



Base System Summary

Bryce Road, Dipton

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GHG Biogenic Losses

The table below outlines the Base biogenic GHG emissions from the property.

eCO ₂ (carbon dioxide equivalents) tonnes/yr				
	Methane GHG Emissions	N ₂ O GHG Emissions	CO ₂ GHG Emissions	Total GHG Emissions
Base GHG emissions	1963	461	7	2431

Summary of Base Farm System

- 625 ha property (611.4 ha effective)
- 3800 MA breeding ewes with a birth rate of 135%
- 1100 replacements kept.
- 5500 non-replacement lambs sold prior to winter.
- 682 to 1364 store lambs on farm from March-May
- 54 beef yearlings on farm from November increasing to 64 in February sold the following January.
- 16 ha swedes and 16 ha kale grown for wintering.
- Approximately 191.5 t DM of supplements harvested on farm.
- Approximately 67.9 t DM of supplements imported on farm.
- Nitrogen fertiliser applied to crops at sowing.

Key Drivers of GHG

Methane emissions are driven predominantly by animal Dry Matter Intake - the more dry matter that is eaten (grazed or imported supplement) by ruminants, the more methane will be emitted. A key focus is maximising profitability from every kg DM consumed.

Nitrous oxide emissions are driven by the nitrogen cycle and the wetness of the soil. If animals urine contains higher concentrations of nitrogen, especially when soils are wetter, the rate of nitrous oxide emissions may increase. Optimising the timing of nitrogen fertiliser application also reduces the risk of losses.

Carbon dioxide is generated every time fossil fuels are burnt, woody vegetation is cleared & when lime or nitrogen fertiliser are applied.