

## Sheep Genetics Report dashboard

### How to Guide: Navigating the Report dashboard

From 13<sup>th</sup> May 2022, members of Sheep Genetics will access their ASBV results information via the Report dashboard. Instead of finding results in PDFs attached to an email, members of Sheep Genetics will get an email notification when results are ready directing them to the Report dashboard. There you will be able to find all the same information previously found in the PDF reports, with additional information and customisation capabilities. This document explains how to get to, and how to navigate within, the Report dashboard.

### How to get to the Report dashboard

Go to the Sheep Genetics search site - <https://search.sheepgenetics.org.au/> and log in.

On the search site dashboard (the home page of the search site) scroll down to the tile titled 'Your flocks'. In this tile, click on the link that says 'Reports' (see Figure 1). You will then be taken to your Report dashboard. From here, you can see the overview of each report and download more detailed result PDFs and the XML to enter the results into your software.

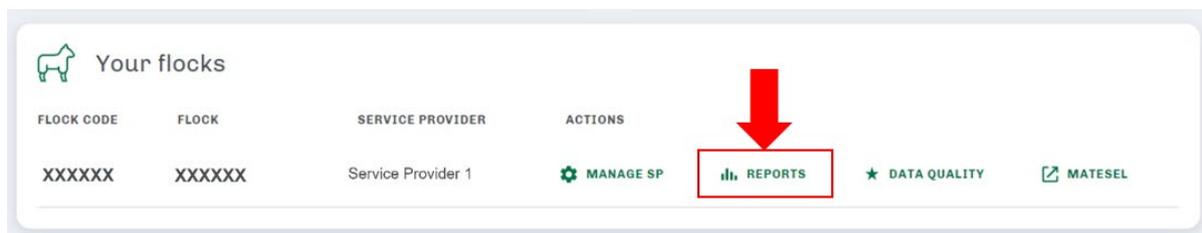


Figure 1: 'Your flocks' tile on the search site dashboard when you log in to Sheep Genetics.

### Report dashboard overview

The Report dashboard provides an overview of each section in various tiles. These tiles contain links to get further information and download reports. Below is a summary of the tiles displayed on the Report dashboard overview.

#### 1) Analysis Info

At the top of this tile, a summary of the result details is given including:

- The name of the analysis that your flock results are reported from
- The analysis date
- The list of the ASBVs that are included in the reports which you can download and are displayed in the small genetic trend graphs and percentile bands lower on the Report dashboard

**To customise the traits displayed in the reports,** click on the ‘Customise ASBVs’ button (see point 2A on Figure 2):

- When you click on this button, a pop-up window appears with the ASBVs currently selected. You can select up to 20 ASBVs.
- To add more ASBVs, type the name of the ASBV or abbreviation in the box at the bottom of the pop-up window and click on the desired ASBV.
- To remove selected ASBVs, click the ‘X’ next to the ASBV in the table.
- If you change your mind and want to leave the ASBVs as they were, click cancel in the bottom right.
- Once you have finished making changes to the selected ASBVs, click save.

**To download results reports in PDF and results XML for your software,** click on the ‘Download PDF & XML button’ (see point 2B on Figure 2) to bring up a pop-up window with a list of the downloadable reports.

- Download them individually by clicking on the ‘Download PDF’ button on the right of each report title
- Download all the PDFs at once by scrolling down and clicking the ‘Download all PDF’ button at the bottom of the pop-up window
- Download the XML report so that you can put the results into your data management software by clicking the ‘Generate XML report’ button.
- To close the window, scroll down and click ‘Close’ button at the bottom of the pop-up window.
- Downloaded reports will appear in the Downloads folder on your computer.

**To build a Data Quality report for your flock,** click on the green link at the bottom of the tile that says, ‘Access to Data Quality report’. For help on how to use and interpret your Data Quality report, please see the Data Quality Report information available on the Sheep Genetics website.

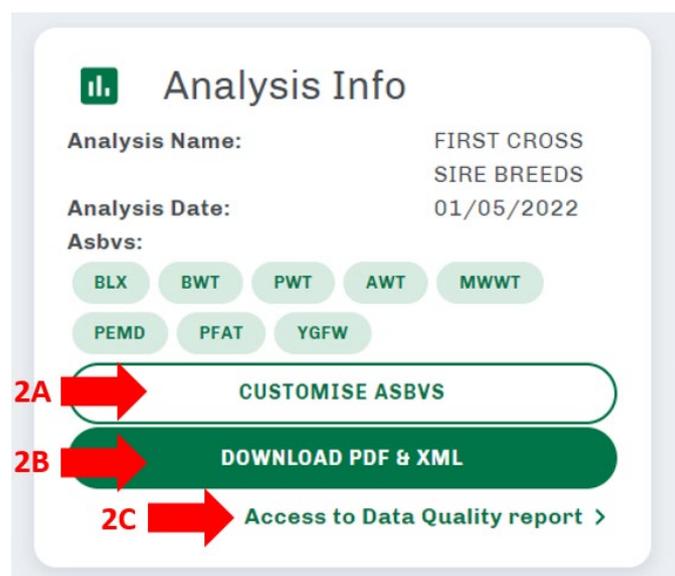


Figure 2: The Analysis Info tile on the Sheep Genetics Report dashboard.

## 2) Exclusions

The tile displays the number of measurements or animals with exclusions for each of the past three year drops, if exclusions exist.

To get a detailed view of your data exclusions, click on the link 'Exclusions report' to go the exclusions page (Figure 3). Here you can view the count per exclusion reason in the grey box, a detailed list of exclusions per animal ID at the bottom of the page and download the exclusions to a CSV file.

- Download a CSV file (viewable in Microsoft Excel) of your exclusions by clicking on the button that says 'EXPORT' at the top of the page under the heading 'Exclusions report' (see 4A on Figure 4).
- Filter the exclusions listed per animal based on the exclusion type by clicking on the box under 'Filter on exclusion type' and select the type of exclusions you want to limit the results to (see 4B on Figure 4). You can also filter on exclusion type by clicking the reason listed in the grey box (see 4C on Figure 4).
- Filter exclusions to those against animals born in a certain year by clicking on the small box next to the drop years of interest (see 4D on Figure 4). You can select more than one.

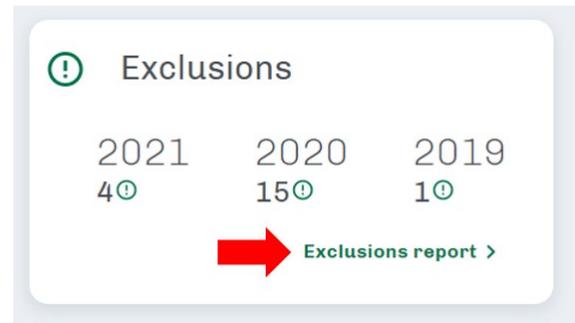


Figure 3: The exclusions tile on the Sheep Genetics Report dashboard

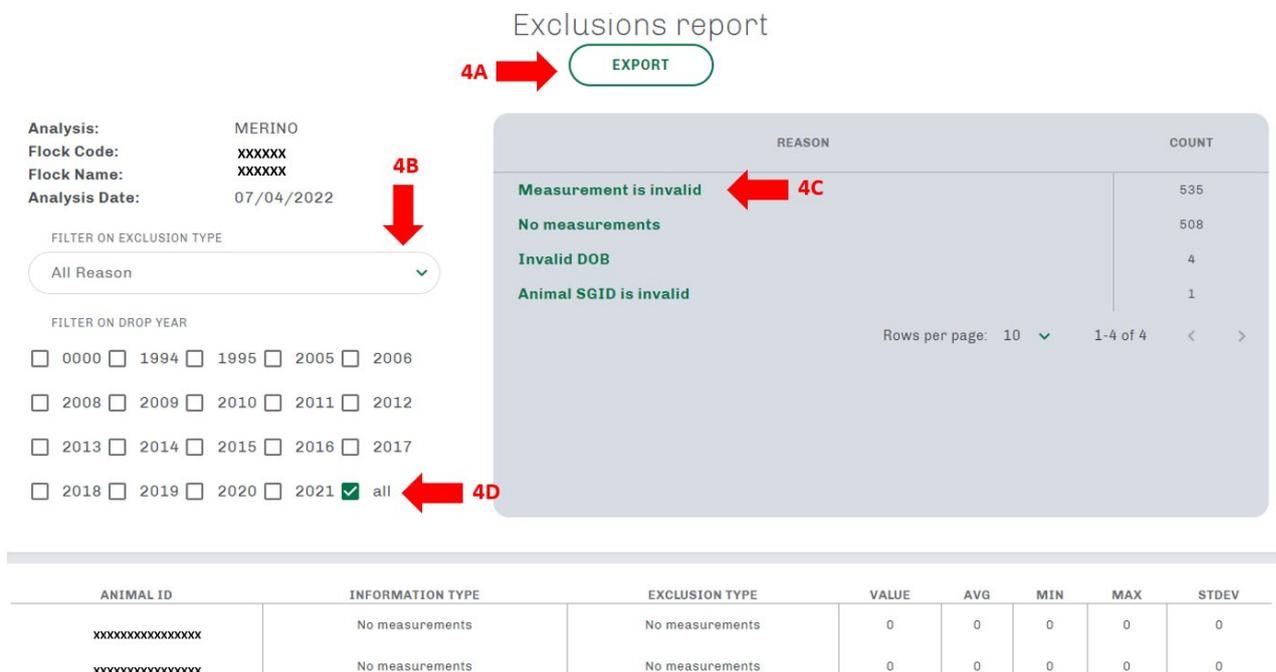


Figure 4: Exclusions report on the Sheep Genetics Report dashboard

To go back to the Results dashboard, click 'back to overview' on the top left of the page.

### 3) Linkage

This tile displays a list of trait groups with a tick or a cross indicating if you are linked or are not linked for that trait group.

To be linked, ensure that you have:

- Relationships or shared genetics between your flock and other flocks that are measured for the same traits.
- Relationships or shared genetics between animals in different management groups and year drops in your own flock measured for the same traits.

### 4) Genetic Trends

This tile displays a series of genetic trend graphs for the ASBVs you have selected in the Analysis Info tile on the top right. Update these ASBVs by clicking the 'Customise ASBVs' button on the Analysis info tile. When you hover your mouse over the trend lines, the average trait value appears for each year drop as you move along the line.

**To view your genetic trends report**, click on the green link at the bottom of the tile called 'Genetic trends report' (Figure 4).



Figure 5. Genetic trends tile on the Report dashboard. The mouse icon shows where hovering over the trend line for YWT provides the YWT average for the relevant year. The red arrow points to the link 'Genetic trends report' to click through to the genetic trends report page.

**Genetic trend graphs** for each of your traits of interest are displayed on this page that give the average for each year drop for your flock, the average of the breed and the average of the analysis. Customise the graph ASBV traits by clicking on the 'Customise ASBVs' button on the left of the page (see 6A on Figure 6).

- On the pop-up window that appears, scroll down to the bottom of the trait rows and click on the box that says 'Search for ASBV or index', type in the trait name or index and click on the desired trait.
- Once you have entered your desired traits, click save at the bottom of the page.
- To use the traits you have chosen as your account defaults, click 'Reset to default ASBVs' at the top right of the pop-up window.

You can customise the graphs to view genetic trends by:

- The sex of the animals to include all or display the males or the females separately by clicking on the box next to the sexes of interest (see 6B on Figure 6).
- The data comparisons included being the flock, breed and/or analysis by clicking on the box next to the group of interest (see 6C on Figure 6).
- The date range of data on the graph. In the middle of the page, beneath the boxes that customise the sex and group comparisons, there is a green date range line under the words 'date range'. Click on points on the green line to adjust the year drops displayed on the trends below (see 6D on Figure 6).
- Graph view or a table view. Switch the view by clicking on the switch toggle located next to the words 'graph view / table view' under the date range line (see 6E on Figure 6).

The total number of animals per year drop is displayed in a bar graph on the top right of the page. When you hover your mouse over bar the corresponding year drop count appears in a pop-up window over the graph. You can download this bar graph as an image or a CSV file by clicking on the small stack of three lines at the top right of the graph (see 6F on Figure 6).

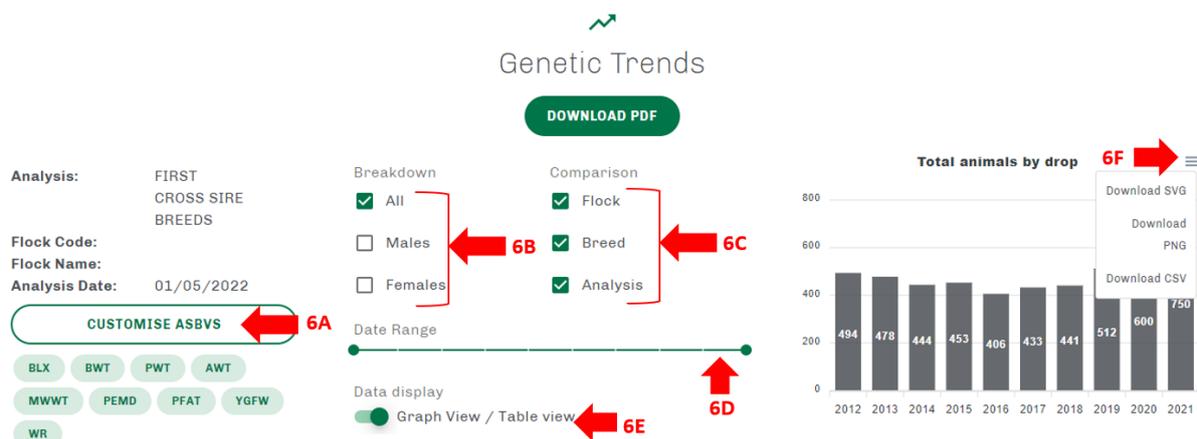


Figure 6: Genetic Trends page in the Sheep Genetics Report dashboard.

To see the genetic trend graphs in an expanded view, click on the small square pictured in the top left corner of each genetic trend line tile.

- This view also provides a table version of the average trait values by year drop for the groups of comparison selected.
- Only one trait can be selected in the expanded view at once.
- On each of the genetic trend graphs you can hover your mouse over the trend line and see the average trait values for each year drop.
- To download the graph as an image or the data in excel, click on the small stacked lines at the top right of the tile. Click on 'download SVG' to save the image to your downloads folder in SVG format. Click on 'download PNG' to save the image to your downloads folder in PNG format. Click on 'download CSV' to download the data to raw values in a CSV file (viewable in Microsoft Excel).
- To exit the expanded view, click on the 'x' at the top left of the top left of the tile.

### 5) Summary

This tile displays a summary of the traits recorded in database for the last year drop of your flock. The size of the green rectangles represents the volume of information for that trait. You can hover your mouse over the trait name for a count of animals from the most recent drop you've submitted with that trait recorded.

**To see a full summary of your data** click on the link at the bottom right of this tile called 'Summary report' (Figure 7).



Figure 7. Summary tile on the Report dashboard. The mouse icon shows where hovering over the rectangle titled BWT provides the count of animals recorded for BWT in a pop-up. The red arrow points to the link 'Genetic trends report' to click through to the genetic trends report page.

You will be taken to a page that displays a table of the trait information recorded on male and female animals for each drop. You can download your summary report PDF by clicking on the green button at the top of the page under the heading called 'Download PDF' (see 8A on Figure 8).

You can choose to highlight a focus trait by clicking on the box under the words 'select a focus trait' (see 8B on Figure 8). This will bring up a bar graph with the counts of animals recorded for the trait for each year drop. You can choose to see either males, females or both by clicking on the boxes on the right of the page under 'Sex' (see 8C on Figure 8).

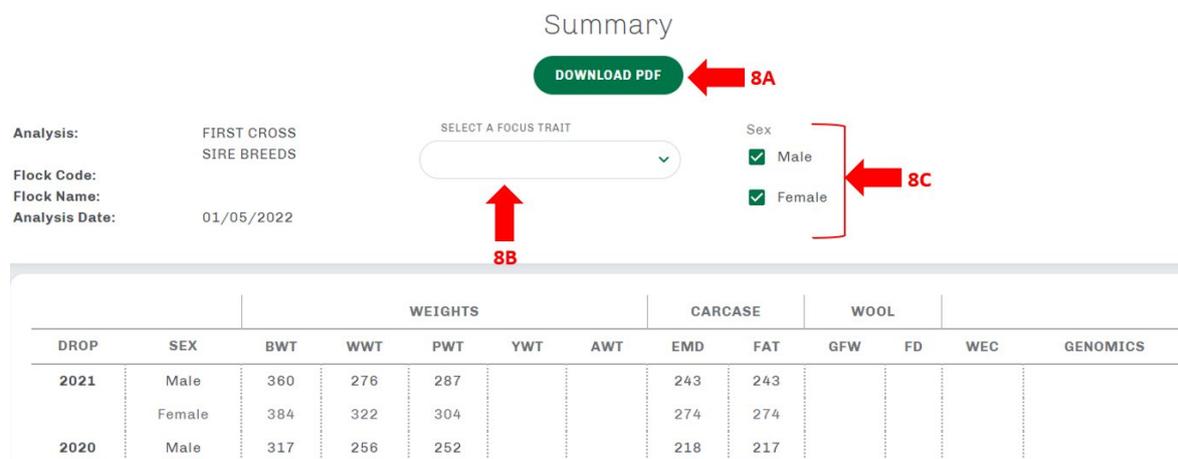


Figure 8. Summary page on the Sheep Genetics Report dashboard.

## 6) Reproduction

This tile displays the NLB:NLW flags and the counts of the component reproduction traits recorded against the dams of the most recent year drop. You can view a more detailed report on the reproduction counts by either clicking on the link called 'Reproduction counts report' (Maternal and Merino) or 'Reproduction summary report' (Terminal, Dohne, SAMM and Goat) (Figure 9).



Figure 8: Reproduction tile on the Sheep Genetics Report Dashboard overview.

**The reproduction counts report** (for Maternals and Merinos) has a link to download a PDF of the report at the top of the page in the green button that says, 'Download PDF'. At the top right of the page, the counts of reproduction records for the year of joining are displayed in a graph. A summary of the information per year of joining is further down the page. If you click on the year of joining (see 9A on Figure 9), the information for that year is expanded beneath the row. This provides you with the counts of information by the ewe year of birth in a graph and in a table below. The table provides the counts for yearling traits in brackets before the adult trait in each column.



Figure 9: Expanded view of year of joining table in the Counts for Reproduction page of the Sheep Genetics Report dashboard

**The reproduction summary report** (for Terminals, Dohnes, SAMMs and Goats) includes various information including ewe fertility percentages, birth types, rear types and more. You can download this report by clicking on the green button beneath the heading called ‘Download PDF’.

The first graph displayed on this page shows the fertility % by year of joining for both adult and yearling joinings. The second and third graphs shows the counts of birth types and rear types respectively per year of joining. On each of these graphs you can hover your mouse over each year drop to get a view of the raw data.

The table at the bottom of the page displays a breakdown of the information relevant to reproduction recording. Some values under the ewe fertility and analysis flags columns may be coloured red or green. Red values have been highlighted to show that these may need to be checked on to ensure the information has been recorded correctly. Values in green indicate where the analysis flags for NLB:NLW includes a yes or ‘Y’.

A link to the reproduction counts report can be found at the top of the page under the heading.

## 7) Genomics

This tile displays a count of the pedigree inconsistencies between the DNA pedigree information and the supplied pedigree information from your data submission. Click on the link at the bottom right of the tile called ‘Pedigree genomics inconsistencies report’ to go through to more detailed information on these inconsistencies (Figure 10).

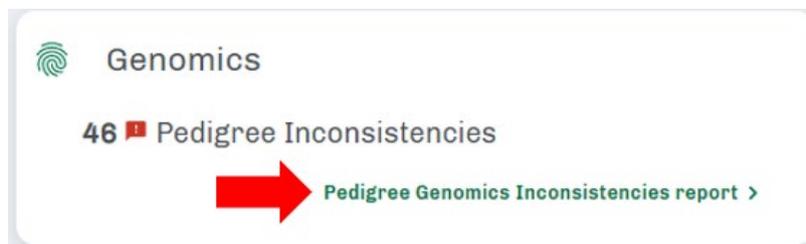


Figure 10: Genomics tile on the Sheep Genetics Report dashboard overview page.

**To view the IDs of animals with pedigree inconsistencies** view the table on the pedigree genomics inconsistencies report page or download it as a PDF by clicking on the ‘Download PDF’ button at the top of the page under the heading.

In the table, the animal of interest is listed in the left column. The second column identifies if the sire or the dam has an inconsistency. The third column includes the pedigree supplied by the breeder (if supplied) that is potentially incorrect. The last column shows the ID of the animal that is the proposed parent based on genomic relationships.

Check this information in your data management software and lambing book to make any corrections to your software. Once you have corrected the pedigree and updated the pedigree method, resubmit the applicable year drops whose pedigree has changed to Sheep Genetics.

## 8) Individual listing

This tile displays links to various groups of animals within the flock including:

- The current drop of males
- The current drop of females
- All genotyped males
- All genotyped females
- Current sires
- Current dams

Click on the corresponding link to the animals you're interested in, to be taken to the Sheep Genetics search site with the relevant animals displayed. You can download these search results as you would normally on the search site by clicking the 'export' button at the top right of the page, to have the data emailed to you in a Microsoft Excel accessible format.

## 9) Percentile Bands

In this tile, the percentile bands for the traits you customised in the Analysis Info tile for the most recent run. The percentiles displayed include the top 5% value in purple, the top 10% value in blue, the top 20% value in green and the midpoint 50% value in grey. A legend for these colours can be seen on the top right of the tile. To get more information on the percentile bands, click on the link at the bottom right of the tile called 'percentile bands report'.

**To customise a percentile band report** click on the button that says 'Customise ASBVs' at the top right of the page and select the ASBVs you want included in the table. You can also change the analysis the percentiles have been built from by clicking on the box under the word 'analysis' on the left of the page under the heading and selecting the analysis you want to build percentiles from.

You can download the percentile bands report by clicking on the green button under the heading called 'Download PDF'.