Grassland dairying
controllable and uncontrollable factors

FarmWise

LIC
www.lic.co.nz

Systems seen in NZ

- All pasture, self contained – no feed in
- Feed in or grazing off – 4–14% feed in
- Feed in for autumn – 10–20% feed in
- Feed in for spring/autumn – 20-30% feed in
- Feed in over lactation – 30-50% feed in
- Once a day

All pastoral dairy systems need the following strategies

- Correct stocking rate (cows/ha acre)
- Graze pastures well
- Plan how and when to use supplements
- Target pasture cover at drying off

Essential pastoral dairy system strategies cont'd

Calving

- Target cover and feed wedge
- Allocate pasture
- Measure feed cover
- Identify and remove surplus feed
- Identify short falls

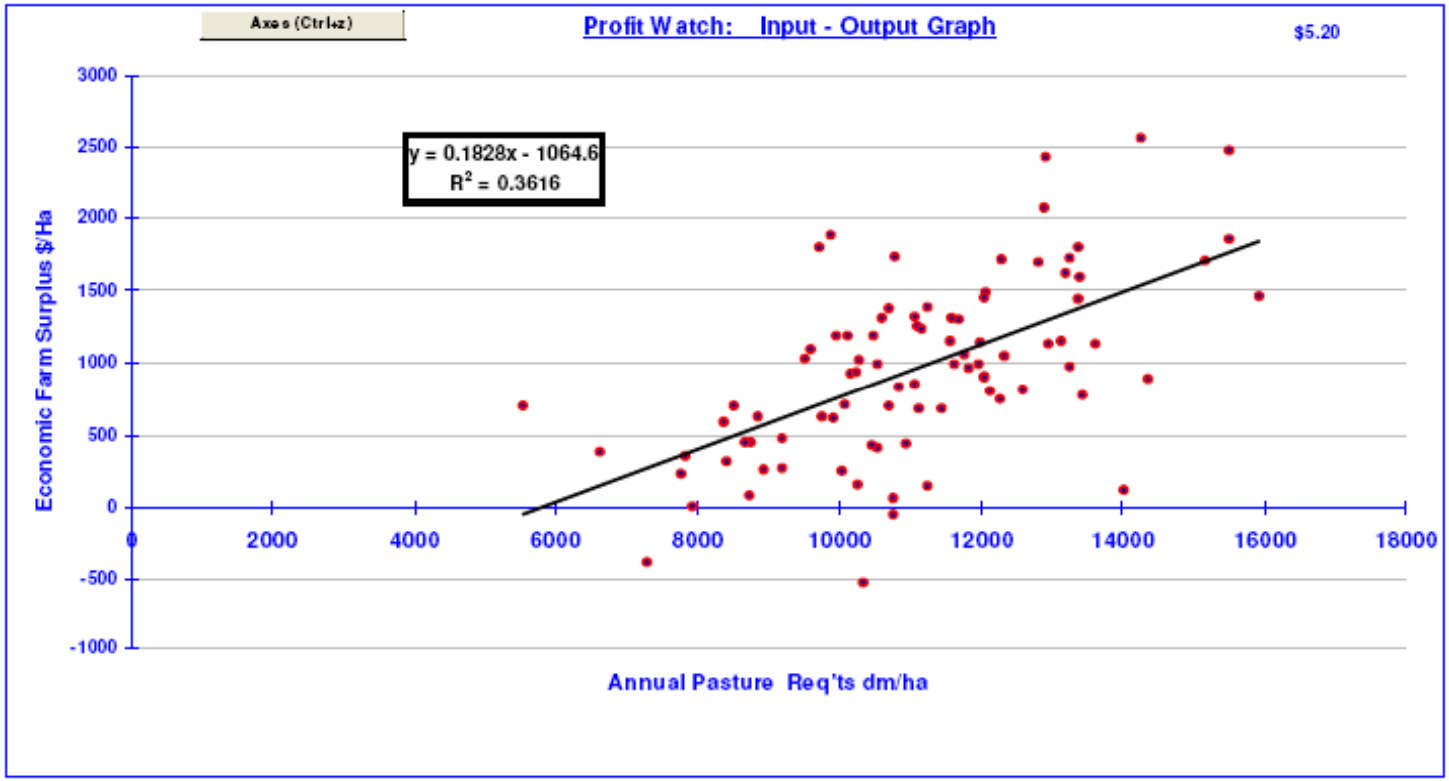
The most important activity on a grassland farm

FarmWise

LIC
www.lic.co.nz

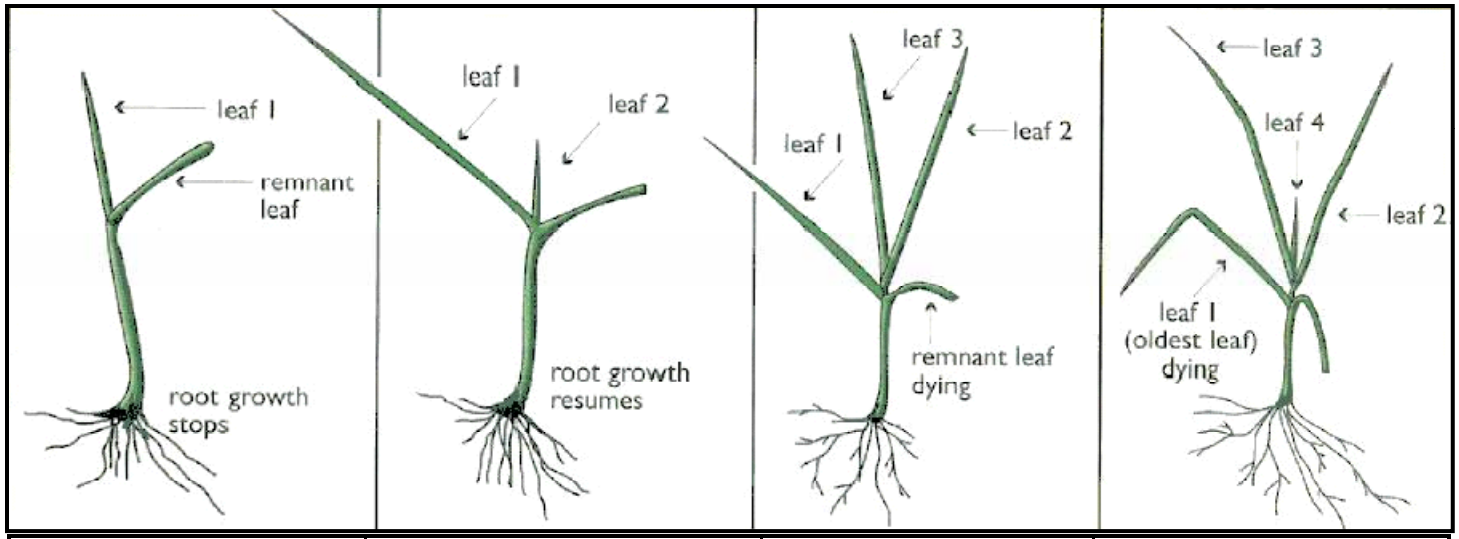
No 1

- Pasture eaten is the greatest driver of farm profitability



No 2

- Well managed pasture is green leafy grass (3 leaf stage) with minimal seed-head and dead-matter.



Leaf Stage 1	Leaf Stage 2	Leaf Stage 3	Leaf Stage 4
Growth dependant on crown & root reserves		Rapid growth, adequate leaf area = optimal growth	Slower growth due to; 1. shading 2. decay

The importance of pasture quality

Pasture Quality (MJ ME/kg DM)	Effect on intake and milksolids	
	kg DM/day	MS (kg/day)
12 (80% digestibility)	18	2.3
11 (73% digestibility)	17 - 17.3	1.9
10 (66% digestibility)	16 - 16.6	1.5 - 1.6

Uncontrollable factors

- Climate
- Soil type
- Milk price

Controllable factors

- The right cow
- Good infrastructure
- Feed budget
- Cost control
- Compact calving

Controllable factors Cont'd

- Efficiencies
- Think outside the square.
- Ask 'what if' questions

Key Factors in Producing Low Cost Milk

- Labour efficiencies - tail painting, calf rearing, simple/effective milking systems
- Pasture management – quality, quantity & utilisation
- All these factors are controlled by the farmer
- Financial outcomes of any system are driven by the cost of feed
- a strong relationship between pasture consumed/ha & EFS/ha

Milking the right cow

Strain Trial - Ireland

Strains	Liveweight	Yield (kg)	Milksolids
NZ	587	5,938	480
High Durability (HD)	632	6,453	479
High Production (HP)	603	6,026	461

Milking the right cow

Fertility Results

	NZ	HD	HP
Gestation Length (days)	278	284	285
No. Services/Cow	1.61	1.79	2.07
CR to 1st Service (%)	64	54	45
CR to 2nd Service (%)	59	41	30
CR to 1st & 2nd Service (%)	84	75	63
6wk Pregnancy Rate (%)	74	65	54
Overall Pregnanct Rate (%)	93	86	74

CR = Conception Rate

Milking the right cow

Profit at reduced milk price ($0.223/litre)

Sytems	NZ	HD	HP
High Concentrate Feeding	£0	-£11,205	-£7,814
Moore Park Sysytem	£0	-£5,743	-£3,239

Milking the right cow

International Statistics

	USA	UK	Austrailia	NZ
CR to 1st Insemination (%)	40	40	48	55

	USA	UK	Ireland	NZ
Number of Lactations	2.3	3.1	2.8	4.7

Good infrastructure

- Good races/lanes
- Fresh clean water
- Good stock control
- Exact allocation – cows to paddock size

Main factors you must control in grassland dairying

- The right cow
- Good infrastructure
- Feed budget
- Cost control
- Compact calving
- Efficiencies
- Think outside the square.
- Ask ‘what if’ questions