

Automatic milking for pasture based farming systems

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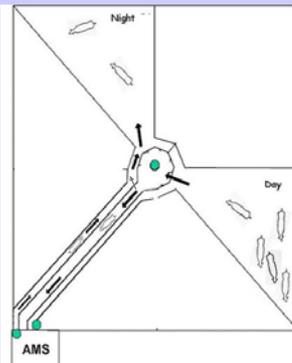


'The Greenfield Project' (Dexcel) Hamilton, NZ

- 180 cows
- 46 ha of pasture
- 2 AMU (~90 cows/AMU)
- ~ 1.2 milkings/cow/day
- Concentrates - 50% of the herd get 1 kg/day and 50% of the herd get none

Cow traffic

- 4 blocks, each divided into a day side and a night side
- Cows graze two breaks (one day side, one on night side) at any one time
- Rotational grazing system
- Fresh break opened up twice daily
- Water available in selection unit, prior to & after exiting the AMS



Selection Unit

- Cows enter through one-way cow operated gates
- Cows exit through computer-controlled gates
- Cows are sent to the AMS or back to pasture depending on when they were last milked



The Big Questions

- Can Automatic Milking work in a grazing system?
- Is Automatic Milking a feasible option in a grazing system?

Economic Feasibility depends on:

(Lightfoot and Mulvaney 2002)

- **Capital cost** (also lifespan/salvage value)
- **Milk price**
- **Labour cost**
- **Labour savings**
- **Milk production per cow**
- **Pasture consumption per ha**
- **AMU efficiency**

Research issues for AMS in Australia

- **Pasture consumption**
- **AMU efficiency**
- **Labour efficiency**

Conclusions

- **Automatic milking can work in high and low input grazing systems**
- **Feasibility will depend on a number of factors**
- **Automatic milking has great potential to meet the needs of some farmers**

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