated EBVs at sale time may differ to that printed in this catalogue.

Heifer Bulls

Dystocia levels in whiteface heifers in the higher rainfall zones of South-east Australia vary considerably, but nevertheless, on average are unacceptably high. As a seedstock producer, we aim to challenge heifers to target around 5% assistance levels and cull accordingly so that we are selecting for calving ease. In a commercial herd, an acceptable level of dystocia (assistance and stillbirths) in a herd varies with each manager. An economic loss becomes a concern above 5% whereas there may not be enough selection pressure for growth and muscling at a level below 5%.

There are many factors that influence dystocia levels, time of calving, heifer age, nutrition throughout pregnancy, pelvic area, heifers' own genetic influence on birth weight and gestation length. Nevertheless, Sires have the dominant influence through birthweight and calf shape.

There is more variation in the potential for bulls to cause calving difficulty **within breeds** than there is **between breeds**. The practise of using bulls of another breed to mate heifers is likely to be less successful than choosing the right bull with-in the breed that you already have.

To reduce calving difficulty in heifers choose a bull with:

- **Positive calving ease EBVs** - Direct and for the longer term, its daughters.
  Use bulls with above average calving ease.
- **Low Birthweight EBV** - itself and back through it's pedigree.
  Use bulls with below breed average birthweight (target less than +4.3)
- **Correct Shoulder Conformation** - Select bulls with narrow sloping shoulders. Some bulls can look tapered from front to back. Bulky shouldered bulls with shoulder blades that protrude and are straighter than 45% should be avoided.

The *Specialist Heifer Bulls* in this catalogue are selected for having the better calving ease characteristics as detailed above, not only in its own performance information, but also in their sire and dam. These are targetted at herds who want to significantly improve calving ease in their animals.

Generally, there are bulls in this catalogue that are **suitable for joining to** heifers in typical low dystocia herds. These are denoted with an 'Easy-calve' logo.

$INDEX

Selection indices for Herefords were updated to production-based $Indices in November 2019 . Known as Breedobject $Index, these indices are designed to allow balanced selection for various production/ market scenarios and breeding objectives. Developed by the Animal Genetics and Breeding Unit (AGBU) at UNE in Armidale, this technology applies various weightings to the available EBVs to give a single EBV that reflects the value of an animal, to your breeding objective, in dollar terms. They rank animals for a single selection goal – **profit.**

The Index indicates the net profitability per cow joined in a particular production system. Higher ranked animals offer extra profit potential.

Generic indexes have been developed for different production systems of typical commercial herds using Hereford bulls. Producers are advised to use the selection index that most closely aligns to their production system.
All four selection indexes are focussed on maintaining and improving eating quality. Significant premiums are applied for increasing marble score up to a marble score of 3. Pressure is also applied to early life growth to maintain low ossification scores and good MSA compliance. In addition, each selection index targets the following specifications:

- **Southern Self-Replacing Index (SSR**) - This production system assumes a typical commercial self-replacing purebred Hereford herd in winter-dominated rainfall regions targeting the domestic market. Daughters are retained for breeding and so maternal traits are of importance. Steers are slaughtered at 20 to 22 months of age to produce 300 kg carcases with 10 mm P8 fat depth. A moderate cost is applied for cow feed costs during the annual feed shortage period which results in small increases in cow weight.

- **North Self-Replacing Index (NSR)** - This production system assumes a typical commercial self-replacing herd in summer-dominated rainfall regions targeting the domestic market. This index is suitable for use by both straight bred Hereford herds and in crossbreeding programs where Hereford bulls are being used over a Bos indicus based cow herd (e.g. flatback). Daughters are retained for breeding and so maternal traits are of importance. Steers are slaughtered at 20 to 22 months of age to produce 340 kg carcases with 12 mm P8 fat depth. A high cost is applied for cow feed costs during the annual feed shortage period which produces little change in mature cow weight.

- **Southern Baldy Terminal Index (SBM)** - This production system assumes a typical commercial crossbred herd using Hereford bulls over Bos taurus females (e.g. Angus). A portion of the heifers are retained for breeding and so maternal traits are of importance. The steers and surplus heifers are destined for slaughter at 20 to 22 months of age. Steers produce 300 kg carcases with 10 mm of P8 fat depth, while heifers produce 270 kg carcases with 12 mm of P8 fat depth. A moderate cost is applied for cow feed costs during the annual feed shortage period.

- **Northern Baldy Terminal Index (NBT)** - This production system assumes a typical commercial crossbred herd (e.g. flatback) using Hereford bulls over Bos indicus/Tropical females (e.g. Santa Gertrudis) where all progeny (male and female) are destined for slaughter. Steers and heifers are slaughtered at 20 to 22 months of age. Steers produce 340 kg carcases with 14 mm of P8 fat depth while heifers produce 300 kg carcases with 17 mm of P8 fat depth.

BREED OBJECT $INDEX *(Figures are breed average for calves born 2020)*			
SSR	**NSR**	**SBM**	**NBT**
$131	***$118***	***$133***	***$98***

Indexes allow balanced selection in the true sense of the word – they apportion the amount of selection pressure that needs to be applied for growth, maternal, carcase and fertility traits to give you the most profitable herd over the long term. High indexing animals will rarely have the highest EBV for any single trait. The weightings depend on the economic importance of individual traits and account for antagonisms between traits.

December 2022 Hereford BREEDPLAN - Percentile Bands for all 2020 born animals

Use this table as a guide to compare individual animals with the current genetic level of the breed

	Calv-Ease		Birth		Growth					Fert		Carcase						Extra		Indexes			
	Dir	Dtrs	GL	Bwt	200	400	600	Mwt	Milk	SS	DC	Cwt	EMA	Rib	P8	RBY	IMF	Doc	NFI	SSR	NSR	SBM	NBT
	%		days		kg					cm	days	kg	sq.cm	mm		%			kg/day	$			
High 1%	+12.4	+9.1	-6.8	-1.6	+49	+82	+117	+114	+28	+4.3	-6.6	+78	+7.5	+2.7	+3.9	+2.7	+2.3	+22	-0.36	+214	+203	+222	+163
High 5%	+10.4	+7.3	-4.1	+0.1	+44	+74	+105	+98	+25	+3.6	-5.5	+70	+6.2	+2.1	+2.9	+2.0	+1.7	+17	-0.21	+193	+182	+201	+147
High 10%	+9.0	+6.2	-3.0	+1.0	+42	+69	+99	+91	+23	+3.2	-5.0	+66	+5.6	+1.8	+2.4	+1.7	+1.4	+14	-0.15	+179	+169	+187	+137
High 15%	+7.9	+5.5	-2.4	+1.6	+40	+67	+94	+87	+22	+2.9	-4.6	+63	+5.1	+1.6	+2.1	+1.5	+1.2	+12	-0.11	+170	+158	+176	+129
High 20%	+7.0	+5.0	-2.0	+2.1	+39	+64	+91	+83	+21	+2.8	-4.3	+61	+4.8	+1.4	+1.9	+1.4	+1.1	+10	-0.08	+162	+150	+168	+122
High 25%	+6.1	+4.4	-1.7	+2.5	+38	+63	+89	+80	+20	+2.6	-4.1	+59	+4.6	+1.3	+1.7	+1.2	+1.0	+9	-0.05	+155	+142	+160	+117
High 30%	+5.3	+4.0	-1.4	+2.8	+37	+61	+86	+77	+19	+2.5	-3.9	+57	+4.4	+1.2	+1.5	+1.1	+0.9	+8	-0.03	+150	+136	+154	+113
High 35%	+4.6	+3.5	-1.1	+3.2	+36	+59	+84	+74	+19	+2.4	-3.6	+55	+4.2	+1.1	+1.4	+1.0	+0.8	+7	-0.02	+144	+131	+148	+109
High 40%	+3.9	+3.1	-0.9	+3.5	+35	+58	+82	+71	+18	+2.3	-3.4	+54	+4.0	+1.0	+1.2	+0.9	+0.7	+5	+0.00	+140	+126	+143	+105
High 45%	+3.2	+2.6	-0.7	+3.8	+34	+56	+80	+69	+17	+2.2	-3.2	+52	+3.8	+0.9	+1.1	+0.8	+0.6	+4	+0.01	+135	+121	+138	+101
50%	+2.5	+2.2	-0.5	+4.1	+33	+55	+78	+66	+17	+2.1	-3.0	+51	+3.6	+0.8	+1.0	+0.7	+0.5	+3	+0.02	+131	+116	+132	+98
Low 45%	+1.9	+1.8	-0.3	+4.3	+32	+54	+75	+64	+16	+2.0	-2.8	+50	+3.5	+0.7	+0.8	+0.7	+0.4	+2	+0.03	+127	+112	+127	+94
Low 40%	+1.2	+1.3	-0.1	+4.6	+31	+52	+73	+61	+15	+1.9	-2.6	+48	+3.3	+0.6	+0.7	+0.6	+0.4	+1	+0.04	+122	+107	+122	+90
Low 35%	+0.6	+0.9	+0.1	+4.9	+30	+51	+71	+58	+15	+1.8	-2.4	+47	+3.2	+0.5	+0.5	+0.5	+0.3	+0	+0.05	+117	+102	+117	+86
Low 30%	-0.1	+0.4	+0.3	+5.2	+29	+49	+69	+55	+14	+1.6	-2.2	+45	+3.0	+0.4	+0.4	+0.4	+0.2	-1	+0.07	+112	+97	+112	+82
Low 25%	-0.9	-0.1	+0.5	+5.5	+28	+48	+66	+52	+14	+1.5	-1.9	+44	+2.8	+0.2	+0.2	+0.3	+0.2	-2	+0.08	+107	+92	+106	+78
Low 20%	-1.7	-0.6	+0.8	+5.8	+27	+46	+64	+49	+13	+1.4	-1.7	+42	+2.6	+0.1	+0.0	+0.2	+0.1	-3	+0.09	+102	+86	+99	+73
Low 15%	-2.7	-1.2	+1.1	+6.2	+26	+44	+60	+45	+12	+1.3	-1.4	+40	+2.4	+0.0	-0.2	+0.0	+0.0	-5	+0.10	+95	+79	+92	+68
Low 10%	-4.0	-2.0	+1.4	+6.7	+24	+41	+56	+39	+11	+1.1	-1.0	+37	+2.1	-0.2	-0.4	-0.1	-0.2	-8	+0.13	+86	+71	+83	+62
Low 5%	-5.9	-3.2	+2.1	+7.3	+21	+36	+49	+31	+9	+0.7	-0.5	+32	+1.8	-0.5	-0.9	-0.4	-0.4	-13	+0.17	+73	+58	+69	+52
Low 1%	-10.1	-5.7	+3.7	+8.5	+14	+25	+33	+10	+6	+0.1	+0.4	+22	+1.0	-1.1	-1.7	-1.0	-0.7	-24	+0.28	+47	+35	+39	+30

Note: Percentile Bands for 2020 Born Calves are provided as a useful tool to compare where a particular animal is placed relative to the breed for individual traits or $Index values. In this catalogue, yellow shading indicates traits that rank in the top 20% of the breed and black shading is a top 5% ranking for 2020 Born 'R' Calves.

Beef Class Structural Assessment System

Structural problems in cattle have a substantial effect on both the reproductive and growth performance of a beef herd. It is widely recognised that structural problems in sires have detrimental effects on conception rates, calving patterns and thus profitability. Similarly, females with inadequate structural characteristics are more prone to weaning lighter calves or conceiving later in the breeding season than their more functional counterparts. These structural problems are filtered through the supply chain resulting in reduced income for the producer, feedlot and thus reducing the overall productivity of the Australian Beef Industry.

Over the past decade, use of the Beef Class Structural Assessment System in the seedstock industry has produced a marked improvement in herds which have shown commitment to using the information appropriately. Through these dedicated breeders, there has been a flow on affect of structural improvement through out all sectors of the beef cattle industry.

Jim Green and Liam Cardile of 'BEEFXCEL' service many of the leading seedstock herds in Australia. 'BEEFXCEL' is not involved in any genetic marketing or specific breeding advice and therefore has no conflict of interests to influence their stock appraisal. The integrity of the structural data provided by 'BEEFXCEL' is recognised throughout the industry as Jim and Liam are fully INDEPENDENT assessors.

Call **Liam Cardile** on 0409 572 570

How to use The Beef Class Structural Assessment System

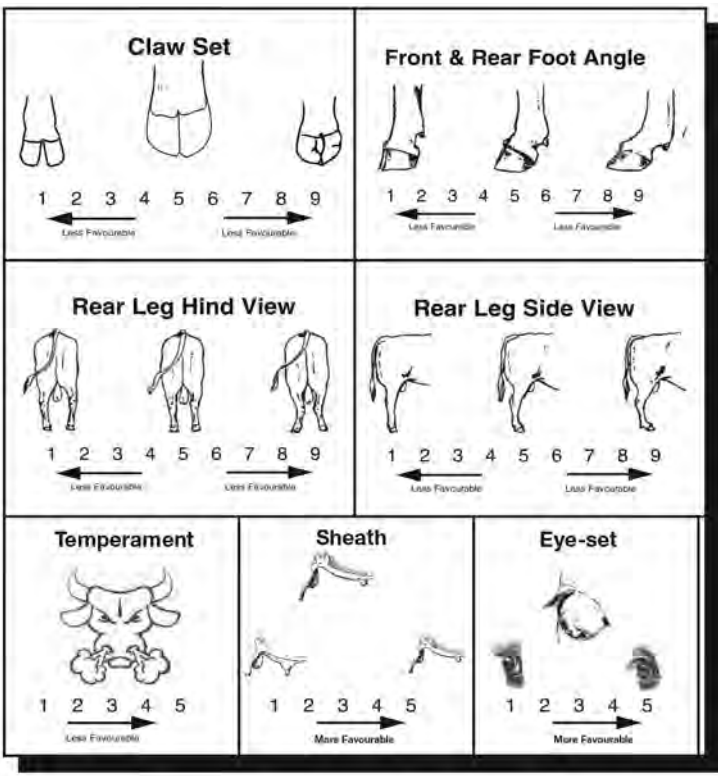
WIRRUNA POLL HEREFORDS STRUCTURAL PROGRAM:

The 2023 Sale Bull offering have been independently structurally assessed to maximise the quality of stock on offer. Any animals deemed inadequate have been removed from the sale draft. The Wirruna sale bulls were assessed by Liam Cardile of BEEFXCEL on 6th December 2022.

How to use The Beef Class Structural Assessment System

The Beef Class Structural Assessment System uses a 1-9 scoring system;

- A score of 5 is ideal. (Note: Temperament Score of 1 is preferable).
- A score of 4 or 6 shows slight variation from ideal, but this includes most animals. An animal scoring 4 or 6 would be acceptable in any breeding program.
- A score of 3 or 7 shows greater variation but would be acceptable in most commercial programs. However, seedstock producers should be vigilant and understand that this score indicates greater variation from ideal.
- A score of 2 or 8 are low scoring animals and should be looked closely before purchasing.
- A score of 1 or 9 should not be catalogued and are considered culls.



GENOMICS AT WIRRUNA

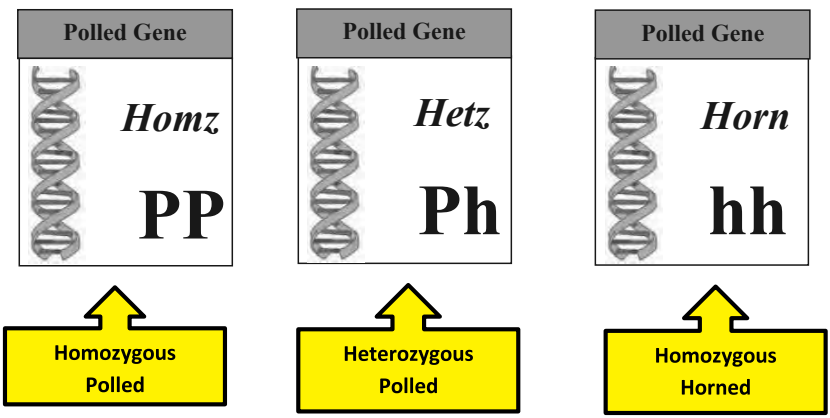
Genomics means the study of the Genome, or genetic make-up of an organism. In recent years, new technologies relating to the actual genes that animals carry have become available to the livestock industries. These include new ways to extract DNA, and run on a SNP (Single Nucleotide Polymorphism) panel to identify DNA markers for key traits & genetic conditions. In fact, many thousands of markers, depending on the size of the SNP panel.

Genomic tests are useful to seedstock breeders for parent verification and to better explain the genetic makeup of an animal, simple traits like the Coat colour, Poll/Horn gene and genetic diseases can be readily identified, but also more complex traits can be measured, due to the large number of markers available, to give us better calculations of an animal's genetic merit. There are currently genomic predictions for traits like calving ease, milk, average daily gain, marbling, docility, carcase weight and residual feed intake. Furthermore, being in its infancy, more traits will be added as the technology develops.

In 2017, we saw the implementation of Single Step BREEDPLAN. This is a significant milestone for the International Beef Recording Scheme at ABRI. In the Single Step analysis, SNP genotypes, along with the normal pedigree & performance information, are being incorporated into the calculation of BREEDPLAN EBVs. From the commercial beef producer's perspective, things won't look much different! However, in the calculations and accuracy of EBVs there will be significant improvements allowing you, the beef cattle producer, to make more accurate breeding decisions with enhanced and more accurate breeding values.

Wirruna have routinely DNA tested all Sires, Donor Dams and sale bulls for many years. Now we are moving to full DNA testing all animals. Wirruna have been at the forefront of this technology and have more genotypes contributed to the Hereford reference population than any other Hereford herd in Australia. This should give you confidence that our data is the best quality that it can be to give you the best tools to make your Breeding decisions.

All sale bulls have gene test results to identify those that are true polled, or homozygous polled (PP), and those that carry the horn gene, or heterozygous polled (Ph). The poll gene results are reported as follows.



All progeny of a PP homozygous polled bull will be polled. Heterozygous polled bulls (Ph), on the other hand, can throw horned progeny if the horn gene is also present in the cow. The test is a very useful tool for those herds who wish to genetically dehorn progeny. Generally, strong poll herds do not need to focus on the gene due to the dominance of the poll gene (P) to the horn gene (h).

WIRRUNA GUARANTEE

Many seedstock producers guarantee their bulls. **Wirruna** offers a unique Bull Guarantee as it also helps to cover the client's risk of a bull not siring a satisfactory number of calves due to the fault of his own fertility.

Wirruna does everything we practically can to ensure a bull is fertile and removes bulls that are unfit to be mated. Given that no one can absolutely guarantee a bulls' fertility, you do buy at your own risk. However, in an effort to share this risk, Wirruna offer this guarantee which is valid for the next mating only and annual testing is strongly recommended.

All bulls are independently examined for:

- *structural soundness,*
- *semen motility & morphology*
- *testicle size & conformation, and*
- *serving ability is observed*

What does Wirruna Guarantee?

1 Bull Infertility

If a tested Wirruna bull is unable to sire calves as a result of a failure of his own fertility during his first mating, we will either:

- replace him with an equivalent bull
- give credit towards future purchases
- refund the purchase price of the bull

Bull Sub-fertility

In the case of a sub-fertile bull not able to achieve an adequate number of pregnancies during his first mating we will either:

- offer a proportioned credit towards future purchases
- partly refund the purchase price of the bull

2 Compensation for lost pregnancies

Furthermore, we also compensate you for the pregnancies that the bull failed to get for you, by means of either:

- a credit towards future purchases
- a cash refund equal to the loss of pregnancies incurred by the owner

How does it work?

Let's assume that you mate your new $5,000 bull to his advised maximum mating load of 40 cows. If the cows are healthy, cycling and free of diseases capable of causing reproductive failure, you should expect 36 (90% for cows, 85% for heifers) of them to conceive over a 9 week joining period. Let's say that only 20 conceive and it can be independently confirmed by a registered veterinarian of a fertility problem in the bull not caused by injury or acquired disease. We will compensate the owner $100 per additional empty cow above that normally expected. Eg. (36-20) x $100 = $1,600, representing the commercial difference in value between the 16 empty cows and 16 pregnant ones. Furthermore, we give a credit or refund on the purchase price of the bull proportional to the missed and expected pregnancies. In this case, the owner will receive 16 of 36 (44%) of $5,000 = $2,222 plus the compensation of $1,600 = $3,822.

The infertile or sub-fertile bull is then to be sold on the vendor's behalf or delivered to a place mutually agreed upon by both parties.

What is your obligation?

This guarantee is not a replacement for good management. It is aimed at appropriately covering the performance of the bull where the cows are diligently managed to recognised industry standards. The bull owner has a duty to observe joining, monitor later cycling, pregnancy test and communicate any problems within 3 months of the bull being taken out of the cows, so as to quickly resolve problems and get on with the beef breeding business. Early pregnancy testing is essential good female management and detection of early surprises is a good loss mitigation measure.

Wirruna does their utmost to produce bulls that are valued by their new owner for their ability to lower their cost per pregnancy and to improve their herd's genetic worth. We believe that if we put your interests first, you will be a more satisfied client. This guarantee, amongst the best on offer in Australia, shares the financial risk within the vital first year of purchasing a bull and clearly demonstrates the confidence that we have in our bulls along with the commitment that we have to you after sale day.

The Locke Family.

Reference Sires - Outside AI

AI SIRE PERFORMANCE DATA

Sire Name	Animal Ident	CALVING EASE				GROWTH & MATERNAL					FERTILITY		CARCASE DATA EBV's							SINDEX VALUE				Lot Nos
		Calv Ease Dir	Calv Ease Mat	GL Days	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mature Weight	Genetic Milk	Scrotal Size EBV	Days to Calving	CWT (kg)	EMA (sq cm)	Rib Fat (mm)	P8 Fat (mm)	RBY (%)	IMF (%)	Trial Docility	SSR	NSR	SBM	NBT	
CHURCHILL STUD 3134A (IMP USA)	OSA43377074AHR	+3.6	+6.5	+2.2	+4.0	+41	+71	+97	+54	+24	+3.3	-4.1	+64.0	+8.9	+3.0	+1.6	+1.1	+1.7	-33	+$211	+$193	+$210	+$141	36,41
GLENTREVOR TRUST N909	HYAN909	+11.1	+10.2	-5.1	+1.6	+42	+72	+93	+71	+22	+3.3	-3.6	+70.0	+4.1	+1.1	+1.2	+0.6	+1.4	+9	+$197	+$187	+$223	+$163	1,4,15,71
LIMEHILLS STARTER 160062	OSA0677160062NZHB	+3.6	+5.6	-3.6	+4.1	+44	+79	+114	+98	+15	+2.2	-2.9	+86.0	+6.0	+1.2	+1.3	+1.1	+0.7	+3	+$205	+$191	+$210	+$149	12
NJW 79Z Z311 ENDURE 173D	OSA43722088AHR	+5.4	+7.7	+7.5	+3.9	+48	+86	+108	+70	+25	+3.0	-5.9	+73.0	+8.9	+2.5	+1.6	+1.4	+1.6	+18	+$239	+$224	+$239	+$164	34,39,44,60
TARCOMBE CADBURY P181	THSP181	+3.3	+6.5	-2.3	+6.2	+54	+94	+124	+104	+20	+4.8	-3.9	+94.0	+8.2	+0.0	+0.0	+2.8	+1.2	+16	+$237	+$226	+$240	+$172	10,11,13,16,33,40
YAVENVALE JUKE J022	YAVJ022	-2.3	+6.2	-1.8	+6.6	+49	+79	+116	+101	+19	+1.6	+0.1	+67.0	+2.4	-0.1	-0.7	-0.1	+3.2	+7	+$175	+$143	+$178	+$130	72,73

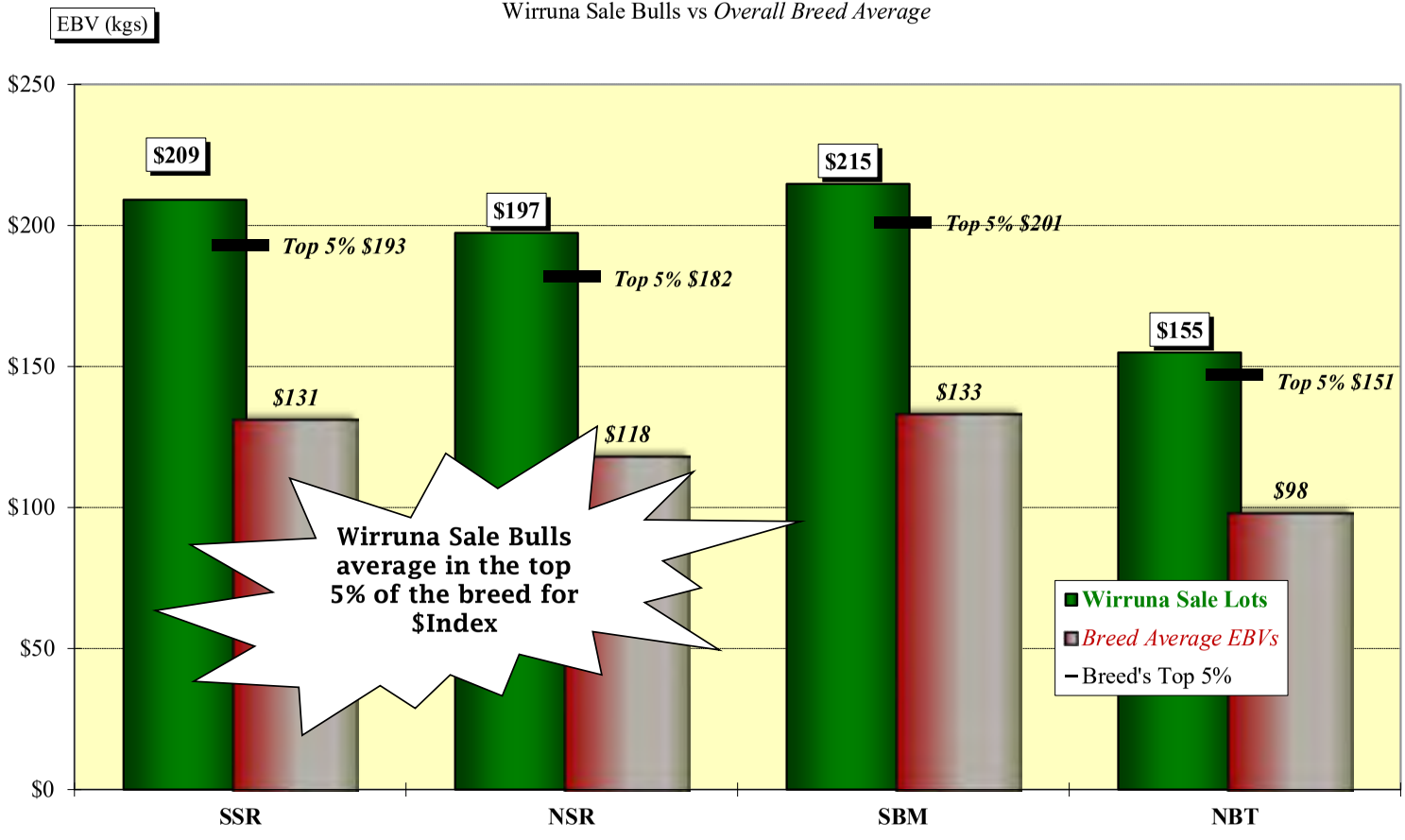
Reference Sires - WPHS

PADDOCK SIRE PERFORMANCE DATA

Sire Name	Animal Ident	BIRTH EBV's				GROWTH EBV's					FERTILITY		CARCASE DATA EBV's							SINDEX VALUE				Lot Nos
		Calv Ease Dir	Calv Ease Mat	GL Days	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mature Weight	Genetic Milk	Scrotal Size EBV	Days to Calving	CWT (kg)	EMA (sq cm)	Rib Fat (mm)	P8 Fat (mm)	RBY (%)	IMF (%)	Trial Docility	SSR	NSR	SBM	NBT	
WIRRUNA FLETCHER F214	WNAF214	+8.4	+10.0	-6.8	+4.4	+47	+72	+93	+56	+22	+1.8	-7.3	+67.0	+5.8	+0.1	-1.9	+1.4	+2.4	-1	+$232	+$207	+$233	+$158	53,57,61,74
WIRRUNA KALIMNA K326	WNAK326	+11.7	+6.2	-4.9	+0.5	+40	+65	+79	+39	+26	+4.7	-7.1	+65.0	+4.4	+2.8	+3.5	-0.1	+2.1	-5	+$205	+$198	+$219	+$158	2
WIRRUNA LEDGER L285	WNAL285	+4.3	+2.6	-2.1	+3.7	+48	+79	+101	+73	+19	+4.4	-4.9	+80.0	+6.2	+1.5	+2.0	+0.8	+1.2	+13	+$203	+$194	+$203	+$145	3
WIRRUNA NIXON N168	WNAN168	-1.2	-1.1	+1.4	+4.8	+45	+76	+98	+69	+15	+3.9	-3.6	+67.0	+5.0	+2.2	+3.3	-0.6	+2.3	+11	+$179	+$167	+$168	+$119	20,37,46,77
WIRRUNA NAPIER N216	WNAN216	+6.7	+9.8	-2.6	+4.3	+34	+69	+88	+69	+19	+3.1	-5.0	+65.0	+9.6	+1.6	+1.4	+1.3	+3.3	-15	+$213	+$203	+$219	+$158	7
WIRRUNA PRIZE FIGHTER P041	WNAP041	+11.1	+1.0	-6.3	+1.7	+30	+56	+70	+55	+14	+2.7	-8.2	+61.0	+7.1	+2.1	+3.6	+1.6	+0.4	+17	+$180	+$185	+$187	+$141	65,76
WIRRUNA PAPA P149	WNAP149	+7.5	+7.2	-4.5	+5.0	+37	+71	+97	+80	+20	+3.3	-3.5	+69.0	+6.5	+0.9	+1.3	+2.7	+1.0	+12	+$205	+$199	+$219	+$159	28,32,42,47,48
WIRRUNA PROMISE P239	WNAP239	+6.2	+0.9	-0.2	+1.9	+42	+77	+103	+70	+24	+6.5	-6.0	+75.0	+5.0	+1.6	+2.2	+0.1	+2.6	+10	+$219	+$204	+$220	+$163	8,9,23,26
WIRRUNA QUAN Q001	WNAQ001	+5.9	+10.2	-8.1	+6.7	+49	+76	+109	+81	+23	+1.2	-6.1	+79.0	+7.8	+0.5	-0.5	+3.0	+1.4	-10	+$240	+$221	+$241	+$165	38,50
WIRRUNA QUEENSCLIFF Q027	WNAQ027	-0.4	+5.4	-1.7	+4.7	+50	+91	+126	+115	+27	+3.2	-6.3	+91.0	+7.8	+1.0	+1.0	+1.9	+1.2	+9	+$222	+$203	+$215	+$155	18,25,45,49,69
WIRRUNA QANTAS Q036	WNAQ036	+10.4	+4.3	-8.7	+3.2	+49	+82	+114	+81	+25	+6.2	-6.6	+87.0	+5.0	+2.4	+3.4	-0.2	+3.1	-12	+$248	+$234	+$260	+$194	14,17,19,35,54,55,56,58,62,68
WIRRUNA QAJEER Q071	WNAQ071	+10.6	+7.3	-5.4	+0.7	+34	+59	+75	+50	+21	+5.2	-5.9	+58.0	+2.7	+1.7	+2.0	-0.2	+1.5	+12	+$177	+$168	+$193	+$140	27,75
WIRRUNA QUALITY Q100	WNAQ100	+8.9	+6.3	-5.6	+5.1	+48	+79	+110	+89	+20	+3.0	-3.8	+72.0	+5.3	+1.6	+2.0	+0.3	+3.1	+6	+$226	+$212	+$241	+$181	22,29
WIRRUNA QUAY Q118	WNAQ118	+4.9	+0.2	-5.0	+4.7	+44	+81	+110	+103	+17	+5.8	-6.2	+77.0	+5.1	+1.7	+2.6	+0.1	+2.1	+21	+$204	+$193	+$204	+$157	31,52,78
WIRRUNA QUAMBONE Q135	WNAQ135	+9.5	+7.4	-2.9	+3.2	+43	+80	+107	+67	+29	+2.1	-5.3	+85.0	+7.5	+2.0	+2.0	+0.9	+3.0	+8	+$248	+$228	+$259	+$187	59,64,67
WIRRUNA QUERIDO Q266	WNAQ266	+8.1	+2.6	+0.5	+4.3	+49	+78	+104	+54	+22	+2.8	-4.7	+72.0	+7.2	+2.3	+2.1	-0.5	+4.0	+7	+$242	+$219	+$245	+$177	63
WIRRUNA QUARTERBACK Q281	WNAQ281	+9.8	+2.3	-3.9	+4.0	+42	+86	+115	+85	+18	+6.7	-5.7	+80.0	+5.8	+1.4	+1.9	+1.1	+1.7	+8	+$243	+$231	+$252	+$185	21,30,66
Breed Ave. '20 drop		*+2.5*	*+2.1*	*-0.7*	*+3.9*	*+33*	*+55*	*+77*	*+65*	*+17*	*+2.1*	*-3.0*	*+51*	*+3.8*	*+0.8*	*+1.0*	*+0.8*	*+0.6*	*+3*	*$131*	*$118*	*$133*	*$98*	
Top 20% of breed '20 drop		**+7.0**	**+6.0**	**-2.0**	**+2.1**	**+38**	**+64**	**+91**	**+63**	**+21**	**+2.0**	**-4.3**	**+81**	**+4.8**	**+1.4**	**+1.9**	**+1.4**	**+1.1**	**+10**	**$162**	**$150**	**$166**	**$122**	Yellow Highlight: top 20%
Top 5% of breed '20 drop		**+10.4**	**+7.3**	**-4.1**	**+0.1**	**+44**	**+74**	**+105**	**+90**	**+28**	**+3.0**	**-5.5**	**+70**	**+6.2**	**+2.1**	**+2.9**	**+2.0**	**+1.7**	**+17**	**$188**	**$182**	**$201**	**$147**	Black Highlight: top 5%

COMPARISON OF $INDEX VALUES

Wirruna Sale Bulls vs *Overall Breed Average*



Lot 1 — WIRRUNA ROMEO R084 (AI) — R084

Pen No. 5 (Wirruna Sires)

Birth Date: 5-Aug-20
Society ID: WNAR084
Horn/Scurs/Poll: P

- ☑ A stylish curve-bending sire by Glentrevor Trust N909
- ☑ He carries exceptional growth (top 5%) from a strong calving ease base
- ☑ A high libido sire with 18 progeny at Wirruna - a proven performer over heifers
- ☑ He features excellent structure, docility, proven fertility & top 5% $Indices

50% Semen rights retained

NJW 73S M326 TRUST 100W
ELITE TRUST K215
ELITE RUTH 0219 D163

Sire: **GLENTREVOR TRUST N909 (HYAN909)**

SOUTH BUKALONG WALLACE 2
GLENTREVOR SIRIKIT J504
GLENTREVOR SIRIKIT F252

Easy-calve

ALLENDALE ANZAC E114
WIRRUNA MATTY M288
WIRRUNA CIRCLE H13

Dam: **WIRRUNA GOLDEN VANITY P412 (WNAP412)**

MOUNT DIFFICULT CADBURY
WIRRUNA GOLDEN VANITY M156
WIRRUNA GOLDEN VANITY J342

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+6.7	**+7.9**	**-5.6**	+3.2	**+48**	**+80**	**+109**	**+98**	+18
63%	*43%*	*76%*	*85%*	*76%*	*73%*	*74%*	*66%*	*52%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+3.0	-2.5	**+80**	+3.9	+0.6	+0.6	+0.6	**+1.5**	**+15**
78%	*40%*	*60%*	*53%*	*57%*	*61%*	*54%*	*59%*	*53%*

STRUCTURAL ASSESSMENT *16-Dec-22*

Front	Back	Front	Back				Muscle Score	
6	*5*	*6*	*6*	*5*	*5*	*3*	C+	Temp. *1*

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	*18-Oct-22*	✓ *Vet.*	✓ *PM%*	**100/95**	*Homz*
$199	**$187**	**$216**	**$161**	*41*	✓ *Serv.*	*NM%*	*4*	**PP**

Purchaser_____ Price _____

Lot 2 — WIRRUNA R105 (AI) — R105

Pen No. 5 (Wirruna Sires)

Birth Date: 5-Aug-20
Society ID: WNAR105
Horn/Scurs/Poll: P

- ☑ Recently nominated as a HAL Super Sire - a proven sire
- ☑ Highest sire in the breed for SSR $Index out of a highly respected dam
- ☑ I love his trait balance of CE, growth, high fertility, B- muscle & marbling
- ☑ A first choice Wirruna sire for near perfect feet & outstanding phenotype

'Star Lot', 50% Semen rights retained

WIRRUNA EXPLORER E188
WIRRUNA HARTWIG H297
WIRRUNA MIDGE A51

Sire: **WIRRUNA KALIMNA K326 (WNAK326)**

ARDO HUSTLER 4110 (IMP)
WIRRUNA CORA H303
WIRRUNA CORA D9

Easy-calve

QUAMBY PLAINS STOCKMASTER Y118
WIRRUNA FLETCHER F214
WIRRUNA LAST DAY B16 (H)

Dam: **WIRRUNA GOLDEN VANITY N085 (WNAN085)**

WIRRUNA JAVA J80
WIRRUNA GOLDEN VANITY L453
WIRRUNA GOLDEN VANITY H139

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+8.6	**+7.5**	**-4.9**	+3.9	**+46**	**+77**	**+99**	+57	+18
58%	*49%*	*76%*	*79%*	*73%*	*72%*	*73%*	*69%*	*63%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+3.6	**-8.3**	**+75**	**+6.1**	**+2.5**	**+2.6**	+0.8	**+2.5**	+8
78%	*51%*	*65%*	*61%*	*63%*	*65%*	*58%*	*64%*	*58%*

STRUCTURAL ASSESSMENT								*16-Dec-22*
Front	Back	Front	Back				Muscle Score	
5	*5*	*6*	*7*	*4*	*5*	*4*	**B-**	Temp. *1*

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	*18-Oct-22*	*Vet.*	*PM%*	**100/100**	*Homz*
$257	**$247**	**$252**	**$171**	*40*	*Serv.*	*NM%*	*4*	**PP**

Purchaser_____ Price _____

Lot 3 **WIRRUNA RYAN R121 (AI)** **R121**

Pen No. 5 (Wirruna Sires)

Birth Date: 6-Aug-20
Society ID: WNAR121
Horn/Scurs/Poll: P

- ☑ A proven Wirruna sire with top-end muscle & marbling scans
- ☑ This culminates in the valuable trait combination of top 5% EMA & IMF%
- ☑ He offers top 3% early growth traits, without compromising the CE traits
- ☑ Will boost growth, carcase performance & profit potential (top 1% $Index)

ALLENDALE YACKA
ALLENDALE ANZAC E114
ALLENDALE DAWN B22 (AI) (ET)

Sire: **WIRRUNA LEDGER L285 (WNAL285)**

GH ADAMS TARGET 5S (IMP)
WIRRUNA DOREEN G115
WIRRUNA DOREEN A37

Easy-calve

QUAMBY PLAINS STOCKMASTER Y118
WIRRUNA FLETCHER F214
WIRRUNA LAST DAY B16 (H)

Dam: **WIRRUNA CIRCLE N057 (WNAN057)**

ELITE 4110 E212
WIRRUNA CIRCLE L81
WIRRUNA CIRCLE F31

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+8.6	**+6.8**	**-5.1**	+3.6	**+48**	**+82**	**+110**	**+86**	**+21**
60%	*48%*	*76%*	*86%*	*76%*	*73%*	*74%*	*68%*	*60%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+3.3	**-4.7**	**+81**	**+6.5**	+0.8	+0.4	+1.3	**+2.3**	**+14**
78%	*47%*	*60%*	*55%*	*57%*	*61%*	*55%*	*59%*	*57%*

STRUCTURAL ASSESSMENT								16-Dec-22
Front 6	Back 6	Front 6	Back 6	5	6	4	Muscle Score C+	Temp. 2

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	18-Oct-22	✓ Vet.	✓ PM%	100/100	Homz
$233	**$217**	**$244**	**$180**	42	✓ Serv.	NM%	4	**PP**

Purchaser_____ Price _____

Lot 4 — WIRRUNA RODNEY R133 (AI) — R133

Pen No. 5 (Wirruna Sires)

Birth Date: 6-Aug-20
Society ID: WNAR133
Horn/Scurs/Poll: P

- ☑ A long-bodied Trust son with docile nature & sound structure
- ☑ Out of a top female, chosen for donor duties with 17 progeny
- ☑ Proven calving ease over heifers at Wirruna - progeny exhibit good growth
- ☑ Amoung the breed's highest rated bulls for $Index values - The Profit EBV!

'Star Lot', 50% Semen rights retained

NJW 73S M326 TRUST 100W
ELITE TRUST K215
ELITE RUTH 0219 D163

Sire: **GLENTREVOR TRUST N909 (HYAN909)**

SOUTH BUKALONG WALLACE 2
GLENTREVOR SIRIKIT J504
GLENTREVOR SIRIKIT F252

Easy-calve

WIRRUNA HARTWIG H297
WIRRUNA KALIMNA K326
WIRRUNA CORA H303

Dam: **WIRRUNA MADAM P012 (WNAP012)**

ALLENDALE ANZAC E114
WIRRUNA MADAM L78
WIRRUNA MADAM E325

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+8.7	**+8.1**	**-5.4**	+3.2	**+46**	**+84**	**+114**	**+89**	+17
58%	*41%*	*76%*	*81%*	*74%*	*72%*	*73%*	*65%*	*52%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+3.7	-3.5	**+82**	+3.7	+1.3	+1.4	+0.4	**+1.9**	**+10**
78%	*41%*	*60%*	*54%*	*57%*	*60%*	*54%*	*59%*	*54%*

STRUCTURAL ASSESSMENT								16-Dec-22
Front 6	Back 6	Front 6	Back 5	4	5	4	Muscle Score C+	Temp. 1

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	18-Oct-22	Vet.	PM%	100/100	Homz
$232	**$218**	**$247**	**$178**	43	Serv.	NM% 4		**PP**

Purchaser_____ Price _____

Lot 5 — WIRRUNA ROSS R186 — R186

Pen No. 5 (Wirruna Sires)

Birth Date: 7-Aug-20
Society ID: WNAR186
Horn/Scurs/Poll: P

- ☑ Long & well-fleshed Wirruna sire with soft skin & hair
- ☑ Amoung the better weight gainers in his cohort - top 5% early growth
- ☑ Largest testicles & highest fertility credentials (top 1% SS & DtC EBVs)
- ☑ A genetic dehorner with top 1% $Index for maternal programs

NB. Slight swelling in left hock, + old pink-eye scar (RHS)

OTAPAWA SPARK 3060 (IMP)
WIRRUNA LINDLEY L477
WIRRUNA MABEL F127

Sire: **WIRRUNA PALLETABULL P611 (WNAP611)**

MOUNT DIFFICULT CADBURY
WIRRUNA CORA J8
WIRRUNA CORA G67

QUAMBY PLAINS STOCKMASTER Y118
WIRRUNA FLETCHER F214
WIRRUNA LAST DAY B16 (H)

Dam: **WIRRUNA LAST DAY N050 (WNAN050)**

WIRRUNA HERNANDO H47
WIRRUNA LAST DAY L240
WIRRUNA LAST DAY J70

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+5.8	**+7.5**	**-6.1**	+5.4	**+45**	**+76**	**+99**	+79	+14
54%	*39%*	*63%*	*86%*	*74%*	*70%*	*72%*	*65%*	*53%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+6.6	**-8.0**	**+66**	**+6.4**	+0.7	+0.4	**+1.8**	**+1.6**	+8
76%	*40%*	*57%*	*50%*	*54%*	*58%*	*51%*	*55%*	*46%*

STRUCTURAL ASSESSMENT								16-Dec-22
Front 6	Back 5	Front 5	Back 5	4	6	5	Muscle Score C+	Temp. 1

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	21-Jun-22	✓ Vet.	✓ PM%	100/100	Homz
$229	$221	$222	$154	42	✓ Serv.	NM%	4	PP

Purchaser_____ Price _____

Lot 6 — WIRRUNA REDGATE R203 (ET) — R203

Pen No. 5 (Wirruna Sires)

Birth Date: 9-Aug-20
Society ID: WNAR203
Horn/Scurs/Poll: P

- ☑ A classy & well-muscled Lennox son out of the great G7
- ☑ Offers plenty of growth - top 5% for 200D, 400D & CWT EBVs
- ☑ A B- muscle pattern supported by top-end EMA & RBY% EBVs
- ☑ Used at Wirruna to capture his standout phenotype & top 1% fertility genes

'Star Lot', 50% Semen rights retained

STUDBROOK D'ARTAGNION V086 (AI) (ET)
OTAPAWA SPARK 3060 (IMP)
OTAPAWA SPOT P30

Sire: **TOBRUK LENNOX (DRHL13)**

MOUNT DIFFICULT FELLIS Y12 (AI)
Pine Hill MARITANA A619
Pine Hill Maritana W575

MOUNT DIFFICULT FELLIS Y12 (AI)
WIRRUNA DAFFY D1
MOUNT DIFFICULT LAST DAY A205

Dam: **WIRRUNA VICTORIA G7 (WNAG7)**

ALLENDALE NATIONAL W168
WIRRUNA VICTORIA E112
SOUTH BUKALONG VICTORIA 202

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+5.3	**+6.2**	-1.5	+5.0	**+47**	**+78**	**+100**	+81	+13
63%	*52%*	*70%*	*87%*	*78%*	*76%*	*77%*	*71%*	*64%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+4.9	**-6.9**	**+77**	**+6.8**	+1.2	+1.8	**+2.1**	+0.7	-1
79%	*49%*	*64%*	*58%*	*61%*	*64%*	*59%*	*63%*	*61%*

STRUCTURAL ASSESSMENT								16-Dec-22
Front	Back	Front	Back				Muscle Score	
6	*5*	*6*	*6*	*5*	*5*	*5*	**B-**	Temp. *1*

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	18-Oct-22	✓ Vet.	✓ PM%	100/100	*Homz*
$222	**$222**	**$217**	**$151**	*42*	✓ Serv.	NM%	*4*	**PP**

Purchaser_____ Price _____

Lot 7 — WIRRUNA ROCKEFELLER R355 — R355

Pen No. 5 (Wirruna Sires)

Birth Date: 20-Aug-20
Society ID: WNAR355
Horn/Scurs/Poll: P

- ☑ A HAL Super Sire used over heifers at Wirruna - 17 progeny
- ☑ One of the highest scans for IMF% & EMA - excellent carcase improving EBVs
- ☑ Consider his combination of top 1% muscle & marbling for high MSA Index
- ☑ Large testicles - proven fertility results with 3 joinings completed at Wirruna

'Star Lot', 50% Semen rights retained

WIRRUNA FLETCHER F214
WIRRUNA KATNOOK K74
WIRRUNA VICTORIA G7

Sire: **WIRRUNA NAPIER N216 (WNAN216)**

NJW 73S M326 TRUST 100W
WIRRUNA MABEL K428
WIRRUNA MABEL F127

WIRRUNA EXPLORER E188
WIRRUNA HARTWIG H297
WIRRUNA MIDGE A51

Dam: **WIRRUNA GOLDEN VANITY K537 (WNAK537)**

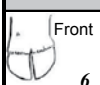
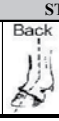
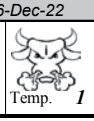
WIRRUNA FREDDIE F381
WIRRUNA GOLDEN VANITY H315
WIRRUNA GOLDEN VANITY E401

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+1.5	**+5.4**	**-3.7**	+2.6	+36	**+69**	+85	+67	+19
61%	*42%*	*62%*	*85%*	*74%*	*72%*	*73%*	*66%*	*58%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+3.6	**-4.9**	**+67**	**+8.1**	**+2.3**	**+3.0**	+0.1	**+3.1**	-14
77%	*44%*	*58%*	*51%*	*56%*	*60%*	*53%*	*57%*	*53%*

STRUCTURAL ASSESSMENT								16-Dec-22
 Front 6	 Back 6	 Front 6	 Back 6	 5	 5	 4	Muscle Score **C+**	 Temp. 1

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	18-Oct-22	Vet.	PM%	100/100	Homz
$183	**$176**	**$178**	**$130**	 39	Serv.	NM%	 4	**PP**

Purchaser_____ Price _____

Lot 8 **WIRRUNA RUSSELL R474** **R474**

Pen No. 5 (Wirruna Sires)

Birth Date: 29-Aug-20
Society ID: WNAR474
Horn/Scurs/Poll: P

- ☑ Nice phenotype - dark & soft coated sire used over heifers
- ☑ Very strong calving ease credentials - 19 progeny at Wirruna
- ☑ Carries high fertility (top 2%) & carcase quality traits (top 5% IMF%)
- ☑ Rates well for the structural attributes, good head carriage & tight sheath

WIRRUNA HARTWIG H297
WIRRUNA KALIMNA K326
WIRRUNA CORA H303

Sire: **WIRRUNA PROMISE P239 (WNAP239)**

WIRRUNA HERNANDO H47
WIRRUNA CIRCLE M183
WIRRUNA CIRCLE K95

Easy-calve

NITHDALE JACKAL 090029
ORARI GORGE MISCHIEF 120083
NITHDALE LESLIE 090020

Dam: **WIRRUNA CORA N159 (WNAN159)**

WIRRUNA HOT STUFF H356
WIRRUNA CORA L487
CO-OP5 CORA G332

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+12.7	+3.2	**-2.5**	**-0.7**	+32	+59	+71	+43	+18
57%	*41%*	*68%*	*85%*	*75%*	*72%*	*73%*	*66%*	*54%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+4.2	**-7.2**	**+61**	+4.6	**+1.9**	**+2.9**	+0.1	**+1.7**	-3
78%	*41%*	*59%*	*52%*	*56%*	*59%*	*53%*	*57%*	*53%*

STRUCTURAL ASSESSMENT								*16-Dec-22*
Front *6*	Back *5*	Front *5*	Back *6*	*5*	*5*	*4*	Muscle Score **C+**	Temp. *1*

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	*18-Oct-22*	✓ *Vet.*	✓ *PM%*	**100/100**	*Homz*
$185	**$183**	**$200**	**$152**	*41*	✓ *Serv.*	✓ *NM%*	*4*	**PP**

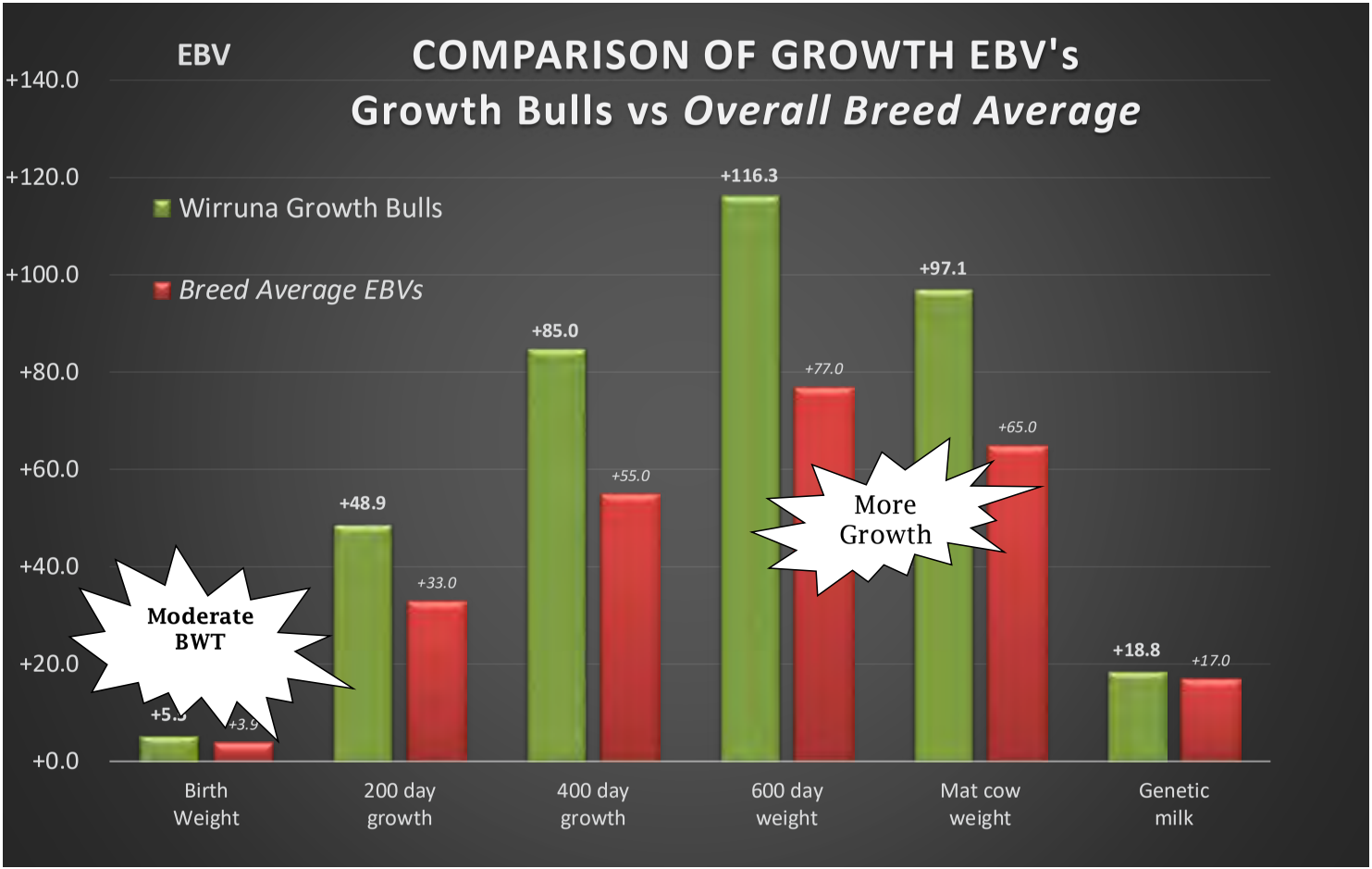
Purchaser_____ Price _____


Lot 1


Lot 2


Lot 6


Lot 7


EBV
COMPARISON OF GROWTH EBV's
Growth Bulls vs Overall Breed Average
+140.0
+120.0
+100.0
+80.0
+60.0
+40.0
+20.0
+0.0
Wirruna Growth Bulls
Breed Average EBVs
+5.9
+3.9
+48.9
+33.0
+85.0
+55.0
+116.3
+77.0
+97.1
+65.0
+18.8
+17.0
Moderate BWT
More Growth
Birth Weight
200 day growth
400 day growth
600 day weight
Mat cow weight
Genetic milk

Lot 9 — WIRRUNA SUNTOP S053 (TW) — S053

Pen No. 7 (Growth Bulls)

Birth Date: 1-Aug-21
Society ID: WNAS053
Horn/Scurs/Poll: P

- ☑ A long bodied bull with natural growth & soundness
- ☑ Born light (as a twin) - impressive birth weight to lifetime growth performance
- ☑ Amoung the heaviest bulls at weaning - top 2% ranking for the weight traits
- ☑ A genetic dehorner with top 5% $Indices indicating good profit potential

Twin

WIRRUNA HARTWIG H297
WIRRUNA KALIMNA K326
WIRRUNA CORA H303

Sire: **WIRRUNA PROMISE P239 (WNAP239)**

WIRRUNA HERNANDO H47
WIRRUNA CIRCLE M183
WIRRUNA CIRCLE K95

Easy-calve

SOUTH BUKALONG WALLACE 2
WIRRUNA JAFFA J55
WIRRUNA VICTORIA G92

Dam: **WIRRUNA MADAM L331 (WNAL331)**

WIRRUNA GLENHOPE G117
WIRRUNA MADAM J269
WIRRUNA MADAM F68

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+5.3	+4.7	**-3.5**	+4.3	**+50**	**+84**	**+116**	**+100**	**+22**
46%	*36%*	*67%*	*73%*	*69%*	*69%*	*69%*	*63%*	*55%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+4.1	-3.5	**+82**	+2.1	+0.4	+0.4	+0.6	**+1.3**	+2
76%	*42%*	*58%*	*52%*	*57%*	*60%*	*52%*	*58%*	*55%*

STRUCTURAL ASSESSMENT								6-Dec-22
Front 6	Back 5	Front 6	Back 5	5	5	5	Muscle Score C+	Temp. 2

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22	✓ Vet.	✓ PM%	100/100	Homz
$203	**$184**	**$215**	**$160**	39	✓ Serv.	NM%	4	**PP**

Purchaser_____ Price _____

Lot 10 — WIRRUNA STEFAN S081 (AI) — S081

Pen No. 7 (Growth Bulls)

Birth Date: 4-Aug-21
Society ID: WNAS081
Horn/Scurs/Poll: S

- ☑ T Cadbury son with nice-barrelled body & good head carriage
- ☑ A little extra birthweight & growth genes, without compromising calving ease
- ☑ Combines that rare combination of top 5% yield & marbling traits
- ☑ Highest bull in the catalogue for crossbreeding $Indices, 200D growth & CWT EBVs

'Star Lot'

KOANUI ROCKET 0219
MOUNT DIFFICULT CADBURY
MOUNT DIFFICULT MONIQUE V65

Sire: **TARCOMBE CADBURY P181 (THSP181)**

RIVER PERRY FERGUS
TARCOMBE DOWAGER M205
TARCOMBE DOWAGER J189

WIRRUNA KALIMNA K326
WIRRUNA NOEL N049
WIRRUNA CIRCE L192

Dam: **WIRRUNA LAST DAY Q247 (WNAQ247)**

KCF BENNETT REVOLUTION X51
WIRRUNA LAST DAY M423
WIRRUNA LAST DAY G63

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+5.9	**+5.7**	**-3.0**	+6.6	**+54**	**+95**	**+127**	**+99**	**+23**
43%	*33%*	*74%*	*72%*	*66%*	*66%*	*66%*	*58%*	*50%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+3.6	-3.5	**+93**	**+8.2**	+0.4	+0.0	**+2.5**	**+1.9**	+3
76%	*37%*	*54%*	*49%*	*53%*	*57%*	*50%*	*54%*	*48%*

STRUCTURAL ASSESSMENT 6-Dec-22								
Front 7	Back 6	Front 6	Back 6	5	6	4	Muscle Score C+	Temp. 1

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22 37	✓ Vet. ✓ Serv.	✓ PM% NM%	100/100 4	Hetz Ph
$250	$232	$258	$188					

Purchaser_____ Price _____

Lot 11 — WIRRUNA STRATTON S090 (AI) — S090

Pen No. 7 (Growth Bulls)

Birth Date: 4-Aug-21
Society ID: WNAS090
Horn/Scurs/Poll: P

- ☑ An extra-long Cadbury son displaying growth & muscle
- ☑ Amoung the highest average daily gainer bulls in the draft- top 1% growth traits
- ☑ Also benefits from high fertility & top 1% CWT, top 5% EMA for valuable carcases
- ☑ Overall balance of favourable traits achieving top 1% ranking for all 4 $Indices

KOANUI ROCKET 0219
MOUNT DIFFICULT CADBURY
MOUNT DIFFICULT MONIQUE V65

Sire: **TARCOMBE CADBURY P181 (THSP181)**

RIVER PERRY FERGUS
TARCOMBE DOWAGER M205
TARCOMBE DOWAGER J189

WIRRUNA JUSTIN J13
WIRRUNA MALCOLM M154
WIRRUNA MADAM J74

Dam: **WIRRUNA VICTORIA P547 (WNAP547)**

WIRRUNA FORT F382
WIRRUNA VICTORIA M036
WIRRUNA VICTORIA K416

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+0.0	**+6.2**	**-4.4**	+7.5	**+54**	**+95**	**+126**	**+101**	**+23**
43%	*33%*	*74%*	*71%*	*66%*	*65%*	*65%*	*57%*	*50%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+5.7	**-5.7**	**+84**	**+6.6**	+1.2	+1.6	**+1.6**	**+1.5**	+8
76%	*38%*	*53%*	*49%*	*52%*	*57%*	*50%*	*53%*	*48%*

STRUCTURAL ASSESSMENT								6-Dec-22
Front 7	Back 7	Front 6	Back 7	5	5	4	Muscle Score C+	Temp. 1

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22 42	✓ Vet. ✓ Serv.	✓ PM% NM%	100/100 4	Homz PP
$235	**$217**	**$225**	**$155**					

Purchaser_____ Price _____

Lot 12 — WIRRUNA STURT S122 (AI) — S122

Pen No. 7 (Growth Bulls)

Birth Date: 5-Aug-21
Society ID: WNAS122
Horn/Scurs/Poll: P

- ☑ A long & proud bull with dark-red coat & well pigmented eyes
- ☑ Weight comes in length & capacity - early growth traits rate in top 10% of breed
- ☑ Boost progeny carcase performance with top 5% CWT, EMA & RBY%
- ☑ High scan for fat traits reveals his obvious softness & finishing ability

LIMEHILLS STAMPER 110429
LIMEHILLS STAMPER 140064
LIMEHILLS LEONORA 749
Sire: **LIMEHILLS STARTER 160062 (OSA0677160062NZHB)**
OKAWA ELECTRA 1117
LIMEHILLS BEAUTY 140225
LIMEHILLS BEAUTY 110483

ALLENDALE ANZAC E114
WIRRUNA LEDGER L285
WIRRUNA DOREEN G115
Dam: **WIRRUNA GOLDEN VANITY N466 (WNAN466)**
WIRRUNA HURRICANE H132
WIRRUNA GOLDEN VANITY K227
WIRRUNA GOLDEN VANITY H53

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+3.0	+2.7	**-3.4**	+4.5	**+44**	**+70**	**+96**	+75	+14
51%	*41%*	*76%*	*74%*	*69%*	*69%*	*70%*	*64%*	*58%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+2.9	-4.0	**+74**	**+7.4**	+1.3	+1.7	**+2.5**	+0.1	+6
78%	*39%*	*58%*	*53%*	*57%*	*61%*	*55%*	*58%*	*54%*

STRUCTURAL ASSESSMENT								6-Dec-22
Front 6	Back 6	Front 5	Back 6	5	5	4	Muscle Score C+	Temp. 2

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22	Vet.	PM%	100/100	Homz
$193	$190	$190	$133	40	Serv.	NM%	4	PP

Purchaser_____ Price _____

Lot 13 — WIRRUNA SCOTT S132 (AI) — S132

Pen No. 7 (Growth Bulls)

Birth Date: 6-Aug-21
Society ID: WNAS132
Horn/Scurs/Poll: P

- ☑ These Cadbury sons offer growth & frame
- ☑ Top 5% early growth EBVs without poor CE traits or driving cow maintenance cost
- ☑ Excellent fertility attributes - large testicle size, top 5% DtC & SS EBVs
- ☑ Carries strong milk, is homozygous polled & good temperament

KOANUI ROCKET 0219
MOUNT DIFFICULT CADBURY
MOUNT DIFFICULT MONIQUE V65

Sire: **TARCOMBE CADBURY P181 (THSP181)**

RIVER PERRY FERGUS
TARCOMBE DOWAGER M205
TARCOMBE DOWAGER J189

ALLENDALE ANZAC E114
WIRRUNA LEDGER L285
WIRRUNA DOREEN G115

Dam: **WIRRUNA GOLDEN VANITY P331 (WNAP331)**

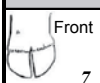
WIRRUNA FORT F382
WIRRUNA GOLDEN VANITY J329
WIRRUNA GOLDEN VANITY E453 (

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+3.9	+4.9	-0.7	+5.2	**+47**	**+78**	**+103**	**+84**	**+23**
44%	*35%*	*75%*	*72%*	*67%*	*66%*	*66%*	*59%*	*52%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+4.9	**-5.7**	**+73**	+4.1	+0.5	+0.8	+0.9	+0.8	**+15**
77%	*39%*	*54%*	*50%*	*54%*	*58%*	*51%*	*55%*	*50%*

STRUCTURAL ASSESSMENT								6-Dec-22
Front	Back	Front	Back				Muscle Score	
 7	 6	 6	 6	 5	 5	 4	C+	Temp. 1

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22	Vet.	PM%	100/100	Homz
$193	**$176**	**$194**	**$138**	 42	✓ Serv.	✓ NM%	 4	**PP**

Purchaser_____ Price _____

Lot 14 — WIRRUNA SETTLER S137 (AI) — S137

Pen No. 7 (Growth Bulls)

Birth Date: 5-Aug-21
Society ID: WNAS137
Horn/Scurs/Poll: P

- ☑ Qantas progeny are the stand-out calves of the cohort
- ☑ Top 1% growth & top 20% CE(Dir) boosts the profit arithmatic - top 1% $Indices
- ☑ Highest marbling scan of the cohort - combines top 1% IMF% with top 5% EMA
- ☑ I really like this fellow for his clean front-end, body depth & overall conformation

'Star Lot'

WIRRUNA HARTWIG H297
WIRRUNA KALIMNA K326
WIRRUNA CORA H303

Sire: **WIRRUNA QANTAS Q036 (WNAQ036)**

WIRRUNA KEITH K169
WIRRUNA LETITIA M367
WIRRUNA LETITIA J135

NJW 73S M326 TRUST 100W
WIRRUNA KIRLEY K368
WIRRUNA NADIA F44

Dam: **WIRRUNA MADAM M476 (WNAM476)**

INJEMIRA ADVANCE Y203 (H)
WIRRUNA MADAM K254
WIRRUNA MADAM F355

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+7.4	+4.2	-3.2	+6.3	+51	+87	+123	+95	+20
44%	*33%*	*73%*	*72%*	*67%*	*67%*	*67%*	*60%*	*53%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+5.1	-5.5	+85	+7.0	+2.0	+2.6	+0.8	+2.4	-14
66%	*38%*	*55%*	*49%*	*54%*	*57%*	*47%*	*55%*	*51%*

STRUCTURAL ASSESSMENT								6-Dec-22
Front 6	Back 6	Front 5	Back 6	4	5	3	Muscle Score C+	Temp. 2

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22 37	✓ Vet. ✓ Serv.	✓ PM% NM%	100/90 4	Homz PP
$252	$238	$257	$187					

Purchaser_____ Price _____

Lot 15 — WIRRUNA STUBBO S151 (AI) — S151

Pen No. 7 (Growth Bulls)

Birth Date: 7-Aug-21
Society ID: WNAS151
Horn/Scurs/Poll: P

- ☑ Lots of growth offered by the dark-red & fine-coated bull
- ☑ Top 1% growth & carcase weight EBVs - in a moderate frame!
- ☑ Note the positive CE - breaks the usual genetic correlations between BWT & CE
- ☑ High fertility helps to achieve $Index rankings in top 1% - the profit EBV

NJW 73S M326 TRUST 100W
ELITE TRUST K215
ELITE RUTH 0219 D163

Sire: **GLENTREVOR TRUST N909 (HYAN909)**

SOUTH BUKALONG WALLACE 2
GLENTREVOR SIRIKIT J504
GLENTREVOR SIRIKIT F252

LIMEHILLS STAMPER 140064
LIMEHILLS STARTER 160062
LIMEHILLS BEAUTY 140225

Dam: **WIRRUNA URSULA Q083 (WNAQ083)**

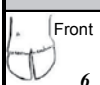
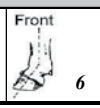
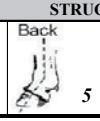
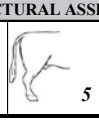
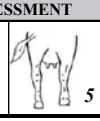
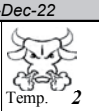
ALLENDALE ANZAC E114
WIRRUNA URSULA N151
WIRRUNA VICTORIA G92

BREEDPLAN COMPLETENESS

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+4.7	**+6.1**	**-2.5**	+7.2	**+54**	**+98**	**+135**	**+134**	+10
49%	*36%*	*76%*	*73%*	*69%*	*68%*	*69%*	*61%*	*50%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+5.0	**-5.1**	**+85**	+4.3	+1.1	+1.5	+0.2	**+1.3**	+9
78%	*37%*	*57%*	*52%*	*55%*	*59%*	*53%*	*58%*	*53%*

STRUCTURAL ASSESSMENT								6-Dec-22
 Front 6	 Back 6	 Front 6	 Back 5	 5	 5	 4	Muscle Score C+	 Temp. 2

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22	Vet.	PM%	95/100	Homz
$234	**$219**	**$237**	**$173**	 40	✓ Serv.	✓ NM%	 4	 PP

Purchaser_____ Price _____

Lot 16 — WIRRUNA SIAM S185 (AI) — S185

Pen No. 7 (Growth Bulls)

Birth Date: 8-Aug-21
Society ID: WNAS185
Horn/Scurs/Poll: P

- ☑ A nice deep-sided fellow with good head & neck extension
- ☑ Growth & carcase weight EBVs rated in the breed's top 1%
- ☑ Herd improving carcase attributes with high-end muscle & yield EBVs
- ☑ Across the board genetic strength - high EBVs across a range of economic traits

KOANUI ROCKET 0219
MOUNT DIFFICULT CADBURY
MOUNT DIFFICULT MONIQUE V65

Sire: **TARCOMBE CADBURY P181 (THSP181)**

RIVER PERRY FERGUS
TARCOMBE DOWAGER M205
TARCOMBE DOWAGER J189

OTAPAWA SPARK 3060 (IMP)
TOBRUK LENNOX
Pine Hill MARITANA A619

Dam: **WIRRUNA LAST DAY P246 (WNAP246)**

GH ADAMS TARGET 5S (IMP)
WIRRUNA LAST DAY G100
WIRRUNA LAST DAY B16 (H)

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+4.8	**+7.5**	**-2.8**	+5.9	**+51**	**+90**	**+118**	**+96**	+13
43%	*34%*	*75%*	*72%*	*66%*	*66%*	*66%*	*58%*	*51%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+3.9	**-4.3**	**+89**	**+8.8**	+0.3	+0.0	**+3.0**	+1.0	-2
76%	*37%*	*54%*	*49%*	*53%*	*57%*	*51%*	*54%*	*49%*

STRUCTURAL ASSESSMENT 6-Dec-22								
Front 7	Back 6	Front 7	Back 6	5	5	4	Muscle Score C+	Temp. 1

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22 37	✓ Vet. ✓ Serv.	✓ PM% NM%	100/100 4	Hetz Ph
$245	$237	$245	$172					

Purchaser_____ Price _____

Lot 17 — WIRRUNA SPORT S206 (AI) — S206

Pen No. 7 (Growth Bulls)

Birth Date: 8-Aug-21
Society ID: WNAS206
Horn/Scurs/Poll: P

- ☑ A high $Index Qantas son showing growth & butt-shape
- ☑ Growth EBVs are at the top-end of the catalogue & breed
- ☑ Also top-end carcase traits - top 1% CWT, top 5% EMA & IMF% EBVs
- ☑ Large testicle size (top 1% SS) are further supported by top 5% DtC EBV

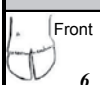
WIRRUNA HARTWIG H297
WIRRUNA KALIMNA K326
WIRRUNA CORA H303
Sire: **WIRRUNA QANTAS Q036 (WNAQ036)**
WIRRUNA KEITH K169
WIRRUNA LETITIA M367
WIRRUNA LETITIA J135

KOANUI UNANIMOUS 0408
KOANUI TECHNO 3062
KOANUI BLUSH 6455
Dam: **WIRRUNA VICTORIA Q365 (WNAQ365)**
WIRRUNA GABU G134
WIRRUNA VICTORIA J302
WIRRUNA VICTORIA G204 (H)

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+3.5	+2.4	**-4.9**	+7.2	**+54**	**+89**	**+128**	**+99**	**+23**
47%	*37%*	*74%*	*73%*	*67%*	*67%*	*67%*	*60%*	*53%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+5.4	**-5.8**	**+90**	**+6.6**	**+1.4**	+1.8	**+1.6**	**+1.9**	-3
76%	*40%*	*57%*	*52%*	*56%*	*59%*	*52%*	*57%*	*53%*

STRUCTURAL ASSESSMENT								6-Dec-22
 Front 6	 Back 6	 Front 7	 Back 7	 4	 5	 4	Muscle Score **C+**	 Temp. 2

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22	Vet.	PM%	100/100	Homz
$248	**$230**	**$244**	**$175**	 42	✓ Serv.	✓ NM%	 3	**PP**

Purchaser_____ Price _____

Lot 18 WIRRUNA SKIPTON S207 S207

Pen No. 7 (Growth Bulls)

Birth Date: 8-Aug-21
Society ID: WNAS207
Horn/Scurs/Poll: P

- ☑ Offers length of body & structural soundness
- ☑ Strong average daily weight gain performance from a moderate BWT
- ☑ 400D & 600D growth in breed top 1% for heavier carcases, sooner
- ☑ Also features top 10% milk, top 5% DtC & top 1% $Index values

KCF BENNETT 3008 M326
NJW 73S M326 TRUST 100W
NJW P606 72N DAYDREAM 73S

Sire: **WIRRUNA QUEENSCLIFF Q027 (WNAQ027)**

OTAPAWA SPARK 3060 (IMP)
WIRRUNA HYACINTH K9
WIRRUNA HYACINTH G256

NJW 73S M326 TRUST 100W
ELITE TRUST 4300 N124
ELITE SONGBIRD 3060 K51

Dam: **WIRRUNA UNDERTONE Q275 (WNAQ275)**

WIRRUNA GOONDIWINDI G391
WIRRUNA UNDERTONE J290
WIRRUNA UNDERTONE F19

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+5.5	**+7.0**	**-2.8**	+4.7	**+46**	**+97**	**+132**	**+136**	**+24**
43%	*34%*	*59%*	*72%*	*66%*	*66%*	*66%*	*59%*	*52%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+2.2	**-6.4**	**+89**	**+5.3**	+1.3	+1.7	+0.6	**+1.5**	+4
77%	*39%*	*54%*	*49%*	*54%*	*58%*	*51%*	*54%*	*47%*

STRUCTURAL ASSESSMENT								6-Dec-22
Front 6	Back 5	Front 5	Back 6	5	5	4	Muscle Score C+	Temp. 2

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22	Vet.	PM%	80/95	Homz
$230	**$209**	**$238**	**$180**	37	Serv.	NM%	4	**PP**

Purchaser_____ Price _____

Lot 19 WIRRUNA SLAM DUNK S279 S279

Pen No. 7 (Growth Bulls)

Birth Date: 13-Aug-21
Society ID: WNAS279
Horn/Scurs/Poll: S

- ☑ Good looking Qantas son showing capacity & fine hair-type
- ☑ Achieved excellent weight/day performance - top 1% growth EBVs
- ☑ All $Indices in the top 1% of the breed - lifting herd profit potential
- ☑ I appreciate his strong growth from a postive calving ease foundation

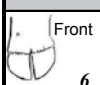
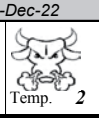
WIRRUNA HARTWIG H297
WIRRUNA KALIMNA K326
WIRRUNA CORA H303
Sire: **WIRRUNA QANTAS Q036 (WNAQ036)**
WIRRUNA KEITH K169
WIRRUNA LETITIA M367
WIRRUNA LETITIA J135

MOUNT DIFFICULT CADBURY
WIRRUNA MEARS M032
WIRRUNA FLORA J190
Dam: **WIRRUNA DOREEN P343 (WNAP343)**
WIRRUNA JUSTIN J13
WIRRUNA DOREEN M462
DUNOON DOREEN D118

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
+7.5	+5.1	-7.9	+5.4	+54	+87	+126	+118	+18
44%	*33%*	*64%*	*73%*	*67%*	*67%*	*67%*	*59%*	*52%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+5.0	-5.3	+87	+3.6	+1.2	+1.7	+0.2	+1.9	-9
77%	*40%*	*55%*	*50%*	*55%*	*58%*	*52%*	*55%*	*52%*

STRUCTURAL ASSESSMENT								6-Dec-22
 6	 6	 6	 7	 6	 5	 4	Muscle Score C+	 Temp. 2

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22	✓ Vet.	✓ PM%	95/100	Hetz
$230	$215	$241	$182	 37	✓ Serv.	✓ NM%	 3	Ph

Purchaser_____ Price _____

Lot 20 — WIRRUNA SPRINGBANK S284 (AI) — S284

Pen No. 7 (Growth Bulls)

Birth Date: 13-Aug-21
Society ID: WNAS284
Horn/Scurs/Poll: P

- ☑ A chip off the old block - long, growthy & mid-maturity
- ☑ Heaviest calf as a weaner - an attractive & easy-doing bull
- ☑ Top 5% ranking for 200D & 400D weights to boost early growth performance
- ☑ Strong maternal background - Dam is a stayer cow with 7 progeny

Sire: **WIRRUNA NIXON N168 (WNAN168)**

ALLENDALE YACKA
ALLENDALE ANZAC E114
ALLENDALE DAWN B22 (AI) (ET)

ELITE 4110 E212
WIRRUNA DIDO H45
WIRRUNA Dido F371

Dam: **WIRRUNA VICTORIA L274 (WNAL274)**

MATARIKI HOLY-SMOKE
WIRRUNA JACQUES J69
WIRRUNA PENELOPE E230

SOUTH BUKALONG SHANNON 40
WIRRUNA VICTORIA J339
WIRRUNA VICTORIA E156

BREEDPLAN COMPLETENESS ★★★★★

Dec 2022 GROUP BREEDPLAN EBV's

CALVING EASE EBVs				GROWTH & MATERNAL				
Calving Ease DIR (%)	Calving Ease DTRS (%)	Gestation Length (days)	Birth Weight	200-Day Growth	400-Day Weight	600-Day Weight	Mat Cow Weight	Genetic Milk
-0.8	+1.1	+0.6	+5.7	**+52**	**+76**	**+103**	+72	**+22**
47%	*39%*	*76%*	*74%*	*69%*	*69%*	*69%*	*63%*	*57%*

FERTILITY EBVs		CARCASE EBVs						
Scrotal Size (cm)	Days to Calving	Carc Weight	EMA (sq cm)	Rib Fat (mm)	Rump Fat (mm)	RBY (%)	IMF (%)	Docility
+0.6	-4.0	**+70**	+3.2	**+1.8**	**+2.9**	-0.4	**+1.9**	+3
78%	*43%*	*57%*	*52%*	*55%*	*59%*	*53%*	*57%*	*53%*

STRUCTURAL ASSESSMENT								6-Dec-22
Front 6	Back 5	Front 6	Back 6	5	5	4	Muscle Score C+	Temp. 2

$INDEX VALUE				HVC BULL CHECK			EYES	Polled Gene
SSR	NSR	SBM	NBT	1-Dec-22	Vet.	PM%	100/100	Homz
$183	**$163**	**$174**	**$122**	36	Serv.	NM% 4		**PP**

Purchaser_____ Price _____