



## Herefords Australia – Explanatory Notes to changes to the Regulations

This document contains some explanatory notes about the new Regulations to help Members of Herefords Australia (HAL) understand what has changed and how it will affect them. It is not a replacement for the Regulations and should be read in conjunction with the Regulations.

### Herefords Australia now has the following Registers:

- *Herd Book Register (HBR)*

No change from the traditional Herd Book Register, now with increased DNA requirements.

- *Hereford Performance Register (HPR)*

No change from the current HPR, now with increased DNA requirements.

- *Hereford Commercial Register (HCR)*

A new Register for non-seedstock Hereford, Hereford based and Cross bred cattle. Entire males are not eligible for this Register

- *Multi-Breed Register (MBR)*

A seedstock register for Hereford based cattle not eligible for entry in any other register.

- *Recorded*

For company use only.

- *Miniature Herd Book (MHB)*

A Herd Book Register for Miniature Herefords

- *Miniature Performance Register (MPR)*

A Register for Miniature Herefords that are not eligible for the MHB.

**Herefords Australia now has the following DNA requirements:**

6.1.(i) *From 1st January 2017 all sires that require progeny to be registered into the HBR or MHB are required to have a minimum of a Low-Density SNP Genotype.*

This regulation has been in place for all of 2017

6.1.(ii) *From 1st January 2018 all sires that require progeny to be registered into the HPR or MPR are required to have a minimum of a Low-Density SNP Genotype.*

This is a new requirement whereby sires of calves registered into the HPR and MPR need to be tested with a Low-Density Genotype.

NOTE - All animals that are DNA tested with a Low Density or High Density SNP Genotype are included in the construction of the Herefords Australia G-Matrix for production of Genomic BREEDPLAN EBVs. Inclusion in the construction of the G-Matrix automatically verifies the sire, dam and sex of the genotyped animal where possible.

6.1.(iii) (a) *Sires of all calves (HBR & MHB registers) born after the 1<sup>st</sup> of January 2018 must be sire verified; and*

(b) *In the event that a sire cannot be sire verified, then all his progeny must be verified to him before registration, without exception.*

This is a new regulation stating that sires of calves born from 1 January 2018 that are registered in the HBR or MHB must be sire verified. If for some reason the sire of calves born after 1 January 2018 cannot be sire verified, then each of his calves that are born after 1 January 2018 need to be individually sire verified back to him before they can be registered in the HBR or MHB.

6.1.(iv) *Any HBR or MHB sire born after the 1st of January 2018 must be sire verified without exception.*

This regulation states that and bull born after 1/1/2018 that may one-day sire calves to be registered in the HBR or MHB must be sire verified.

6.1.(v) *From the 1st of January 2018, new donor dams must have a minimum of a low-density genotype on record to obtain a donor dam permit with the company prior to the registration of ET calves.*

6.1.(vi) *The following verifications will be applied to an animal's details to identify what level of DNA verification has occurred:*

a) *Sire Verified: Verified / Not Verified / Not Tested / Failed*

*b) Dam Verified: Verified / Not Verified / Not Tested / Failed*

The current 'Parent Verified' field that appears in online lookup of those animals that have been verified using DNA will be replaced with two fields being 'Sire Verified' and 'Dam Verified'. These fields will appear on all animals whether they have been DNA verified or not, with the appropriate result being displayed in the field. Below is an explanation of the results:

- **Verified:** The sire/dam has been DNA Verified as correct
- **Not Verified:** If the animal is born prior to 1 January 2018 and has been DNA tested however the listed sire/dam is not DNA verified and no further re-collection and testing of DNA samples is possible in accordance to the Company's DNA Testing Policy.
- **Failed:** The animal has failed DNA verification to the sire/dam after re-testing in accordance to the Company's DNA Policy
- **Not Tested:** The animal has not been verified to sire or dam using DNA Verification

*6.1.(vii) The Company reserves the right to conduct any DNA/Genomic/Genetic conditions testing of any animal.*

HAL may conduct any testing on any animal at the company's expense.

*6.1.(viii) The company reserves the right to only accept DNA/Genomic/Genetic conditions test results from company approved laboratories.*

HAL will only accept DNA test results from laboratories that are approved by HAL. Results from other laboratories will not be accepted.

*6.1.(xi) Available genomic data will be used to verify the sire, dam, sex and genetic condition status of animals recorded in the Company registers and to resolve suspected discrepancies.*

- a) In cases where the genomic data indicates a required amendment to an animal's record, the owner and breeder of the animal will be provided with 14 days notice of the intended amendment, during which time evidence can be provided to controvert the intended amendment (as per the Company's DNA Testing Policy);*
- b) Where genomic data suggests unresolved discrepancies in the recorded sire, dam, sex or genetic condition status of an animal born prior to 1 January 2018 the recorded information and the animal's registration status will remain unchanged;*

- c) *Where genomic data suggests unresolved discrepancies in the recorded sire, dam, sex or genetic condition status of an animal born after 1 January 2018 the suspected incorrect information will be removed from the database and the animal's registration status will be revoked until the discrepancies are resolved.*

The above regulations indicate how animals that fail verification will be dealt with in regard to registration status. This is for all animals that are parent verified either by the owner of the animal or by the company (through the construction of the G-Matrix or by request for Parent Verification).

Part (a) indicates how the company will deal with animals where a suggested replacement sire or dam is presented.

Part (b) indicates how animals born before 1 January 2018 will be treated. If a recollection and re-testing process (as per the Company's DNA Testing Procedure) cannot be followed and any discrepancies resolved, then the original information will not be altered, with the appropriate verification status (see 6.1.(vi)) noted.

Part (c) indicates how animals born after 1 January 2018 will be treated. Animals that are born after 1 January 2018, and who fail sire or dam verification will have their Registration Status revoked until all discrepancies are resolved.

- 6.1.(xii) *The onus of proof to replace any incorrect ancestral pedigree is on the owner of the animal/semen, and the company takes no responsibility or obligation to determine the correct pedigree.*

This regulation states that if an animal fails a parent verification, then it is the responsibility of the owner of that animal to provide sufficient evidence to the company to determine the correct sire and /or dam for that animal.

- 6.1.(xv) *If the Company receives information indicating that any sire is transmitting known genetic conditions, it shall cause the matter to be investigated and include the results in the animals data on the Company's database.*

HAL may take the appropriate action on any animal that is found to be transmitting undesirable genes. All test results for known Genetic Conditions will be displayed on the animals details.