

Guide to RamFinder

RamFinder is a search tool that finds either sires or young animals (potentially for sale) that meet criteria set by the user based on the large across flock NZGE evaluation. The indexes and breeding values are updated regularly – but for flocks and animals to be included, a flock must have elected to participate in NZGE reports and be recording traits that are specified in the search criteria.

RamFinder is aimed at assisting ram breeders identify potential outside sires that may add value to their breeding objective. Commercial farmers can also use the tool to find animals or sire lines that match their breeding objectives or to update information on rams they have previously purchased. Sheep farming systems and challenges are diverse across New Zealand and different breeders/farmers will have different criteria for rams. For example some areas experience disease challenges such as facial eczema and to others this is not important. RamFinder allows individuals to tailor selection criteria to meet their needs.

As more data is collected over time on the performance of progeny or relatives in participating flocks, the indexes and breeding values for individual animals are updated.

There are 3 options for using RamFinder

1. Search all eligible connected flocks using prescribed criteria.
2. Find a particular flock and report the indexes and traits you select for rams in that flock.
3. Find a particular animal using SIL flock number, tag and birth year.

To find a SIL flock number

Use BreederFinder - found on the SIL website (www.sil.co.nz) to search all SIL recorded flocks, selecting for breed, area, a flock name, surname or a combination of factors. It will report the details on owner, address and flock numbers for flocks that match your criteria.

To check which indexes and traits a flock is connected for in the NZGE

On the SIL website, click on Tools, NZGE, then View latest NZGE reports. This brings up a list of available NZGE reports. Scroll down to the section below to supporting documents.

Click on “Participants and Flock Connectedness Table”. This lists all flocks and the traits for which they are connected. RamFinder will only report values where are animals in flocks that are connected for those traits, if a flock is not connected for that trait then the value will be blank. Goal Traits include production traits such as Reproduction, Survival, Lamb Growth, Adult Size, Meat Yield, and Wool as well as health traits such as WormFEC (parasite resistance), Resilience to internal parasites, Facial Eczema Tolerance and Dag Score.

Benchmark Results

A percentile band table can also be viewed or downloaded from this section. This is based on connected flocks in NZGE reports and lists the percentile bands for indexes, sub-indexes and breeding values.

Note, it is easier to be good at a few things than many things. The more traits in the search criteria, the fewer animals that it will find that are good at all of them.

RamFinder Search instructions

Step 1. Choose the overall objective – Dual Purpose or Terminal Sire

eSearch RamFinder

Production System Dual Purpose ▼

Choose either Dual Purpose or Terminal Sire for “Production System”

Step 2. Choose the Index components and information to be presented

The New Zealand Standard Maternal Worth (NZMW) or Terminal Worth (NXTW) indexes are displayed or you can customise an index by ticking the boxes in the “Use in Custom Index” column.

Next, choose the indexes and breeding values (BVs) to be displayed for individuals. We suggest you start with indexes and after the search finds animals, add in BVs if further information is desired.

Choose component traits you want in the Index by ticking the “use” box. If there is a trait you are interested in but don’t want it included in the combined index tick the “show” box only so it will not be in the combined index but will be shown in the results. You might choose this option if you want to focus on a couple of traits to improve but still check if the other traits were acceptable e.g. use and show NZMW + DP WormFEC but only show DP Body Condition.

Click “**update**” when you have finalised your choices to update the custom index values.

Choose minimum or maximum constraints for a few indexes (or BVs). You do not need to specify minimum or maximums for all traits. You may choose to set them for the ones that are most important to you. The Lo/Hi ranges indicate the top 10th percentile value and bottom 10th percentile value for the evaluation. If you are interested in animals above the 10th percentile leave the maximum blank.

You can use the maximum criteria to avoid animals that are extreme for a trait - or if you are looking for an individual within a specific range – e.g. a maintainer for reproduction if you already are at your desired scanning percentage.

For example to create a TS Custom index including NXTW traits (TSS, TSG and TSM) and TS WormFEC. TS Dag Score will be shown but not include in the TS Custom index.

Production System		Terminal Sire ▼						
Select information to be displayed			[Genetic Merit, Trait Criteria see note below]					
Indexes	Abbrev	Minimum	Maximum	Lo/Hi range	Average	Show		
NZ Standard Terminal Worth	NXTW	<input type="text" value="700"/>	<input type="text"/>	421 to 1442	931	<input checked="" type="checkbox"/>		
TS Custom Index	TSCustom	<input type="text"/>	<input type="text"/>	421 to 1442	931	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
NXTW Goal Traits		Abbrev	Minimum	Maximum	Lo/Hi range	Average	Show	Use In Custom Index
TS Survival	TSS	<input type="text"/>	<input type="text"/>	-74 to 223	75	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
TS Lamb Growth	TSG	<input type="text"/>	<input type="text"/>	277 to 1027	652	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
TS Meat Yield	TSM	<input type="text"/>	<input type="text"/>	-97 to 376	139	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Other TS goal traits		Abbrev	Minimum	Maximum	Lo/Hi range	Average	Show	Use In Custom Index
TS WormFEC	TSF	<input type="text"/>	<input type="text"/>	-196 to 188	-4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
TS Dag Score	TSD	<input type="text"/>	<input type="text"/>	-8 to 11	2	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Step 3. Choose in what order the animals are reported

'Sort results by' – By default results are sorted on NZMW or NZTW index from high to low. There is an option to sort low to high if required. Results can also be resorted later.

Step 4. Choose which animals (males or females) you want listed by entering more details.

A) **'Query type'** - To search all SIL-ACE flocks the query type needs to be set to “Animals which match the following criteria”. If there are specific animals you wish to look up you can set the Query Type option to “A specific animal by ID” and provide the animal ID. The required format is Flock.Tag/last 2 digits of Birth Year. For example 8999.3569/15 is a ram from flock 8999 with tag 3569 and birth year 2015.

B) **Animals** - Young rams can be selected by entering an appropriate Animal Birth Year.

C) **Sex** – most users are interested in searching males but it is also possible to search for females.

D) **Status** – most users are interested in “Alive” animals but RamFinder can also be used to look up updated values on historical sires based on progeny performance by setting this to blank.

E) **Region** – the area the ram is located may be of importance to some users and can be selected here.

F) **For Sires (and Dams) - Progeny Birth Years** – Rams that have sired progeny can be selected by setting Progeny Birth Year range to match years you are interested in. For young animals without progeny ensure Progeny Birth Years is left blank.

This example will report on rams born 2016 that are currently alive.

Select Animals to be displayed	
Query Type	Animals which match the following criteria ▼
Animal	Birth Year 2016 ▼ to 2016 ▼ Sex Male ▼ Status Alive ▼
For Sires (and Dams)	Progeny Birth Years ▼ to ▼

This example will report on sires with progeny born in 2014 -2016 period that are currently alive.

Select Animals to be displayed	
Query Type	Animals which match the following criteria ▼
Animal	Birth Year ▼ to ▼ Sex Male ▼ Status Alive ▼
For Sires (and Dams)	Progeny Birth Years 2014 ▼ to 2016 ▼

Step 5. Choose Sheep Type or Breed

Selecting Dual Purpose or Terminal Sire will search in flocks of that production type for animals meeting the criteria irrespective of breed.

Genetic Vision (GV)/Breed refers to the overall breeding goal of the flock in terms of breed type e.g. Suffolk or Composite. There may be some individuals with a small proportion of other breeds in their pedigree but GV indicates the main breed focus for a flock.

To restrict the search to a particular breed click on the down arrow and choose the relevant name. This example will limit the search to Romney flocks.

Sheep Type or Breed	
Sheep Type	Genetic Vision/Breed ▾
Breed Specification	Romney ▾

If you want animals of any breed or mix, set the Breed Specification box to **“Any”**. *This is important as the search will fail if no selection is made for Breed Specification (i.e. if you leave the field blank).*

Sheep Type or Breed	
Sheep Type	Genetic Vision/Breed ▾
Breed Specification	Any ▾

The other option for breed specification is to specify the breeds you may want included in an animal’s pedigree. You can specify minimum proportions of a breed if desired. You could choose this option and in breed proportion range set it to 100% Texel for example to constrain the search to just purebred animals. If you were interested in a mixed breed you may put in some criteria such as minimum of 50% Suffolk and 20% Texel (see example).

Sheep Type or Breed			
Sheep Type	Breeds in Pedigree ▾		M
1st Breed	Suffolk ▾	50% ▾ to ▾	
2nd Breed	Texel ▾	20% ▾ to ▾	

Step 6. Initiating the Search

When you have entered all your search criteria – click the green “Start Search” button at the bottom left of the screen. A list of animals will be returned that match the criteria you have set. You can do multiple searches and fine tune the search once you have it returning the required animals. Use the green “Return to Search” button to return to the main screen to adjust the criteria.

NO RESULTS?

If you get a message that no animals meet the criteria – use the blue “return to search” button and review the criteria. Prioritise the most important factors, remove or reduce threshold values on others, press the UPDATE button and rerun the search.

A message saying the “search timed out” means that too many animals were found that met your criteria and you need to narrow the search by returning to the previous window and refining the criteria.

It is better to start with a broad search approach and fine tune the criteria once you have it finding the right type of animals.

Step 7. View results

The example below is of a Dual Purpose search with a NZMW index, a DP Custom index including NZMW plus DP WormFEC, with DP Dag Score (DPD) shown but not included in the index.

Values are blank where a flock is not connected for that goal trait.

<u>BTag</u>	<u>Birth Yr</u>	<u>Sex</u>	<u>NZMW</u>	<u>DPCR</u>	<u>DPS</u>	<u>DPG</u>	<u>DPA</u>	<u>DPM</u>	<u>DPW</u>	<u>DPD</u>	<u>Sire</u>	<u>Dam</u>	<u>Breed1</u>	<u>Breed2</u>
<u>432/11</u>	2011	R	3187	624	173	2675	-385	237	99	-9	223/10	1899/08	Rom 44%	Texel 26%
<u>50261/14</u>	2014	R	3183	775	921	2088	-677	487	76	11	C472/12	50069/11	Texel 42%	Coop 30%
<u>491/12</u>	2012	R	3175	667	741	1930	-560		397		1434/10	482/06	Rom 100%	
<u>51966/15</u>	2015	R	3171	892	492	2351	-833	123	269		50261/14	50094/12	Texel 34%	Rom 21%
<u>231/14</u>	2014	R	3169	551	846	1141	356	-177	276	5	3/13	127/11	Coop 100%	

Any words or numbers underlined in the table of results can be clicked with the mouse to bring up more information.

- Clicking a flock number brings up the flock name and owner contact details.
- Clicking on the individual birth tag will bring up a more detailed page of results with pedigree, current owner, index and BV information (if selected) and a visual representation relative to percentile merit for an individual (see example below).
- Clicking on the header titles will sort the information based on that column.

eSearch RamFinder

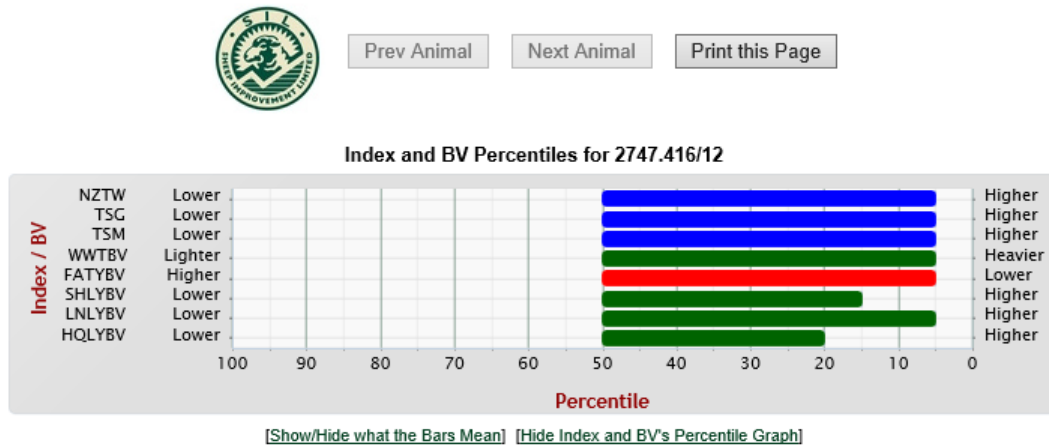
Dual Purpose

<u>Flock</u>	<u>BTag</u>	<u>Birth Yr</u>	<u>Sex</u>	<u>NZMW</u>	<u>DPCR</u>	<u>DPS</u>	<u>DPG</u>	<u>DPA</u>	<u>DPW</u>	<u>DPE</u>	<u>DPD</u>	<u>DPCustom</u>	<u>Sire</u>	<u>Dam</u>	<u>Breed1</u>	<u>Breed2</u>
<u>719</u>	<u>C472/12</u>	2012	R	3874	865	475	2188	256	89	589		4463	623/08	217/10	Texel 50%	Coop 50%
<u>33</u>	<u>347/12</u>	2012	R	3457	546	1217	1991	-631	333	310		3767	523/09	96/10	Rom 100%	
<u>4851</u>	<u>154/14</u>	2014	R	3296	395	1071	2026	-562	365	448	6	3744	635/12	172/12	Coop 100%	
<u>1425</u>	<u>231/14</u>	2014	R	3169	551	846	1141	356	276	570	5	3739	3/13	127/11	Coop 100%	
<u>2744</u>	<u>50261/14</u>	2014	R	3183	775	921	2088	-677	76	541	11	3724	C472/12	50069/11	Texel 42%	Coop 30%
<u>4474</u>	<u>154/14</u>	2014	R	3337	526	726	1997	-2	89	274	28	3611	857/11	600/12	Rom 44%	Texel 26%
<u>124</u>	<u>325/15</u>	2015	R	3015	533	659	1829	-241	235	590		3605	D1/13	3/12	Rom 100%	

Graphic of individual ram screen

After clicking on the individual birth tag, the screen shows

- a report of the Indexes and eBVs as requested in the original search specification
- a graphic representation of the performance level (percentile band) for each component goal trait
- The screen also shows the current owner and more details can be revealed by clicking on any underlined information.



[\[Show/Hide what the Bars Mean\]](#) [\[Hide Index and BV's Percentile Graph\]](#)

Search Criteria

Birth ID	2747.416/12	Current Owner	Mt Linton Station
Current ID	2747.416/12	Location	Southland
Birth Year	2012	Breed 1	Suff 43%
Birth Rank	2	Breed 2	Texel 38%
No. of Progeny	77	Sire Birth ID	2747.712/11
		Dam Birth ID	2747.170/09
		Progeny IDs	show/hide

Index Values for Alive Ram 416/12

Index	Result	Percentile
NZTW	1668	5
TSG	1152	5
TSM	478	5

BV Values for Alive Ram 416/12

BV	Result	Accuracy	Percentile
WWTBV	6.27	93	5
FATYBV	-1.484	89	5
SHLYBV	0.2551	86	15
LNLYBV	0.3392	87	5
HQLYBV	0.2904	88	20

[\[Click here to view Index and BV definitions \]](#)

In this example the ram 2747.416/12 was in the top 5% percentile for NZ Standard Terminal Worth index. He was in the top 5% for TSG (Terminal Growth) and TSM (Terminal Sire Meat Yield) and lower FATYBV (Fat Yield).

Accuracies for displayed traits are shown. For young animals with no progeny, values are a prediction based on their own performance and that of relatives. Accuracy levels are generally similar within an age group for younger animals in a particular flock. Accuracies increase with more measured records on progeny. Ram 2747.416/12 was a sire with 77 progeny which gives very accurate BVs for growth.

Again, clicking on any underlined words and numbers will reveal additional information.

Part 2: Find a particular flock and report for animals in that flock

In the “Flock and Parentage Criteria” you can type in up to 3 flocks of interest and rams will be listed based on your selection criteria as before. For example, to find animals in flock 2638

Flock and Parentage Criteria (to specify flocks or animals to show or not show)			
SIL Flock Number (e.g 1234)	Not <input type="checkbox"/>	2638	Not <input type="checkbox"/>
Sire (e.g 1234.5678/09)	Not <input type="checkbox"/>		Not <input type="checkbox"/>
Dam (e.g 1234.5678/09)	Not <input type="checkbox"/>		Not <input type="checkbox"/>

Occasionally selection lists are dominated by one or two flocks for a given selection criteria. To focus your search for rams from flocks other than the dominant flocks, or a flock you would like to avoid, you can type in up to 3 flocks to be excluded in the search and tick the Not box. For example, to ignore animals in flock 29 and 2402

Flock and Parentage Criteria (to specify flocks or animals to show or not show)			
SIL Flock Number (e.g 1234)	Not <input checked="" type="checkbox"/>	29	Not <input checked="" type="checkbox"/>
		2402	Not <input type="checkbox"/>
			Not <input type="checkbox"/>

It is also possible to search for rams from specific sires or dams by typing in their SIL format ID (Flock.Tag/last 2 digits of birth year). For example, to find progeny of sire 2747.416/12

Flock and Parentage Criteria (to specify flocks or animals to show or not show)			
SIL Flock Number (e.g 1234)	Not <input type="checkbox"/>		Not <input type="checkbox"/>
Sire (e.g 1234.5678/09)	Not <input type="checkbox"/>	2747.416/12	Not <input type="checkbox"/>
Dam (e.g 1234.5678/09)	Not <input type="checkbox"/>		Not <input type="checkbox"/>

Part 3: Find a particular animal using SIL flock number, tag and birth year

To find a particular animal e.g. one you own and you would like updated breeding values, or an animal you may be considering purchasing;

- 1) Select Production System (Terminal Sire or Dual Purpose)
- 2) Select the information you would like displayed
- 3) Change the “query type” to “A specific animal by ID”.
- 4) Type in the full ID in SIL format which is Flock.Tag/last 2 digits of birth year.
- 5) Click the green “Start Search” button as before to reveal the results table for that animal.

For example to display information for animal 2747.416/12

Select Animals to be displayed	
Query Type	A specific animal by ID
Animal ID (e.g 1234.5678/09)	2747.416/12

eSearch RamFinder

Terminal Sire

Flock	BTag	Birth Yr	Sex	NZTW	TSS	TSG	TSM	Sire	Dam	Breed1	Breed2
2747	416/12	2012	R	1668	39	1152	478	712/11	170/09	Suff 43%	Texel 38%

Your query found 1 animals. Showing page 1 of 1.

Additional sources of useful information www.sil.co.nz

NZGE supporting material

Go to www.sil.co.nz and follow the leads to the NZGE Leader lists. Below the Leader Lists is a section labelled "Additional NZGE information".

Additional NZGE Information

NZGE Analysis Information

Participants and flock connectedness table *** This table lists flock type e.g. DP or TS*

Percentile bands table for Sires and Young Rams

National Genetic Trends

NZGE Participants and Connectedness

This table lists active New Zealand flocks that participate in the NZGE reports. It also lists the sub-indexes (e.g. Reproduction, Growth, Dags, Facial eczema etc.) each flock is genetically connected for. All SIL flocks participate in the NZGE analysis but not all flocks participate in NZGE reports and not all flocks are connected for every trait. If a flock you are interested in is not coming up in a search – check the list of participants to see if are they in NZGE reports. If so, check if are they connected for the traits you selected for a Custom index. If they are not connected for a particular trait, remove that trait from the list (including the show and use boxes). Press update and try again.

Percentile Bands Tables

For each NZGE evaluation a percentile band table is generated for Dual Purpose and Terminal Breed sheep. The percentile tables are available on the SIL website on the NZGE leader list page, below the trait leader lists.

The percentile band tables indicate the average value (50th percentile value) and incremental percentile band values for a range of Index combinations, sub -indexes and breeding values for the latest NZGE evaluation. If you are looking at RamFinder results pages for many animals it can be helpful to have printed off the relevant percentile band table to benchmark figures quickly.

National Genetic Trends Graphs

These show the industry average genetic merit by year for NZGE.

For assistance call 0800 SILHELP (0800 745 4357).