



Reading the NZGE Percentile Band Tables

Percentile bands tables are designed to enable breeders and ram purchasers to benchmark animals for indexes and traits relative to all animals in the NZGE analysis. The mean and standard deviation that describes the variation of the animals for each trait is used to construct the table and is updated regularly.

Example: Part of the percentile band for Terminal Sires showing the main indexes.

Threshold to be in top X%	NZTW	SIL-ACE Terminal Sire Sub-indexes		
		TSS	TSG	TSM
5%	+1625	+162	+1050	+618
10%	+1496	+133	+963	+549
20%	+1340	+98	+858	+465
30%	+1227	+73	+782	+404
50%	+1041	+32	+657	+304
70%	+855	-9	+532	+204
80%	+742	-34	+456	+143
90%	+586	-69	+351	+59
95%	+457	-98	+264	-10
Traits in index or units	Lamb Survival, Lamb Growth, Meat Yield	Lamb Survival	Lamb Growth	Meat Yield
Number of connected flocks	89	104	125	94
Number of sires	1288	1421	1804	1492

Headings relate to the NZ Terminal Worth Index (NZTW) and the three sub-indexes that comprise index.

The percentile band is indicated on the left and the value at the threshold is lists next to it.

For example the average value for NZTW (50%) was 1041c and the value at the top 5% was 1625c. A ram with a NZTW value of 1200c would be in the best 50-30% band.

The bottom section describes the traits in the index and the number of flocks connected and the number of sires.

SIL indexes are presented as cents per ewe lambing for dual purpose or cents per lamb for terminal sires, so a higher number indicates higher merit. Breeding values are presented in the units they are measured so growth and wool traits are in kilograms and number of lambs born and survival in proportion of a lamb.

For most breeding values a higher indicates higher merit, but this is not always the case. For example, faecal egg count (FECeBV) and Facial eczema BVs (GGT21eBV) are better when they are lower indicating less eggs/gram or less liver damage enzyme levels.

Number of connected flocks

As part of each NZGE evaluation, flocks are tested for genetics connectedness, connectedness is required to correct for between flock non-genetic effects to ensure that flocks can be validly compared. Only flocks that are adequately connected are reported on leader lists and in RamFinder.

Unconnected flocks do receive indexes and breeding values but as they cannot be accurately benchmarked against other flocks they are considered within flock values only. To be connected a flock must be recording the trait and have progeny from common sires in common with the main flock group in the NZGE. A flock may be connected for some traits and not for others.



A dual-purpose flock may be connected for reproduction, survival, and growth – but as the NZMW index includes wool, they would not be eligible to be listed for NZMW. A table of flock connectedness by traits is updated every two months with the Leader lists and is available on the SIL website. (www.sil.co.nz).

Percentile band tables are reasonably robust and changes tend to slow and steady, but it is best practise to compare values against the most up-to-date tables.

Number of connected Sires

This indicates the number of sires connected for the index, sub-index or BV. A sire may have been purchased from an unconnected flock in which he has no progeny (A) is used in another flock (B) that is connected, so would be eligible to feature in Leader lists and included in the count of connected sires.

Generating flock reports using NZGE values

Within and across flock reports can be generated from NZGE evaluations, and individuals benchmarked against the percentile bands tables.

Sire and Young Ram tables

Sires generally represent a very select sub set of animals that have higher merit than the wider population. Sires should be compared against the Sire Percentile Bands tables. Young rams for sale (hogget and two tooth rams) should be benchmarked using the Young Rams table which is based on the whole population of young animals (both ewe and ram) born the previous year.