



The Angus Society of Australia

Angus GROUP BREEDPLAN

~ How to Participate ~

Angus GROUP BREEDPLAN is an advanced genetic evaluation system that provides a genetic description of Angus cattle for a comprehensive range of traits influencing fertility, growth, maternal and carcass performance. It provides predictions of the genetic merit of individual animals called Estimated Breeding Values (EBVs). These EBVs are used by Angus breeders and bull buyers to assist in selection decisions and purchase of breeding stock. EBVs are now accepted by most beef producers as an essential tool in the breeding and marketing of seedstock.

EBVs are based on all available pedigree and performance records provided by breeders in Australia and New Zealand, along with available overseas genetic information. EBVs provide the best means for comparison of the relative genetic merit of animals across the breed for those traits included in the analysis. EBVs obviously cannot be used in isolation in any selection or purchase decision. Visual assessment is still necessary for those characteristics not adequately described by EBVs, particularly structure and conformation.

GROUP BREEDPLAN EBVs have been proven to be more accurate than raw performance measurements for assisting in the selection of breeding stock. Research results and industry experience has shown that more rapid genetic gains can be achieved in herds which make use of EBVs in their selection decisions. In the calculation of EBVs all available pedigree and performance information on each animal and its relatives (parents, ancestors, siblings, progeny, etc.) is combined to provide a single best estimate of an individual's genetic merit for each trait. In addition, allowance is made for environmental differences between properties, seasons and management groups on each animal's performance. Differences in heritabilities between traits and genetic associations between traits are also accounted for in the calculation of EBVs.

The analysis of the Angus pedigree and performance database to generate GROUP BREEDPLAN EBVs is conducted by the Agricultural Business Research Institute (ABRI), using software developed by the Animal Genetics and Breeding Unit, a joint institute of NSW Agriculture and the University of New England. Ongoing BREEDPLAN research and development is supported by Meat and Livestock Australia.

HOW TO PARTICIPATE

All Full Members or Junior Full Members of the Angus Society of Australia are eligible to participate in Angus GROUP BREEDPLAN. An enrolment form can be obtained from the Society. On enrolment you will be sent information on how to submit performance data for inclusion in the program.

To be eligible for inclusion in the Angus GROUP BREEDPLAN animals must be registered with the Angus Society in either the Angus Herd Book (HBR), Red Angus Register (RAR), Angus Performance Register (APR), the Angus Commercial Register (ACR), the Angus Progeny Test Register (PTR) or the Multi-Breed Register (MBR).

HOW MUCH DOES IT COST ?

An annual enrolment fee of \$132 is payable for participants of GROUP BREEDPLAN (*includes GST*). This fee is in addition to membership and herd inventory fees.

GROUP BREEDPLAN enrolment and applicable Herd Inventory fees cover the cost of recording all performance data on the current year's drop of calves – including all weight, carcass and fertility traits. The fees cover the total costs of data entry, analysis and provision of EBV reports for animals in your herd following each batch of data submitted. Historical data (e.g. from progeny recorded prior to the current calf drop) can also be included at a cost of \$2.68 (includes

GST) per animal (payable to ABRI). If error free data can be electronically entered from a compatible software program then the costs of including historical data can be reduced.

ANGUS GROUP BREEDPLAN GENETIC EVALUATION REPORT

An Angus GROUP BREEDPLAN Directory (Sire Summary) is produced once a year in January. This Directory includes detailed explanatory notes and EBV lists for proven sires (meeting a minimum EBV accuracy criteria) and selected young bulls in the breed. The Directory is circulated to all members and distributed widely throughout the industry. The Angus GROUP BREEDPLAN Directory is a major marketing and promotion document for Angus breeders.

The most up to date GROUP BREEDPLAN EBVs are also available on the Angus Society website.

HOW DOES THE PERFORMANCE RECORDING SYSTEM WORK ?

Angus GROUP BREEDPLAN involves a two stage calf recording system.

■ Stage One:

Calves are registered with the Society in one of the eligible registers. Pedigree and birth details, including calving ease and birth weight are recorded on the Angus Calf Record Forms and submitted directly to the Angus Society. The registration information recorded by you regarding AI dates, herd joining dates, birth dates, birth weight and calving ease all contribute to the data for EBVs on gestation length, birth weight, calving ease and days to calving. All queries regarding pedigrees and recording on the Calf Record Form should be directed to the Registrar at the Angus Society.

■ Stage Two:

All later performance information (e.g. weights, ultrasound carcass scan data) is recorded by you on pre-printed Performance Data Input Forms. These forms are prepared and processed by staff at ABRI. If you use one of the three approved computer programs you can send these records to ABRI by disk or email.

Two full Angus GROUP BREEDPLAN analysis runs of the entire Angus database are conducted

each year called "group runs". These take place in July and December and data must be submitted before set dates to be included in those runs. Cut off dates for registration and performance data submission are published in the Angus Bulletin. Updates of performance figures can take place between these major runs, producing "interim" EBVs. Newly registered animals must be included in a group run before any interim figures can be calculated.

All queries regarding submission of performance information and your Angus GROUP BREEDPLAN herd reports should be directed to ABRI.

HOW MUCH WORK IS INVOLVED?

Very little extra work, over and above normal requirements for the registration of cattle is required for participation in Angus GROUP BREEDPLAN. The recording of birth weights and calving ease is optional, but strongly encouraged where feasible. All calves should be weighed at least once, at about 200 days of age. Their weights should be entered on a Performance Data Input Form and returned to ABRI. It is desirable to also weigh calves at about 400 and 600 days of age. Pregnant heifers should be noted as belonging to a separate management group once they are more than three months in calf.

If you and/or your customers are interested in carcass traits then you should consider hiring an accredited contract scanner to measure fat depth, eye muscle area and percentage intramuscular fat on your animals. A list of accredited ultrasound scanning contractors is available from the Angus Society.

Fertility EBVs can be obtained by providing details of mating dates on the Joining Details Form (for the calculation of Days to Calving EBVs) and the measurement of scrotal circumference on yearling bulls.

WHAT TRAITS ARE INCLUDED ?

Angus GROUP BREEDPLAN provides EBVs for up to 17 different traits, providing a comprehensive array of information to assist in your selection decisions. It also enables you to provide better "product description" to your clients when marketing your seedstock.

EBVs are currently provided for the following traits:

CALVING EASE TRAITS:

CALVING EASE DIR (%) ~ Estimates of genetic differences between animals in the ability of their calves from 2 year old heifers to be delivered without assistance.

CALVING EASE DTRS (%) ~ Estimates of genetic differences between animals in the ability of their 2 year old daughters to calve without assistance.

GESTATION LENGTH (DAYS) ~ Estimates of genetic differences between animals in the number of days from the date of conception to the calf birth date.

BIRTH WT (KG) ~ Estimates of genetic differences in calf birth weight.

FERTILITY TRAITS:

SCROTAL SIZE (CM) ~ Estimates of the genetic differences between animals in scrotal circumference at 400 days of age.

DAYS TO CALVING ~ Estimates of genetic differences in female fertility, expressed as the number of days from the start of the joining period until subsequent calving.

GROWTH TRAITS:

200-DAY WT (KG) ~ Estimates of the genetic differences between animals in liveweight at 200 days of age.

400-DAY WT (KG) ~ Estimates of the genetic differences between animals in liveweight at 400 days of age.

600-DAY WT (KG) ~ Estimates of the genetic differences between animals in liveweight at 600 days of age.

MATERNAL TRAITS:

MATURE COW WEIGHT (KG) ~ Estimates of genetic differences between animals in cow weight at 5 years of age.

MILK (KG) ~ Estimates of the genetic differences between animals in milk production, expressed as variation in 200-day weight of daughter's calves.

CARCASE TRAITS:

CARCASE WEIGHT (KG) ~ Estimates of the genetic differences between animals in carcass weight, adjusted to 650 days of age.

EYE MUSCLE AREA (CM²) ~ Estimates of the genetic differences between animals in eye muscle area at the 12/13th rib site, in a 300kg carcass.

RIB FAT (MM) ~ Estimates of the genetic differences between animals in fat depth at the 12/13th rib site, in a 300 kg carcass.

RUMP FAT (MM) ~ Estimates of the genetic differences between animals in fat depth at the P8 rump site, in a 300kg carcass.

RETAIL BEEF YIELD % (RBY%) ~ Estimates of the genetic differences between animals in percentage retail beef yield, in a 300kg carcass.

INTRA-MUSCULAR FAT % (IMF%) ~ Estimates of the genetic differences in percentage intra-muscular fat (marbling) at the 12/13th rib site, in a 300 kg carcass.

LINKS WITH OTHER HERDS

In order to obtain reliable EBV figures from Angus GROUP BREEDPLAN it is important that your herd has strong genetic links across years, management groups and with other herds participating in the program. These links are essential to enable the separation of the apparent genetic differences between animals from those simply due to differences in environmental factors.

Linkage is achieved through the use of AI sires that have also been used by several other herds and/or through the purchase of animals which have had progeny in other herds. In a herd with weak linkage the EBVs for particular animals may fluctuate over time relative to the EBVs for animals in other herds.

Where two or more members herds are managed and run as a single mob on the same property then they can be considered as a single herd in the GROUP BREEDPLAN analysis. This situation often occurs where members in the same family have a number of animals registered in their own name but the animals are actually managed and recorded together as a single herd. If you are in this situation then discuss your options with the Society.

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WHO TO CONTACT FOR FURTHER INFORMATION

- Pedigree details and the registration of calves:

The Registrar
The Angus Society of Australia
Phone 02 6772 3011
Fax: 02 6772 3095
Email: regos@angusaustralia.com.au

Eliza Newcombe, Rachael Hancock,
Michelle Rottcher or Kate Boardman

- On submission of performance data and issues relating to GROUP BREEDPLAN herd reports:

Angus GROUP BREEDPLAN
Agricultural Business Research Institute (ABRI)
Phone: 02 6773 2244 or 02 6773 3555
Fax: 02 6772 5376
Email: angus@breedplan.une.edu.au

- On performance recording and use of Angus GROUP BREEDPLAN EBVs

Breed Development and Information Manager
The Angus Society of Australia
Phone: 02 6772 3011
Fax: 02 6772 3095
Email: carel@angusaustralia.com.au

Carel Teseling

Postal Address - Angus GROUP BREEDPLAN

Angus GROUP BREEDPLAN
ABRI
University of New England
Armidale, NSW, 2351.



ANGUS AUSTRALIA

Angus GROUP BREEDPLAN Enrolment
1st January 2011 to 31st December 2011

Please tick:

- I wish to enrol my herd in Angus GROUP BREEDPLAN for the period 1/1/2011 to 31/12/2011
- I am a Full Member, or a Junior Member of Angus Australia.
- I agree to pay an enrolment fee of \$132 covering the period 1/1/2011 to 31/12/2011 (includes GST)
- I understand that this enrolment will entitle me to obtain a GROUP BREEDPLAN herd report from the subsequent Angus GROUP BREEDPLAN analysis – provided that I have submitted post-birth performance data to Angus BREEDPLAN prior to the relevant deadline.
- I understand that data for inclusion in GROUP BREEDPLAN will only be accepted for animals recorded in one of the registers of the Angus Society (i.e. Herd Book, RAR, APR, ACR, MBR or PTR).
- As a participant of Angus GROUP BREEDPLAN I agree to the following:
 - (a) Pedigree and performance data submitted from my herd will be included in the Angus GROUP BREEDPLAN analysis together with data obtained from other participating herds to calculate Estimated Breeding Values (EBVs);
 - (b) The ownership of all such data is vested in Angus Australia;
 - (c) Data from each participating herd and results of GROUP BREEDPLAN analyses will be used by the Society for research and/or the publication or dissemination of EBVs on individual animals.
- I have read and understand the conditions specified in Society Regulation 17.5 in relation to the accuracy of performance recording and the use of EBVs in sale catalogues and promotional material.
- Payment enclosed \$132 enrolment.

Membership Name:

Herd Ident: Herd Prefix:

- Data shall be submitted to Breedplan via:
- Paper or
 - Breedplan Compatible Excel template or
 - Angus Australia submission facility on website or
 - Breedplan Compatible herd recording program

Please sign
Signature of Member or Nominated Representative of Member Date

I Wish to pay by:

- Cheque (attach cheque made payable to Angus Australia)
- Credit Card Payment Visa Bankcard Mastercard Amount Paid \$ _____

Card Number _____

Name on Card: Expiry Date:/...../.....

Signature:

SEND COMPLETED FORM AND PAYMENT TO:
ANGUS AUSTRALIA
LOCKED BAG 11, ARMIDALE NSW 2350
PHONE: 02 6772 3011 FAX: 02 6772 3095

THE ANGUS SOCIETY OF AUSTRALIA

2011 REGULATIONS

17 ANGUS GROUP BREEDPLAN

- 17.1 An annual enrolment and the prescribed fee applies for the period from 1st January to 31st December.
- 17.2 Data will only be accepted from members for inclusion in Angus GROUP BREEDPLAN for animals that are recorded in one of the registers provided by the Society.
- 17.3 Data submitted for inclusion in Angus GROUP BREEDPLAN will be analysed together with data from other herds and relevant overseas genetic evaluation information to calculate Estimated Breeding Values (EBVs) and other statistics. This data will remain the property of the Society and will be used for research and/or the publication or dissemination of EBVs on individual animals.
- 17.4 The Society retains copyright on all information generated from the Angus pedigree-performance database (including pedigrees, EBVs and accuracies). Inaccurate or misleading use of this information in advertising and promotional material may contravene the Trade Practices Act.
- 17.5 In enrolling (or re-enrolling) in Angus GROUP BREEDPLAN members will agree to the following conditions. Violation of these conditions may result in the cancellation of enrolment.
- (i) Contemporary groups will be managed in such a way to ensure that all animals allocated to a particular group have an equal opportunity to express their performance. Animals that are given preferential treatment, or are sick or disadvantaged will be allocated to separate contemporary groups. No animal will be excluded from a contemporary group on the basis of its individual performance.
 - (ii) All performance data will be measured using appropriate equipment (and not estimated). Breeders will ensure the correct functioning of scales and other equipment used to measure performance.
 - (iii) EBVs and accuracies included in sale catalogues and advertisements will be current and accurate. A consistent set of EBVs and accuracies will be used for all animals in a particular sale group (i.e. selected figures will not be omitted for individual animals). All non-zero EBVs will be shown with either a clear positive (+) or negative (-) sign.
 - (iv) Wherever EBVs are included in advertisements and sale catalogues acknowledgement of the source of the EBVs will also be included (e.g. January 2011 Angus GROUP BREEDPLAN EBVs). The current average EBV's for the reference birth year as provided in the Angus Australia Website will also be included in sale catalogues.
 - (v) Parental or ancestor EBVs shall not be used in lieu of individual animal EBVs in advertisements and sale catalogues.
 - (vi) All overseas genetic evaluation information and/or raw data included with EBVs in advertisements or sale catalogues will be clearly labelled.
 - (vii) Abattoir carcass data will only be accepted from Angus Australia approved progeny test programs where animals have been managed to ensure unbiased representation of different sire lines and necessary protocols for carcass data collection have been met.