

WHFF 444 Genomic Survey Summary v3

Background

At the 43rd WHFF Council meeting it was decided to survey the WHFF Membership to establish the usage of SNPs and Microsatellites.

Questions

1. Countries who responded

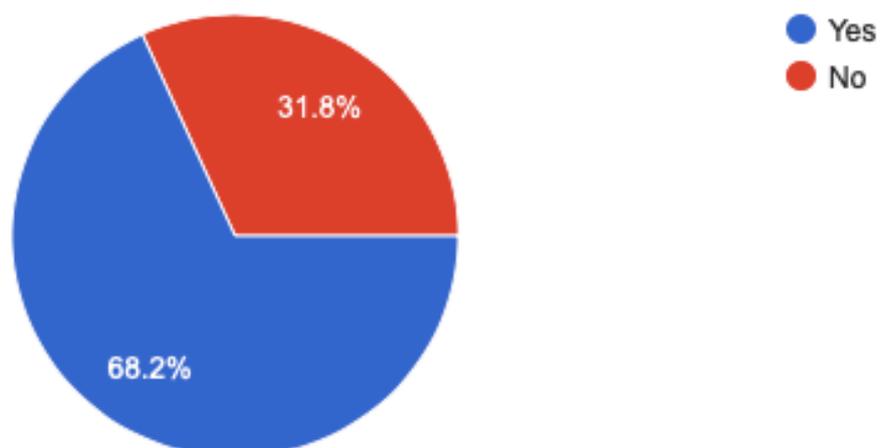
There were 22 Countries who responded

Australia	Italy
Belgium	Japan
Colombia	México
Croatia	New Zealand
Czech Republic	Poland
Denmark	Spain
Finland	Switzerland - Holstein Switzerland
France	Switzerland - swissherdbook
Germany	The Netherlands and Flanders
Hungary	United Kingdom
Ireland	US

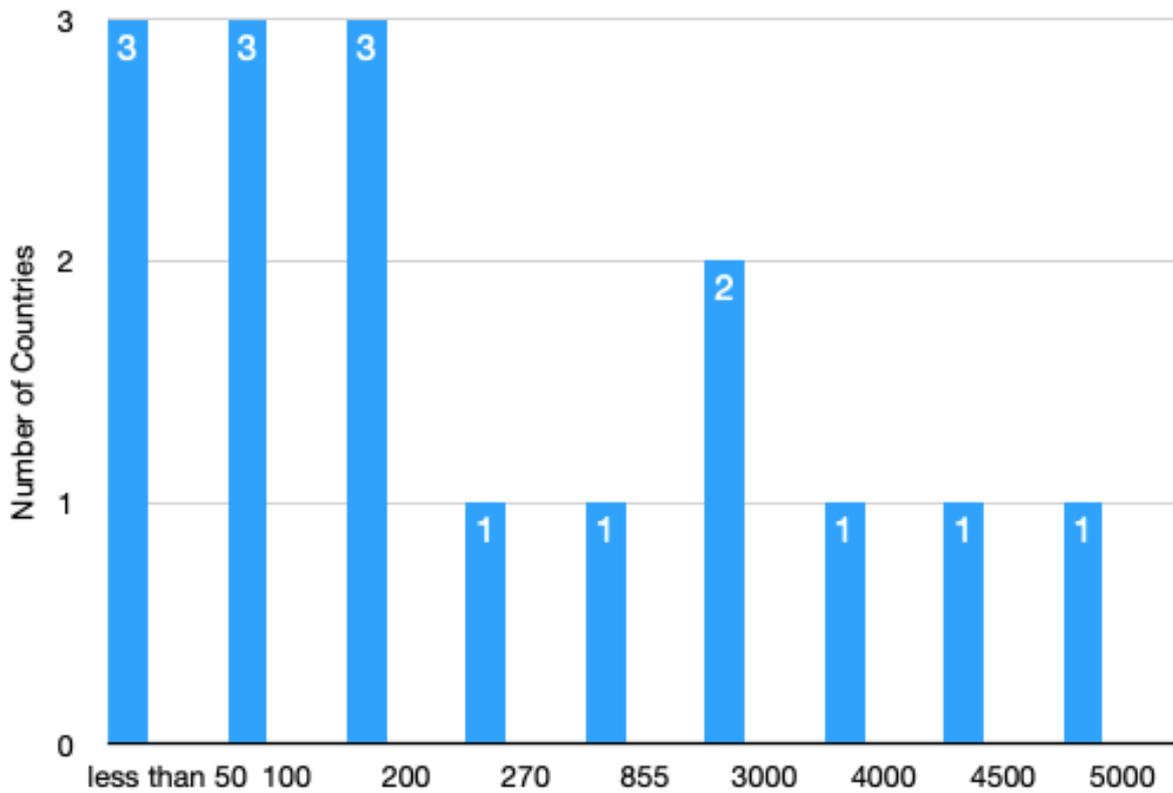
2. Do you use MicroSatellites for genomic analysis?

16 Countries completed MicroSatellites Analysis

22 responses



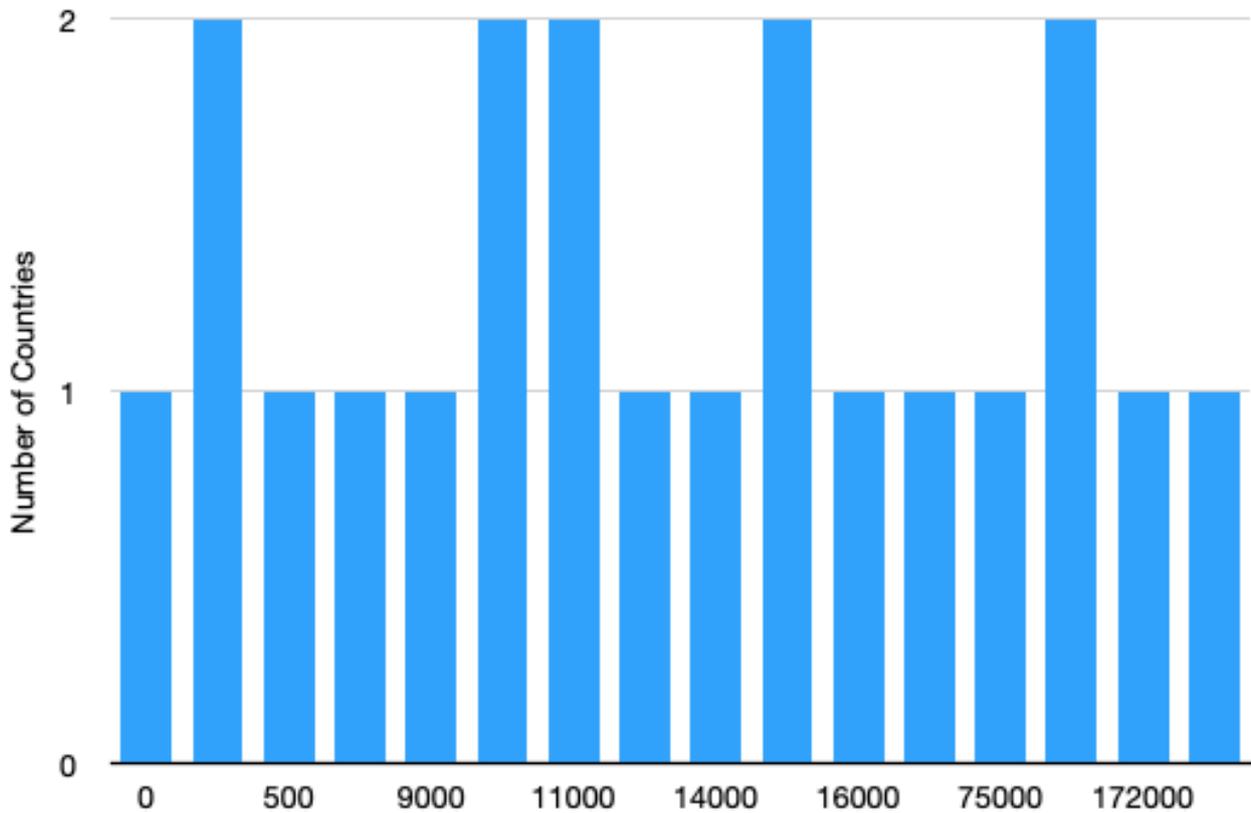
3. How many MicroSatellite analysis do you complete a year?



4. Do you use SNPs for Genomic Analysis?

22 Countries use SNPs for Genomic Analysis (100% of those who answered the survey)

5. How many SNP analysis do you complete a year?



6. Tick all the options you use Genomics for

Parentage verification	Parentage discovery	Genomic Indexes	Monogenetic traits	Recessives	Haplotypes
21	19	21	9	10	8

Milk Caseins	QTL	Making a reference group for new breeds	Diseases	Hereditary defects	Genomic Biodiversity
5	2	1	1	3	3



7. What are your plans for Genomic analysis in the future?

We are currently phasing out microsatellites in favour of SNP based parentage
make selection in calves for the rearing of animals above the average in the associated herds
Continue to carry out activities
more QTL
Additional monogenetics traits, tool to increas max. heterozygotich parantage relationship in breeding plan at the farms and parhaps automatic parantage control.
To be aware about new genetic traits and to make the price of analysis cheapper
for parentage control: stop microsatelittes and just use SNPs (in up to 2 years)
Continue to promote our Genomic Selection program, the HUNGENOM Project and keep the costs low!
check for peculiarities and further recessive genes
apply many traits and incremet numbers of SNPs for chips
Establish a genomic selection program
At present it is very running by the Breeding Companies and on different, Work is currently underway to get an across industry genomic platform.
Increase in number of females with genomic analysis in particular to estimate genetic index, identification of new genetic traits
to increase the use of SNPs
MicroSatellite are only used for parentage verification of claves out of frozen embryos when the dam is not genotyped. We hope through GenoEx to have access soon to much more 200-SNP-Panel of embryo donors, with the goal to reduce the use of MicroSatellite.
move a much parentage testing to SNP analysis as possible
Continue to grow our Genomic Testing program, and to further the direct exchange between Breed Associations of the 200 Parentage Verification SNP's.



8. If you have any comments about your decisions, please give details below.

There were three comments.

The exchange of the 200 Parent Verification SNPs among Associations should be done without additional charges for Associations not involved in other services such as Interbull-GENOEX. Before SNPs, we were able to exchange microsatellite information without fees because it was in our (Holstein associations worldwide) best interest that parent verification was preformed in all member countries.

We are currently working on a SNP -based system for parentage verification and parentage discovery. Hopefully we have this up and running as a herdbook service later this year.

Genomic indexes are currently in place in the Netherlands and Flanders. This is not a herdbook service. The genomic evaluation system is owned and controled by CRV BV, which is a different legal entity.

Please not that we don't directly do any of these analysis - they are done by outside labs and genetic evaluation centers