Breeding for Disease Resistance in Sheep

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Threats to existing control measures

• Gastro-intestinal parasites
  – Anthelmintic resistance

• Sheep Blowfly
  – Animal welfare issues (mulesing)
  – Pesticide residues
  – Resistance to pesticides

• Lice
  – Pesticide residues
  – Pesticide resistance
Breeding for disease resistance - What is the down-side?

- Extra trait to improve
  - effect on selection pressure
  - correlations with production traits

- Physiological cost?

- May need to deliberately challenge
  - Challenge varies spatially and temporally

- Difficulties with economic weights
Other complications

- Alternative control measures uncertain
- Production losses difficult to quantify
- Treatment costs usually non-linear
- Distributions rarely continuous or normal