

What measurements to take when in a sheep breeding program?

	Rams		Ewes		Comments
	Age of Measurement	Wool Growth	Age of Measurement	Wool Growth	
Fibre diameter	> 9 months	> 6 months	> 9 months	> 6 months	Should be measured on all sheep – see article about relevance of precision and accuracy with respect to type of measurement.
Greasy Fleece Weight	> 9 months	> 6 months	> 9 months	> 6 months	Collect weaning weight measurements to correct for early age measurement if lambs not pre-shorn or early age measurements are collected. Rule of thumb: to have as much wool as possible at as old an age as possible prior to joining. Can be measured twice on rams if possible pre-joining or if using early age measurements. This improves the accuracy of selection.
Yield	With fibre diameter measurement	With fibre diameter measurement			There is a high genetic correlation between greasy fleece weight and clean fleece weight, so selection on greasy fleece weight will lead to increased clean fleece weight. Therefore, I only recommend yield measurements on rams, and if you are collecting two measurements, only one measurement. Needs to be measured if staple strength is measured.
Staple Strength	With fibre diameter measurement	> 6 months			Should be measured directly where reducing fibre diameter is a high priority in the breeding program.
FEC	Spring lambs				Significant gains can be made with measurement of rams only. Collection to occur before 1 st spring, but after young rams exposed to worm larvae. Best results will occur when average FEC for the mob is > 300 EPG. Need to monitor FEC in young rams over their first winter.
Dag Score	Over their 1 st winter		Over their 1 st winter		On or at winter crutching, collect information on dags to determine those with and without dag accumulation.
Body weight	Off shears		Off shears		Allow time for sheep to “empty out” after yarding and before collection of measurements. Important to measure in rams to maintain body weight and reproductive rate. Measurement in ewes relevant where increases in body weight are part of the objective.
Fleece rot	Prior to shearing		With classing prior to shearing		Fleece rot has a high genetic correlation with body strike. Sheep resistant to fleece rot are less likely to have progeny with body strike.
Breech wrinkle / perianal bare area	Lamb marking		Lamb marking		Measure breech wrinkle score and perianal bare area using standardized scoring systems.