



# F1 WAGYU

FULLBLOOD BULL BUYING GUIDELINES 2022



---

These guidelines are provided as guidelines only, with a specific focus on using Fullblood Wagyu bulls on Angus type females. Other considerations may be important for other breed types such as indicus or dairy crosses. It is important for breeders to ensure that they have discussed their breeding programs for F1 production with their identified supply chain prior to commencing their program.

---

Suite 6, 146 Marsh Street,  
Armidale NSW AUSTRALIA 2350

email [office@wagyu.org.au](mailto:office@wagyu.org.au)  
phone 02 8880 7700

VERSION : 052022-SC11469



---

# Using Fullblood Wagyu bulls

The standard for F1 Wagyu production is a registered Fullblood Wagyu bull with high Marble Score EBV over high quality (high IMF%) Angus Females.

Where possible, knowledge of Angus %IMF EBVs is valuable in establishing your female herd for F1 Wagyu production. The following guidelines relate to selection of Fullblood Wagyu sires for use over high quality Angus Female genetics.

## F1 TERMINAL \$INDEX AND MARBLE SCORE EBVs

Unless you already have established relationships with supply chains who have carcase data feedback on your animals, only registered Fullblood Wagyu sires should be used for F1 production. Estimated Breeding Values (EBVs) for Wagyu – Wagyu EBVs – are only available for animals registered with the Australian Wagyu Association (AWA). Using these AWA EBV's, F1 Terminal \$Index values are generated for each sire. The AWA recommends using sires in the top 30% of the breed for F1 production (see Table 1).

**Selecting bulls with high marbling EBVs are of most importance** to selecting Fullblood Wagyu sires for F1 production. Selecting registered Fullblood sires in the top 30% for Marble Score is recommended (see Table 1).

## GENERAL CONSIDERATIONS:

The **primary purpose of Wagyu genetics within a F1 Wagyu x Angus breeding program**, is to maximise the marbling genetic input from the Wagyu sire. It is important to not compromise this marbling by using low marbling quality female lines.

**Fullblood Wagyu carcasses average Marble Score 8 (MB8), with long fed Angus typically achieving an average of around MB3.** F1 Wagyu x Angus typically achieve MB5.5 on average, with large variation in Marble Score, usually ranging from MB2 to MB8. Heterosis is not evident for marbling.

## BIRTHWEIGHT EBV IMPORTANT FOR HEIFER CALVING EASE

**Many F1 breeders use Wagyu sires on Fullblood Angus Heifers for their first calf.** Although Wagyu birth weights tend to be lower than Angus birth weights, birth weight EBVs need to be considered for Fullblood Wagyu bulls used on Angus heifers. The suggested target is < +2 kg. High birth weight Wagyu bulls can result in birth difficulties in Angus heifers. The target of < +2kg for birth weight is related to heifer joinings only and is not important for cow joinings.

## GROWTH RATE AND COW SIZE

**Growth rate is not required to be high for F1 sires.** Too much growth genetics (high growth EBVs) will take too long to finish (cost more to feed) to achieve a high marbling outcome. Typically, Wagyu X Angus will bring hybrid vigour to provide appropriate growth. F1 feeding programs are significantly shorter than Fullblood feeding programs, typically around 350 days of feedlotting F1's.

**Large mature cow weight in the Angus dam should be considered as a contributing factor to F1 feeder size and age at maturity.** Selecting dams of large mature cow weight may impact on the age at maturity of the Wagyu F1 progeny and the ability of these progeny to finish to desired carcass specifications during the feedlotting phase.

## F1 PRODUCTION WITH NON-ANGUS FEMALE BREEDS

**Other female breeds may have different requirements.** It is important for breeders to ensure that they have discussed their breeding programs for F1 production with their identified supply chain prior to commencing their program.

## STRUCTURAL CORRECTNESS AND GENERAL BULL SELECTION GUIDELINES

Breeders should consider other general bull selection guidelines for purchasing Wagyu sires. These include:

**Structural soundness:** Observe feet and leg structure and movement. Wagyu sires typically have good longevity and will work for many years. It is recommended that you purchase sires with certificates of soundness.

**Fertility and semen motility:** Ensure testicles are normal and that fertility is guaranteed.

**Accuracy of EBV's:** Select sires with EBV accuracy as high as possible. For example, you can have more confidence in a sire with EBV accuracies of 65% compared to a sire with EBV accuracies of 55%.

**Temperament:** Observe and handle bulls prior to purchase and select bulls with good temperament. Remove sires that show poor temperament or whose progeny show poor temperament.

**Carcass data:** In addition to EBVs for carcass traits, carcass data can be used to demonstrate performance of semen sires where parentage verification can be demonstrated.

**TABLE 1**

AWA GUIDELINE FOR FULLBLOOD WAGYU F1 COMMERCIAL BULLS - TARGET AWA BREEDPLAN PERCENTILES

Preferred range in green ■ Acceptable range in yellow ■

	GL (days)	BW (kg)	200 (kg)	400 (kg)	600 (kg)	MCW (kg)	MILK (kg)	SS (cm)	CWt (kg)	EMA (sq. cm)	RUMP (mm)	RBV (%)	MS	MF (%)	WBI (\$)	SRI (\$)	FTI (\$)	F1I (\$)
TOP 1%	-2.8	-2.9	+34	+52	+70	+74	+8	+2	+57	+7.4	+4.2	+1.7	+2.6	+0.41	+279	+276	+240	+226
TOP 5%	-1.9	-1.7	+24	+40	+55	+57	+6	+1.2	+44	+5.7	+3	+1.2	+2.1	+0.33	+240	+238	+204	+191
TOP 10%	-1.5	-1.1	+21	+34	+47	+48	+5	+0.8	+38	+4.7	+2.3	+1	+1.9	+0.3	+220	+217	+184	+173
TOP 15%	-1.2	-0.7	+18	+30	+41	+43	+4	+0.6	+33	+4.2	+1.8	+0.8	+1.7	+0.27	+205	+203	+172	+160
TOP 20%	-1	-0.4	+16	+27	+37	+38	+3	+0.4	+30	+3.7	+1.5	+0.7	+1.5	+0.25	+194	+192	+163	+151
TOP 25%	-0.8	-0.1	+15	+25	+34	+35	+2	+0.3	+27	+3.3	+1.2	+0.6	+1.4	+0.23	+184	+183	+154	+143
TOP 30%	-0.6	+0.1	+14	+23	+31	+31	+2	+0.1	+24	+2.9	+0.9	+0.5	+1.3	+0.21	+176	+174	+147	+136
TOP 35%	-0.4	+0.3	+13	+21	+28	+28	+2	+0	+22	+2.6	+0.7	+0.4	+1.2	+0.2	+168	+167	+140	+130
TOP 40%	-0.3	+0.5	+11	+19	+25	+25	+1	-0.1	+20	+2.3	+0.4	+0.3	+1.1	+0.19	+161	+160	+134	+124
TOP 45%	-0.2	+0.8	+10	+17	+23	+23	+1	-0.2	+18	+2	+0.2	+0.2	+1	+0.17	+154	+153	+129	+118
TOP 50%	-0.1	+1	+9	+16	+21	+20	+0	-0.3	+15	+1.7	+0	+0.1	+1	+0.16	+148	+147	+124	+113
TOP 55%	+0.1	+1.2	+8	+14	+18	+18	+0	-0.4	+13	+1.4	-0.3	+0	+0.9	+0.15	+141	+141	+118	+108
TOP 60%	+0.2	+1.4	+7	+13	+16	+15	-1	-0.5	+11	+1.1	-0.5	-0.1	+0.8	+0.14	+135	+135	+113	+103
TOP 65%	+0.3	+1.6	+6	+11	+14	+13	-1	-0.6	+9	+0.8	-0.7	-0.2	+0.7	+0.12	+129	+129	+108	+97
TOP 70%	+0.4	+1.8	+5	+9	+11	+10	-2	-0.7	+7	+0.5	-1	-0.3	+0.6	+0.11	+122	+123	+102	+91
TOP 75%	+0.6	+2.1	+4	+7	+8	+7	-2	-0.8	+5	+0.2	-1.3	-0.4	+0.5	+0.09	+115	+115	+97	+85
TOP 80%	+0.7	+2.4	+3	+5	+6	+4	-3	-0.9	+2	-0.2	-1.6	-0.5	+0.4	+0.08	+107	+107	+89	+78
TOP 85%	+0.9	+2.8	+1	+3	+2	+0	-3	-1.1	-1	-0.7	-2	-0.6	+0.3	+0.06	+97	+98	+81	+70
TOP 90%	+1.2	+3.3	-1	-1	-3	-5	-4	-1.3	-5	-1.3	-2.5	-0.8	+0.1	+0.03	+85	+87	+71	+60
TOP 95%	+1.5	+4	-4	-5	-10	-13	-5	-1.5	-11	-2.3	-3.1	-1	-0.1	-0.01	+65	+69	+56	+44
TOP 99%	+2.3	+5.4	-9	-15	-22	-28	-8	-2	-22	-3.8	-4.3	-1.5	-0.6	-0.1	+30	+34	+26	+14
Low Value	+4.1	+14.9	-24	-38	-63	-61	-12	-3.2	-49	-7.6	-7.6	-2.5	-1.6	-0.28	-69	-48	-47	-63

# Important notice

It is very important that you appreciate when viewing the AWA database that the information contained on the AWA database, including but not limited to pedigree, DNA information, Estimated Breeding Values (EBVs) and Index values, is based on data supplied by members and/or third parties. Whilst every effort is made to ensure the accuracy of the information reported through AWA, AWA officers and employees assume no responsibility for its content, use or interpretation. AWA disclaims all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs you may incur as a result of the use by you of the data on this AWA database and the information supplied by ABRI and AGBU being inaccurate or incomplete in any way for any reason.

Regarding EBVs and Index values, it is very important to appreciate, and you need to be aware that:

- » EBVs are derived using Wagyu Single-Step BREEDPLAN technology developed independently by the Animal Genetics and Breeding Unit (AGBU), using the information contained within the AWA database.
- » AGBU is a joint venture of NSW Department of Primary Industries and the University of New England, which receives funding for this purpose from Meat and Livestock Australia Limited.
- » AWA relies solely on advice provided by AGBU and ABRI in accepting Wagyu Single-Step BREEDPLAN software.
- » EBVs published in Wagyu Single-Step BREEDPLAN are estimates of genetic potential of individual animals and may not reflect the raw animal phenotype.
- » EBVs can only be directly compared to other EBVs calculated in the same monthly Wagyu Group BREEDPLAN analysis.

Regarding pedigree and DNA testing results submitted to the AWA, it is very important to appreciate, and you need to be aware that:

- » Pedigree and DNA data submitted and supplied to AWA may have errors in it which cannot be detected without further DNA testing.
- » Technology may have advanced since a particular test was undertaken so that previous inaccuracies which were not detectable are now able to be detected by current testing technology.
- » AWA estimates that less than 1% of the pedigree entries, ownership or breeding details in the AWA Herdbook may have errors or which may be misleading. For this reason, users ought to consider if they need to obtain independent testing of the relevant animal (if possible) to ensure that the data is accurate.

Regarding prefectural content, it is very important to appreciate, and you need to be aware that:

- » Prefectural content is based on the estimation of prefectural origin from Japanese breeding records of 201 foundation sires and 168 foundation dams. As genotype-based parent verification is not used in Japan, and full Japanese registration certificates are not available for all foundation animals, exact prefectural composition for these sires and dams cannot be validated.
- » The calculation of prefectural content for Australian Herdbook animals relies on the accuracy of pedigree records and DNA samples provided by AWA members.
- » The reporting of prefectural content for animals within the AWA Herdbook relies on the calculation provided by ABRI.

If you consider that you do not understand or appreciate the nature and extent of the data provided or the EBVs of a particular animal, then AWA strongly recommends that you seek independent expert advice.



Suite 6, 146 Marsh Street,  
Armidale NSW AUSTRALIA 2350

**email** [office@wagyu.org.au](mailto:office@wagyu.org.au)  
**phone** 02 8880 7700

[www.wagyu.org.au](http://www.wagyu.org.au)    