



World Wagyu Council - Technical Committee Meeting

AGENDA

Date/Time: Tuesday 19th September 2022, 9pm in South Africa and Namibia, 7pm in UK, 12pm in Idaho and 2pm in Roanoke, Virginia. 20th September 2022, 6am in Australia

Location: Via Zoom – to be arranged by Elandri de Bruyn

Duration: 1 hour maximum

Attendees: (all CEO's/Company Secretaries):

Graham Truscott, Chairman

Jordan Beeman, Chairman, American Akaushi Association

Waldo Scheepers, Breed Improvement Director, Wagyu Society of South Africa

Kaci Carrales, CEO, American Akaushi Association

Matt McDonagh, CEO Australian Wagyu Association

Elandri de Bruyn, COO, Wagyu Society of South Africa

Richard Saunders, Company Secretary, British Wagyu Breeders Association

Chris Dickinson, Director, British Wagyu Breeders Association

Uwe Jerathe, Chairmain, German Wagyu Society

Robert Williams, CEO, American Wagyu Association

Sarel du Toit, Secretary, Namibian Wagyu Society

Pete Eshelman, WWC Chairman

Agenda:

1. Welcome attendees, note apologies.
2. Minutes of previous meeting

2.1 World Wagyu Council Technical Committee 21st June 2022 (attached)



3. Business arising - see Action List (attached)
4. Technical issues extracted from the World Wagyu Congress Minutes of 8th May 2015 – see Appendix A

The following were minuted as technical issues in the World Wagyu Congress Minutes of 8th May 2015. As agreed at our WWTC meeting of 18/3/21, we will use these issues as a starting point as this is where all attending country associations at that time got to and reached resolution. The meeting will:

- reconsider each issue
- determine if it is still valid; and
- confirm the Resolution or change it if necessary.

There are a number of issues and they are expected to take more than one meeting to work through. The order of consideration was determined at our meeting of 18/3/21 as follows:

- 4.1 Standardised registration and pedigree recording to facilitate movement of animal genetics between countries – considered at WWCTC meeting of 14/6/21 and 13/9/21, **completed**
- 4.2 Animal registration from another country's Wagyu Association – considered at WWCTC meeting of 14/6/21, **completed**
- 4.3 Global Wagyu genetic analysis – see Appendix A, Item 4
Wagyu Data Review Expression of Interest
- 4.4 Maintaining Genetic Condition data consistency – see Appendix A, Item 2, **completed**

Technical Summary: A summary of the issues agreed to date has been provided by the WWC TC Chairman for inclusion in the WWC website under a TECHNICAL button, and sent to all WWC TC members on 2nd September 2022 (attached).

- 4.4a Presentation of methods used with carcass cameras – all WWC TC members to present their methods.
- 4.5 Cloning – see Appendix A, Item 5
- 4.6 Structural assessment of donor females for international sale - – see Appendix A, Item 6



WORLD WAGYU
Council

5. Other business

6. Next meeting – 28th November 2022



**Technical issues extracted from the World Wagyu Congress
Minutes of 8th May 2015**

1. Standardised registration and pedigree recording to facilitate movement of animal genetics between countries

Objective: To standardise the registration requirements across countries and so facilitate the movement of animal genetics between countries.

It would appear that over 20 countries are registering Wagyu in their herdbooks. As the genetic performance of these individual animals becomes more accurately assessed international demand will see more cross-country trade of these genetics. This will require the transfer of animal registration details from one herdbook to another. Common rules for the registration of Wagyu animals would assist such transfer.

For example, initial imports of Wagyu to Australia came via the USA, however their Wagyu Associations do not have consistent rules for registration:

- Australia – requires all animals to be registered in its breeding animal registers to be DNA parent verified.
- USA – requires that all animals to be registered as Fullblood must be DNA parent verified, but Purebred and other grades do not require DNA parent verification.

This has led to difficulties in the registration of Purebreds from the USA into Australia.

Resolved: That the World Wagyu Congress recommend to its member Associations that:

- *DNA parent verification be required as a prerequisite for at least Fullblood animal registration.*
- *Complying WWC member herdbooks to be recognised by other WWC members and Fullblood registrations from those members to be automatically accepted, providing they meet the receiving association's other rules.*



2. Animal registration from another country's Wagyu Association

Objective: *To reduce the effort and cost of animal registration for animals already registered in other countries.*

When a Wagyu Association is requested to register a Wagyu animal which is already registered in another country it is usually a requirement to obtain a registration certificate for the animal and record at least three generations of that animal's pedigree in the herdbook of the receiving country, with accompanying fees for each generation recorded. Hence international animal registration can be expensive.

A number of countries are using the Agricultural Business Research Institute's (ABRI) International Livestock Recording System Version 2 (ILR2) and web-based Internet Solutions (I4) service. ABRI is considering development of an ILR2 service to enable the extraction of pedigree information from an association's Internet Solutions (I4) database. If an animal is already registered in another country, ILR2 would then be able to identify that animal from the target database and extract that animal's details including its pedigree to a nominated number of generations and load that data into the receiving database. To prevent unauthorised data load the target association would be required to agree for such extracts, and an extract animal counter would prevent excessive data extract. As this would be developed for general use no development cost is anticipated.

Resolved: *That the World Wagyu Congress:*

- *Endorse the ABRI development of the ILR2/I4 pedigree data extract service.*
- *Encourage those WWC members using ILR2/I4 to allow ILR2/I4 data extract for overseas animal registration.*
- *Where such extract is used for overseas animal registration, WWC members to only charge for a single registration at their standard pricing, without a charge for background pedigree loading.*
- *Recommend that the originating country's registration identifier be recorded on the importing database.*

3. Maintaining Genetic Condition data consistency

Objective: *To share Genetic Condition test results and so reduce the overall cost of testing.*



The Wagyu breed tests and records the results for a number of recessive genetic conditions and the common conditions are described in Appendix B. Many animals have already been tested so other countries could share the benefit of that testing and prevent the need to retest.

ABRI has developed a service for ILR2 which extracts all genetic condition test results and makes them available in a file. With agreement from Wagyu Associations using ILR2, these files can be run to load their results into the Association databases. The extracts can be run automatically, with each association required to load the update files when ready. Setup cost per Association is AUS\$440.

Resolved: *That the World Wagyu Congress:*

- *Encourage WWC members using ILR2 to extract genetic condition and other test results and make them available at no charge to all other mutually agreeing WWC member associations using ILR2.*
- *Recommend that ILR2 record the genetic condition test sample identifier from the originating country in the importing country's database.*

4. Global Wagyu genetic analysis

Objective: To compare Wagyu animal genetics across the world and so identify leading animals in every country which may add value to member breeding programs.

Best Linear Unbiased Projection (BLUP) has been used for genetic analysis in many biological species since the 1960's. BREEDPLAN provides BLUP genetic analysis for beef cattle and is generally regarded as the best of its type internationally.

BREEDPLAN uses the world's most advanced genetic evaluation system (ie. an "animal model"

which incorporates multi-trait analysis procedures) to produce Estimated Breeding Values (EBVs) of recorded cattle for a range of traits (e.g. birth, weight, carcase and fertility). In North American countries, BREEDPLAN produces Estimated Progeny Differences (EPDs) to conform with the local reporting conventions.

BREEDPLAN was developed by the Animal Genetics & Breeding Unit (AGBU) and is commercially delivered by ABRI. It is the national beef recording scheme in Australia, New Zealand, Namibia, Thailand and the Philippines. Its use is increasing in the United States, Canada, United Kingdom, Hungary, South America and South Africa.

The Australian Wagyu Association has completed the first stage of a Wagyu Collaborative Genetics Research Project which has upgraded the Wagyu BREEDPLAN analysis to include AUS-MEAT and Japanese Digital Imaging Camera carcase data into the carcase EBVs for: Carcase Weight, Eye Muscle Area, Marble Score and Marbling Fineness. The model also includes EBVs for fertility, maternal and growth traits. A Fullblood Terminal Index based on carcase weight and marble score has provided overall animal performance ranking.



A global Wagyu Genetic Analysis could be developed enabling registered and performance recorded Wagyu in different countries to be genetically analysed and ranked on a common base for all traits, enabling international comparison of Wagyu males and females.

Technical alternatives:

The technical alternatives for a global Wagyu Genetic Analysis needing further investigation include:

1. Each country to maintain its own pedigree and performance database along with an alias file of animals registered in other countries with different identifiers. Combine pedigree and performance databases on a monthly basis from all contributing countries and produce country report data matching country requirements.
2. Larger Wagyu Associations eg. Australia, USA to provide facilities management based registration and performance data recording services to overseas associations. For example, Australia will provide services to the British Wagyu Association.
3. Establish a cloud-based central Global Wagyu Database into which each country registers its own animals under a common set of rules. A global analysis to be run monthly from that database and produce country report data matching country requirements.

The meeting noted that South Africa will implement BREEDPLAN by the end of 2015 and then will consider joining the joint Wagyu genetic analysis. New Zealand will need to establish its own BREEDPLAN analysis before joining the joint Wagyu genetic analysis.

Resolved: *To develop a global Wagyu genetic analysis based on BREEDPLAN in a staged approach:*

- *Initially develop a joint analysis between Australia and USA with the timeframe:*
 - *Within 6 months set the American Wagyu Association database to include the same carcass fields as in the Australian Wagyu Association database*
 - *Within 12 months combine the Australian and USA databases for a joint analysis.*

5. Cloning

Resolved: *That the Technical Committee consider the matter of cloning and the registration of cloned animals.*

6. Structural assessment of donor females for international sale



WORLD WAGYU *Council*

The meeting considered that it would be useful for donor females required for production of embryos for export to undergo independent structural assessment prior to embryo export.

