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# Genetic Benchmarking for Commercial Merino Breeders

Produced for the CRC for Premium Quality Wool undergraduate program by;  
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# Genetic Benchmarking

## What is it?

- Establish the relative performance of
  - flocks & bloodlines,
  - rams, ewes & sires

## Why is of value?

- Establishes change is required
- Provides a means to make change
- The start of genetic improvement
- Marketing - industry comparison

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# Introduction

## Two 'Best Practice' benchmarks

- **Bloodline Performance**
  - based on combined wether trials
  - benchmark
    - bloodlines, *plus*
    - flocks
- **Sire Performance**
  - based on Fine- & Medium-Wool CTSE
  - benchmark
    - sires, *plus*
    - flock rams & ewes

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# Tools

- **Breeding Objectives**
  - the future, long-term, well-defined, measurable
- **Performance records e.g. objective measurement**
  - allows performance to be clearly defined
- **Wether trials**
  - performance of several flocks
- **Bloodline Performance**
  - performance of many widely used bloodlines

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# Tools

- **On-Farm Trials**
  - establish performance in the farm environment
  - flocks, bloodlines, rams and sires
  - only limited number compared
- **Comparative Analysis Groups**
  - routinely compare their production and \$ value
  - environment difference between flocks





# Tools

- **Central Test Sire Evaluation (CTSE)**
  - relative performance of elite stud sires
- **Across-stud evaluation**
  - benchmark to industry - CTSE
  - small number of studs for several years
  - stud breeders: stud sires & ewes
  - commercial breeders: flock rams
  - low efficiency - limited comparisons
  - variable accuracy - limited links

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# Tools



## MERINO BENCHMARK

- group developed in '96 - 8 members
- development phase - now open - 18
- policy on output & QA procedures
- genetic groups analysis plus BLUP = accurate analysis = across-stud relative value of ewes, rams and sires