

# Modern Dairy Cow Disease - How low can we go?



**NEIL BAKER**  
FARM MANAGER  
**BAKER'S OF HASELBURY PLUCKNETT**

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- Principles of Dairy Farming
- Large Dairy Herds
- Baker's Farm History
- Where we are now
- KPI's and Tackling Disease
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# Principles of Dairy Farming

- A good herd health plan should:

1. Be capable of detecting early symptoms of ill health
2. Take steps to eliminate the sources of disease
3. Enlist the aid of the vet to control disease by suitable preventative measures such as vaccination
4. Adapt all management practices which will reduce the risk of disease

✦ *The Principles of Dairy Farming, Kenneth Russell, 1953*

# Principles of Dairy Farming

- At least 3 out of 4 cases of mastitis ought never to happen.
  - They should be prevented by proper routine methods on the farm.
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- It means that if you take sufficiently active steps on farm you can avoid many mastitis cases – and save yourself a lot of worry and money.
    - Your 1<sup>st</sup> step should be to establish a standard milking technique and stick to it
    - Use of disinfectants to wash udders and milkers hands between cows
    - Check milking liners
    - Do not over milk
    - It is a proven fact that the quicker and easier milk is removed, the less likely injury is going to occur to the udder

✦ *Dairy Farmers Veterinary Book, Norman Barron MRCVS PHD, 1963*

# Large Dairy Herds

- Large herds get a bad press.
  - Large herds perceived to have poor health.
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- All evidence points to disease levels being as good as smaller herds.
  - I'm saying size **doesn't** matter regardless of how many acres/cows a farm has in regards to herd health.
  - A bad farmer is a bad farmer but perhaps bad farmers don't (can't) expand!

# Start of Expansion



- 2002/03 built extension on 1992 unit now 350 beds plus other yards.
- Growing using extended grazing and out wintering.

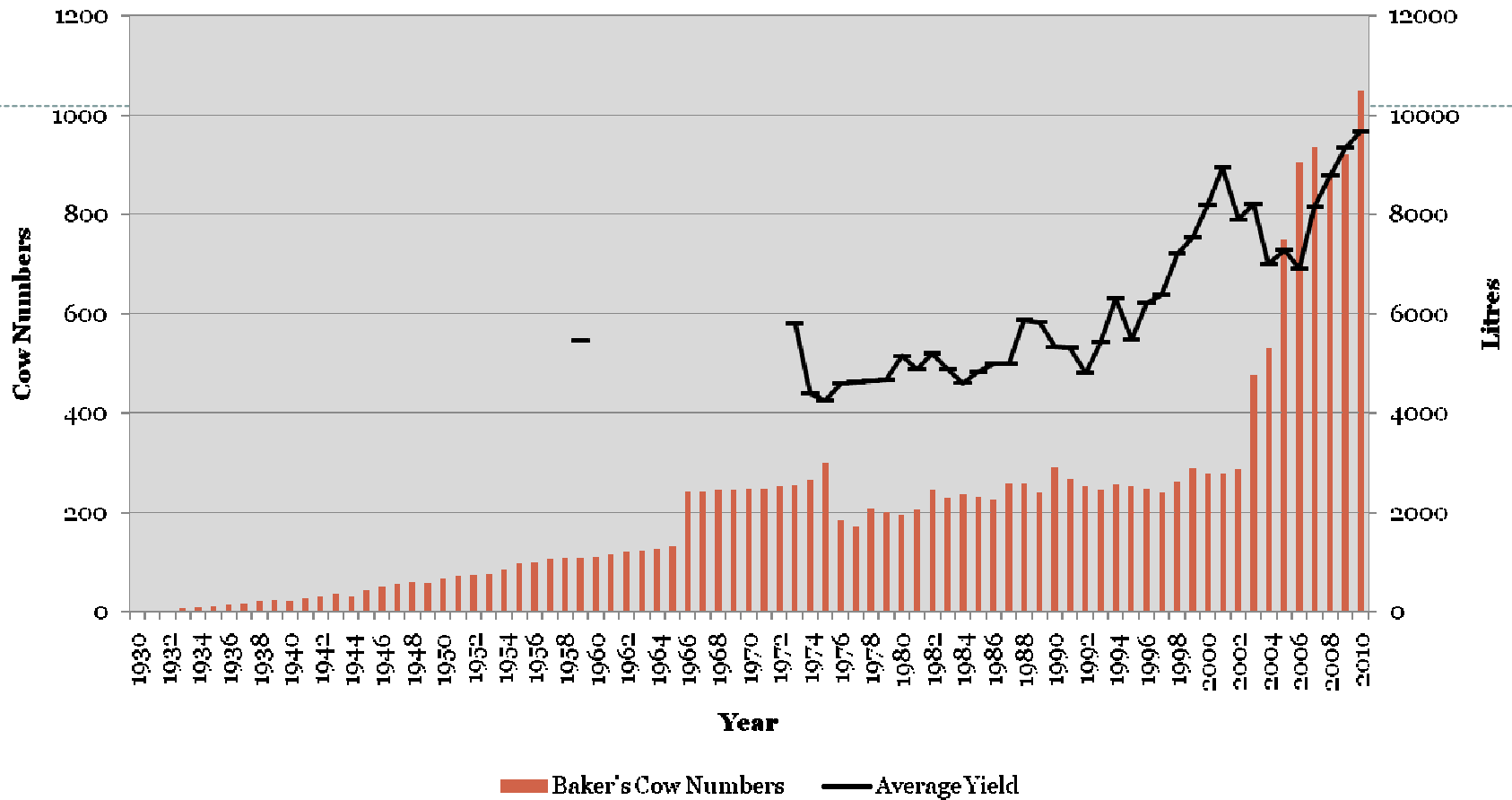
# 2004 Sand Introduced

- Sand beds and old shed mattresses
- Sand introduced in 2004 onto mattresses, simple lagoon system.
  - Slurry system **not** simple anymore.



# Farm Expansion

**Farm expansion through cow numbers and yield since 1930**



**WHERE WE  
ARE NOW**

# Cheese Making at Leaze Farm

- **300 tons a year using 1/3 of all milk produced**

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- **Vintage Farmhouse Traditional Handmade  
Cheddar Cheese**

## Now Supplying:

- Waitrose as **Somerset Ploughman's**
- Tesco as **Vintage Finest**
- Marks and Spencer's as **Barnstormer**

# Farm Details

## **LEAZE FARM (Haselbury Plucknett)**

- Cheesemaking room
- Calves Reared to 6 Months

## **MANOR FARM (Haselbury Plucknett)**

- 100 Growing Heifers 6 to 12 months
- Silage and Feed Storage
- Workshop and Machinery

## **RUSHYWOOD FARM (Haselbury Plucknett)**

- Dairy Unit
- Sand Bedded Cubicles
- Low Yielders Grazed
- 80 Bail Rotary Parlour
- 14 Bail Parlour Used For All Unsaleable Milk
- Milked Daily x 3
- Intensive Fresh Cow Management

## **BROAD LEAZE FARM (Yeovil)**

- Rented Farm For Forage Production

## **HINTON FARM (Crewkerne)**

- 250 Heifers 12 to 23 months

## **MIDDLE CHINNOCK (3 miles away)**

- 80 Heifers 8 to 12 months



# Herd Details

|                              | <b>CURRENT</b> | <b>1 YEAR AIM</b> |
|------------------------------|----------------|-------------------|
| <b>Cows</b>                  | 1049           | 1200              |
| <b>Heifers 1 yr +</b>        | 214            | 300               |
| <b>Heifers 0-1 yr</b>        | 286            | 400               |
| <b>Butter Fat</b>            | 4.03           | 4                 |
| <b>Protein</b>               | 3.29           | 3.45              |
| <b>Bactoscan</b>             | 21             | 20                |
| <b>Cell Count</b>            | 133            | 100               |
| <b>Ave Milk Sold per cow</b> | 9654 litres    | 10500 litres      |

# Cropping

2010

2011

|              |                  |
|--------------|------------------|
| Grazing      | 88.10 ha         |
| Maize        | 278.63 ha        |
| Lucerne      | 140.02 ha        |
| Grass Cut    | 89.63 ha         |
| <b>TOTAL</b> | <b>596.38 ha</b> |

|              |               |
|--------------|---------------|
| Grazing      | 76 ha         |
| Maize        | 300 ha        |
| Lucerne      | 140 ha        |
| Grass Cut    | 80 ha         |
| <b>TOTAL</b> | <b>596 ha</b> |

# Labour

## Directors

- **BRIAN & CHRISTINE BAKER**

## Farm Manager

- **NEIL BAKER**



## Herd Managers

- **JOHN WOMACK (Jan 08) & RICHARD GOODWIN (Aug 08)**

## Polish Workers

- **x 9**

## Tractor Drivers/Farm Staff

- **x 2**

## Office Staff

- **x 1**

## Head Cheesemaker

- **Philip Keys (May 80)**

## Cheeseroom Staff

- **x 3**

# KPI'S AND TACKLING DISEASE

# KPI's

- Key KPI's
  - Average daily milk yield per cow in herd
  - Average dry matter intake per cow per day
  - Number of confirmed pregnancies per month
  - Number of cows culled within first 60 days of lactation
  - % cows mobile
  - Number of Mastitis cases per month

# Key Drivers For Change

- I've spent a lot of time with cows and done a lot of milking, Lameness and Mastitis treatments waste time, that time spent prevents you from preventing them.

- Tidiness/Cleanliness



- Set targets

- Reason for current low levels of disease are the high levels experienced in the past through expansion and understaffing.

- Some cows never get ill and it wasn't always the low yielders.

- Why was that?

- Genetics

- Events in their life

- Past conditions

- Current conditions

✦ Can we change our cows future?

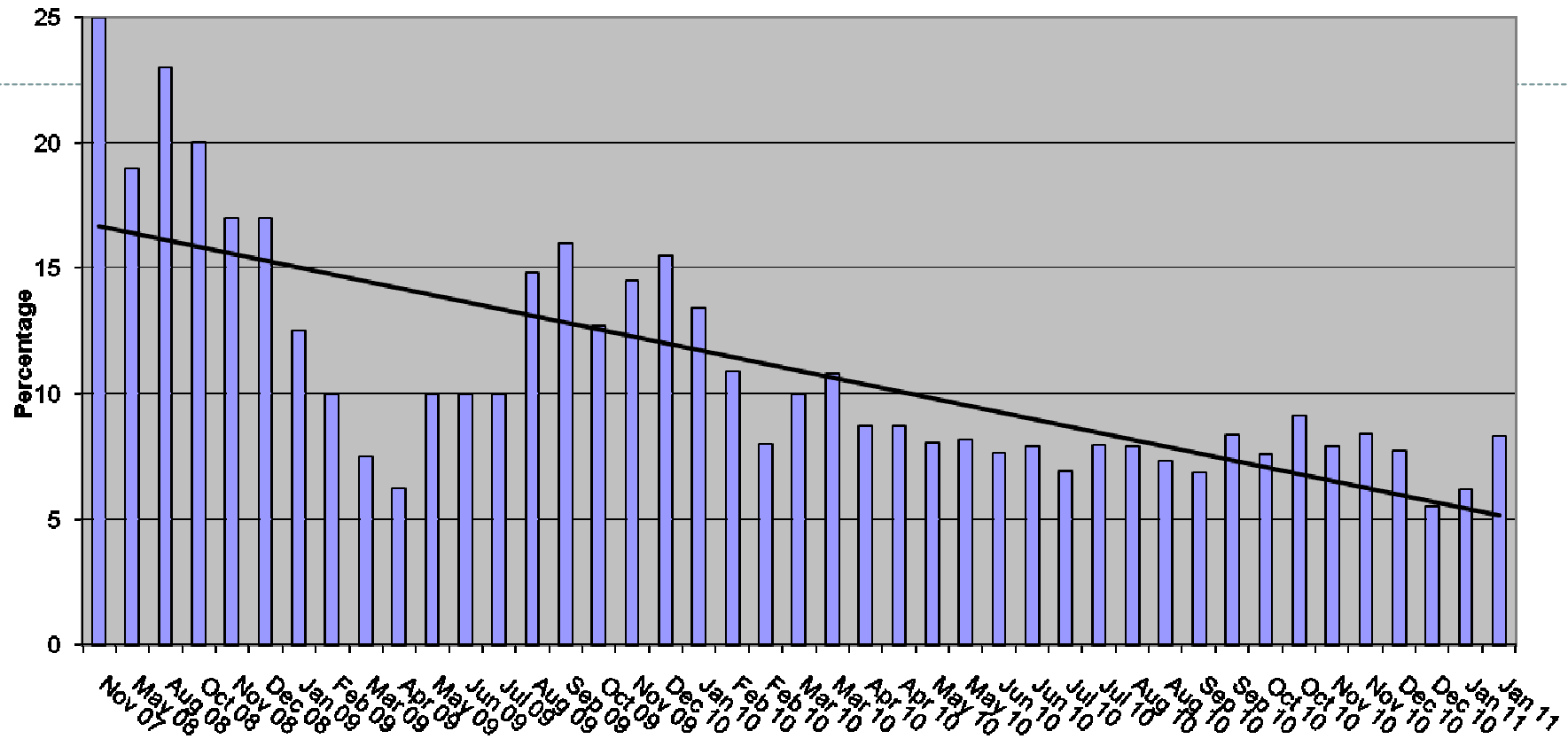
# Tackling Lameness

- Target =  
**0% lameness**
- Key points
  - Cow comfort
  - Mobility scoring
  - Maximum 3 hours a day out of pen
  - Daily foot bathing
  - Twice a year foot checking
  - Reduce injuries
  - Instant treatment
  - Comfort indexes



# Lameness graph

Total Lameness Cows



# Tackling Mastitis

- Target =

**0 cases of Mastitis**

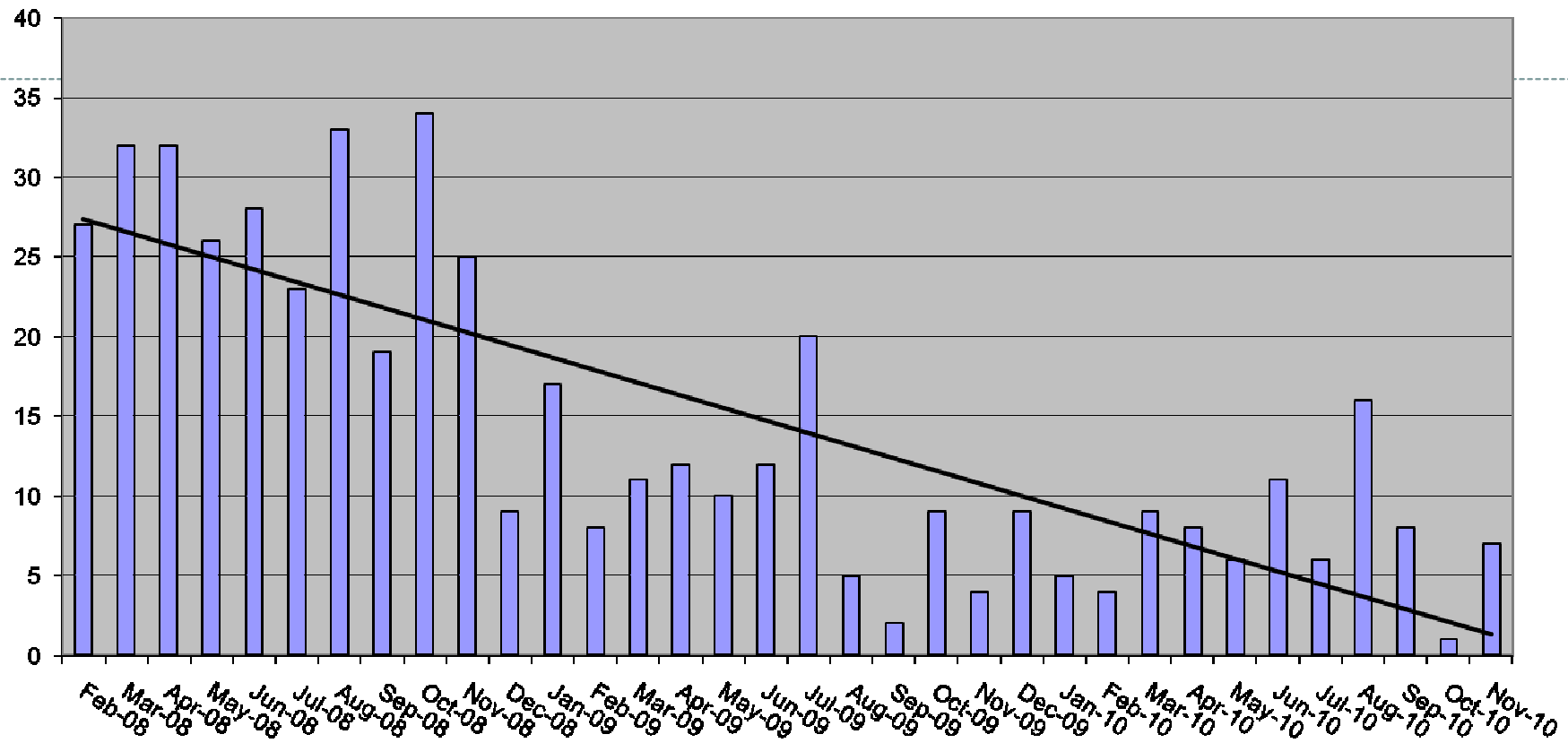


- Key points

- Keep bacteria/manure away from cows teat end
- Bed design
- Drainage
- Sand
- Clip tails a lot
- Keep legs clean with slow, calm, quiet walking
- Milking routine
- Parlour testing
- Parlour products
- Milker training/coaching
- Liner changing
- Separate treatment parlour
- Do not over stock
- Mastitis sample collection in case testing is needed

# Mastitis graph

Clinical Cases by month



HOW WE

DO IT

# Teamwork

- To get these results all the staff has to pull together, like any good team.
  - Everyone has their own strengths, its about getting the best out of individual members of the team. ○
  - To get my team to not only do their best but when their best isn't good enough, to recognise that; before something goes wrong.
  - Problems cause more problems.
  - Need protocols so everyone knows what to do.
- 
- ✦ Put in the resources to make it happen, if management don't do it, why should the rest of the staff? Don't force people to make the wrong decision by overloading them.

# Doing the hard yards

- We've got to make the decisions, we can't expect the cows to do it!
  - Dive on the ball or not?
  - Make the tackle or not?
  - Drive into the gate or open it?
  - Clean the trough or not?
  - Walk past the shit on the bed or clean it off?
  - Walk past that empty feed bag or tidy it up?
  - Head rail broken, leave it or fix?
  - Shut the gate properly or not?
  - Go home when you know there's a leaking water trough or fix it?
  - Ignore Mastitis or not?
  - Ignore Lameness or not?

✦ Lead by example

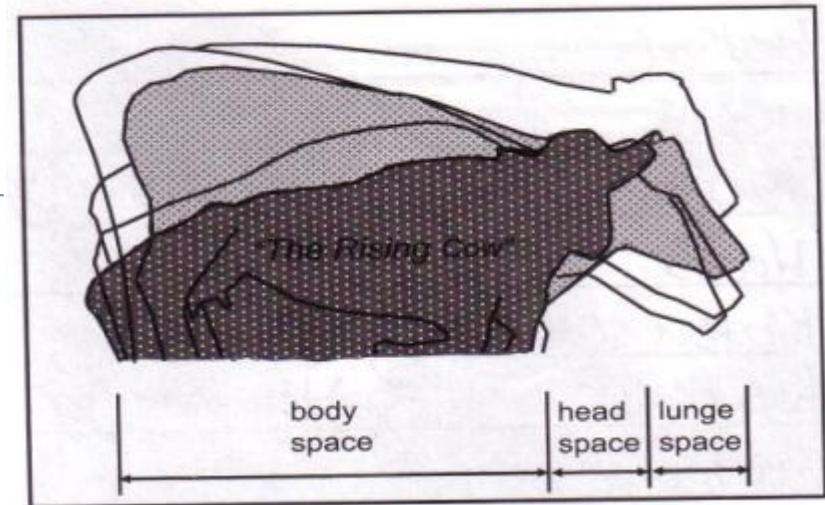
# Stall Design

- Things to think about.
  - Surface
  - Get up and down
  - No front rails
  - How manageable are the beds?
  - No over stocking
  - Some beds never used
  - Get a tape measure
  - How big are your cows
  - How big are your stalls
  - Weigh tape
  - Comfort indexes
  - Side lunge, don't do it



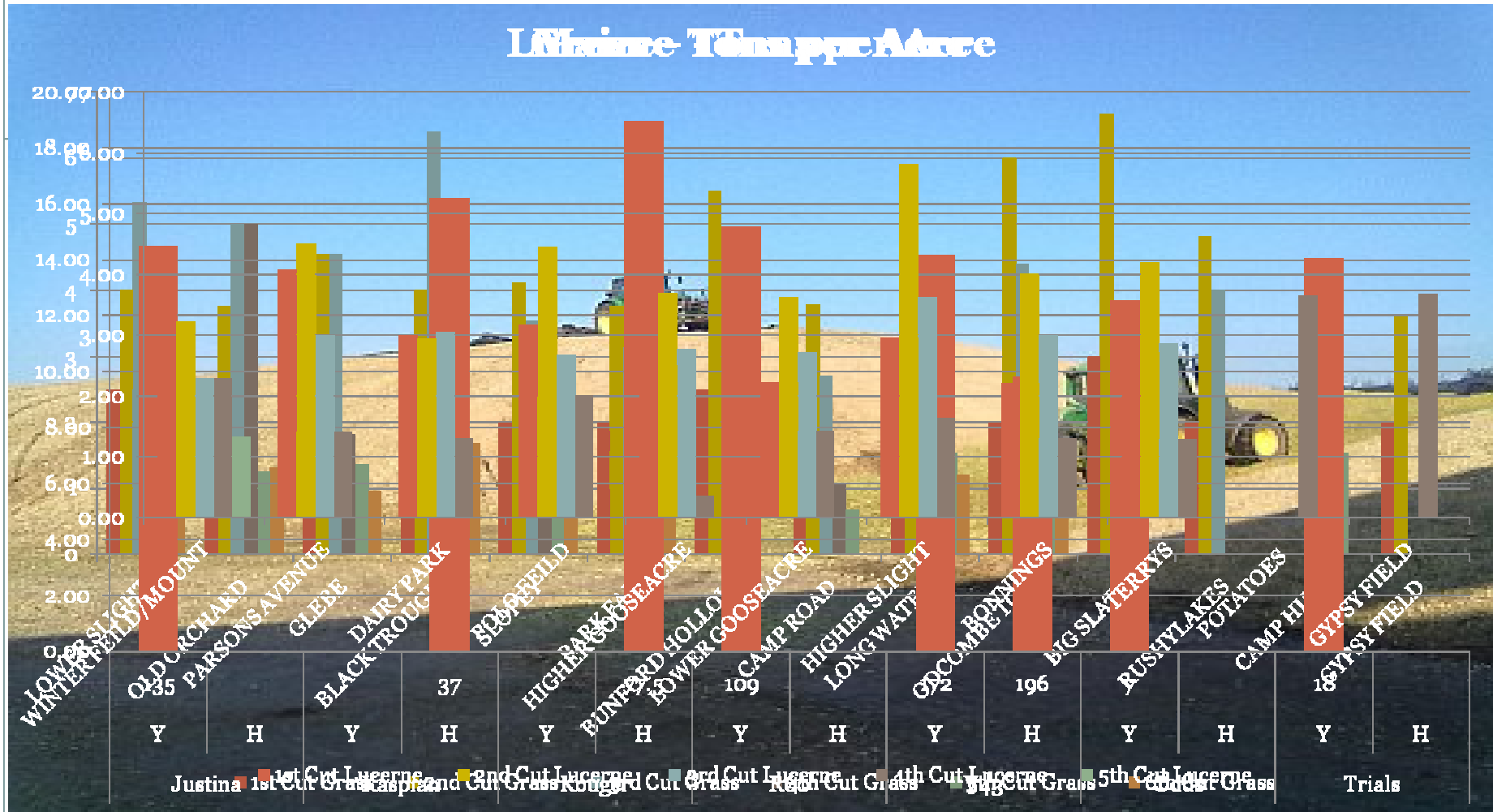
- Look at cows.
  - Knees
  - Necks
  - Hocks
- Is your equipment broken.
  - Broken stalls
  - Head rails
  - Parlour

## Stalls at work...



- Look after your freestalls
- Don't make cows think about simple things
- Do they touch the stalls
- Nothing in front of cows, rails/walls/posts/cows/straps/concrete

# Harvesting



# Feeding

- Different rations for High, Low and Dry yielders.

- Sample Dry Ration

- Straw – 50mm Chop
- Maize Silage
- Dry Mineral Blend
- Grass Silage



# Parlour



350 Cows per hour  
4 man milking team.

THE

FUTURE

# Herd Health Philosophy

- If you cant measure it how do you know whether it is good or bad.
- Don't improve things that aren't bad, got to prioritise.
- Be honest with yourself.
- Don't make excuses.
- Be creative, there is always a way.
- Style of management.
  - Values held
  - Attitude
  - Using your experience

## Some thoughts.....

- Whenever you lose interest in being better at something, chances are you have already stopped being good at it.
- If you fail to plan, you plan to fail.
- We are what we repeatedly do, excellence then is not an act it is a habit.

✦ *Always do what's best for the cows.*