

Table 9. Sheep Genetics recommendations to improve LMY by matching terminal sires to ewe base and target market

Domestic Trade Weight	Trade \$ Index values of 109 or above. The Trade \$ Index aims to optimise growth, fat and muscle for a 20kg carcass weight lamb. Specific traits should fall roughly within the ranges shown below.				
Lambs from XB ewes 18–22kg CWt	BWT	PWT	PFAT	PEMD	Carcass Plus Index
	+0.5 or below	12 or above	-1 to 0	+1.2 or above	175 or above
	Note: If PWT is greater than 14 then PFAT range should be greater than -0.5. If rams are being mated to maiden ewes, BWT may need to be below +0.4. Rams with higher post-weaning weight ASBVs will produce lambs with faster growth rates and will have greater carcass weights at given ages. As new season lambs from 1st cross ewes are usually fatter, rams should have lower ASBVs for fat to compensate for this effect. However, if sires ASBVs for growth are high, the ASBVs for PFAT should not be as low.				
Lambs from Merino Ewes 18–22kg CWt	BWT	PWT	PFAT	PEMD	Carcass Plus Index
	+0.4 or below	12 or above	-0.7 to +0.5	+1.2 or above	175 or above
	If rams are being mated to maiden ewes or small framed ewes, BWT may need to be below +0.3. In general rams selected to mate to Merino ewes should have slightly higher growth and slightly higher PFAT values to compensate for the Merino genetics, particularly if the environment is such that the season is shorter. Emphasis on muscling should be moderate to high.				
Export Weight	Export \$ Index values of 107 or above. The Export \$ Index aims to optimise growth, fat and muscle for a 24kg carcass weight lamb. Specific traits should fall roughly within the ranges shown below.				
Lambs from XB ewes 24kg + CWt	BWT	PWT	PFAT	PEMD	Carcass Plus Index
	+0.5 or below	13 or above	-1.2 to 0	+1.5 or above	185 or above
	If rams are being mated to maiden ewes, BWT may need to be below +0.4. Getting 2 or 3 fat score 24kg plus lambs is a challenge. Sires with negative ASBVs for fat will produce leaner lambs. Selecting sires with higher growth rate and negative ASBVs for fat will produce higher yielding lambs. However, very low PFAT values may impact on eating quality.				
Lambs from Merino ewes 24kg + CWt	BWT	PWT	PFAT	PEMD	Carcass Plus Index
	+0.4 or below	13 or above	-0.1 to 0	+1.5 or above	185 or above
	If rams are being mated to maiden ewes or small framed ewes, BWT may need to be below +0.3. In general ASBVs for fat do not need to be as low as for XB ewes. However it is important that you look at your feedback sheets as there is significant variation in the genes for fatness and growth amongst Merino ewes. In general Merino ewes may also be slightly poorer muscled so a little more emphasis on muscling should occur.				