

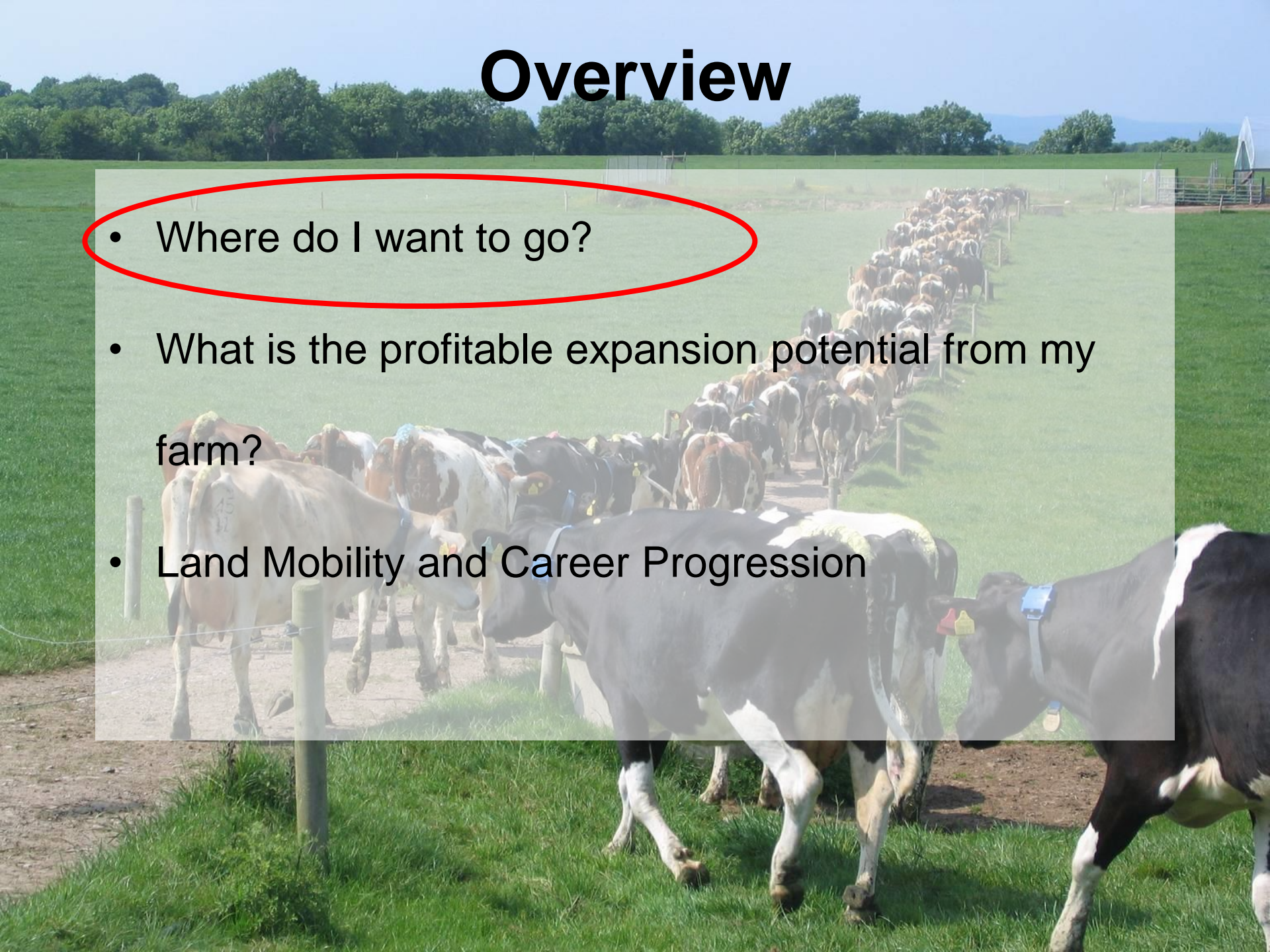
# How much milk can/should I produce profitably?

**Laurence Shalloo**

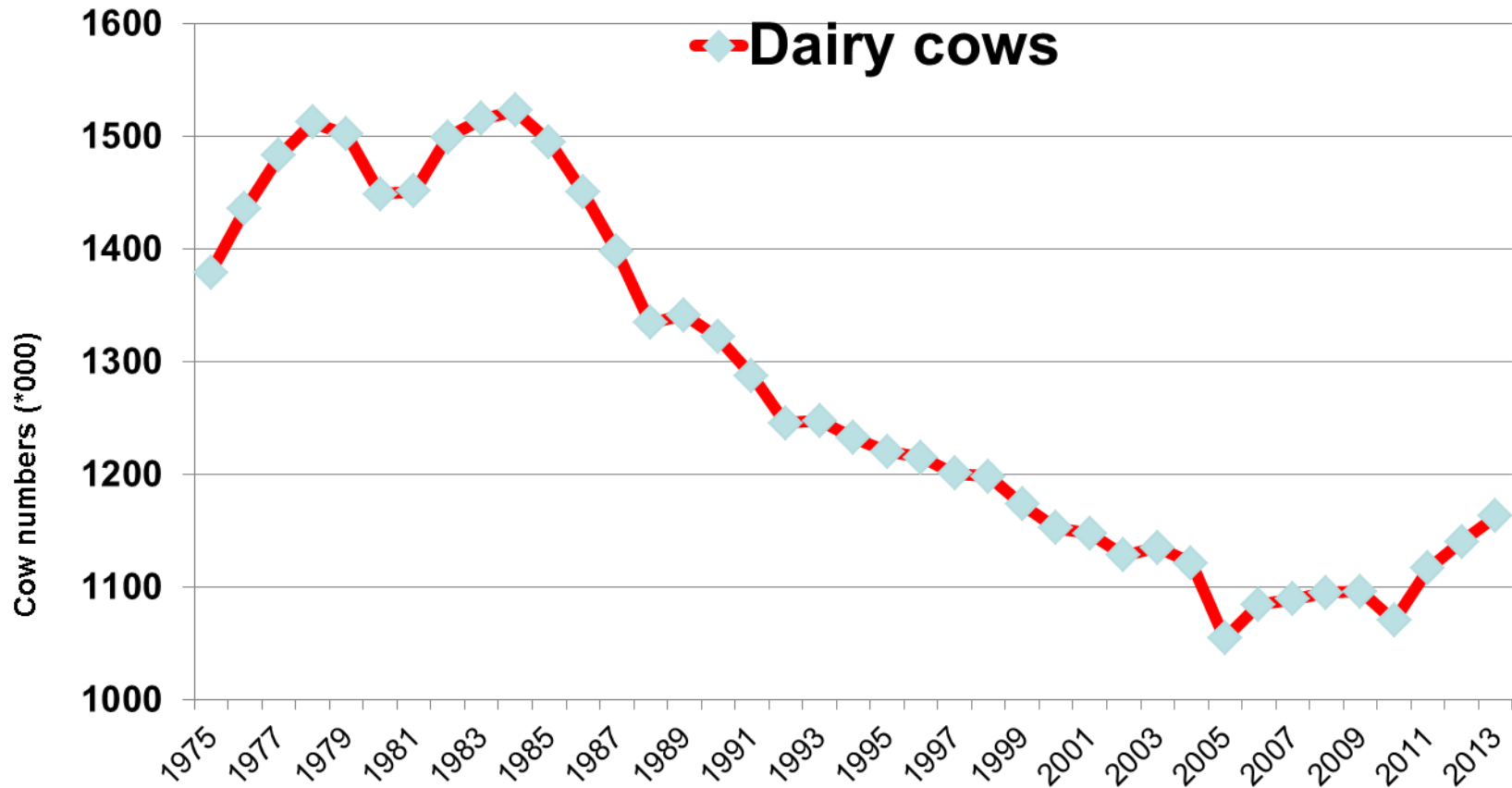
*Livestock Systems Research Department,  
Animal & Grassland Research and Innovation Centre,  
Teagasc, Moorepark*

# Overview

- Where do I want to go?
- What is the profitable expansion potential from my farm?
- Land Mobility and Career Progression



# Background - Dairy Cow Numbers



# Background - Replacement heifers

## Dairy Heifer Calves



# Planning for expansion

- Business Objectives?

**We need to move away from the group think!**

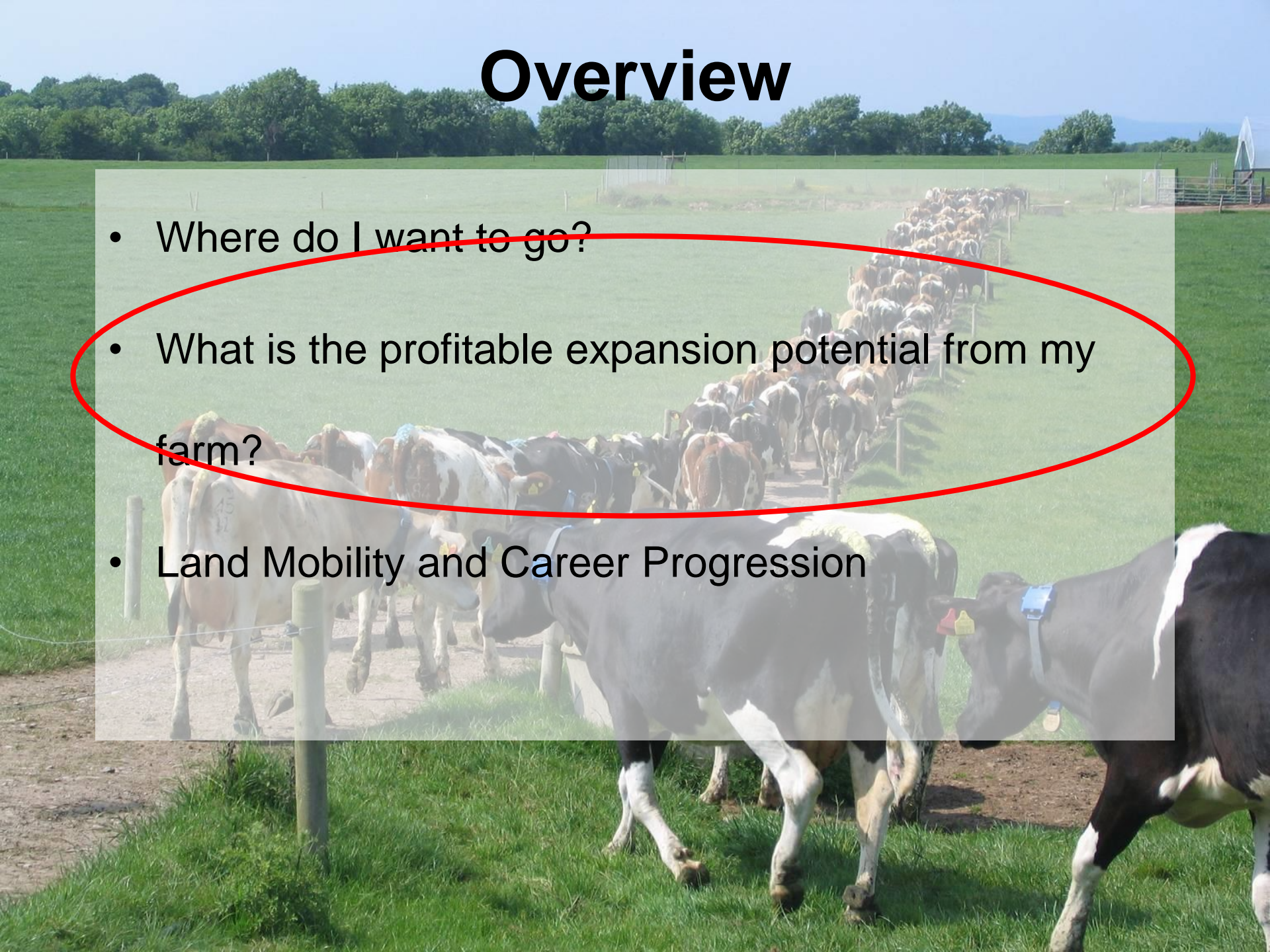
- Physical
- Personal

**Farm plan should be the centre of expansion!**

- Will expansion increase your profitability?
- Effect on cash flow during expansion?

# Overview

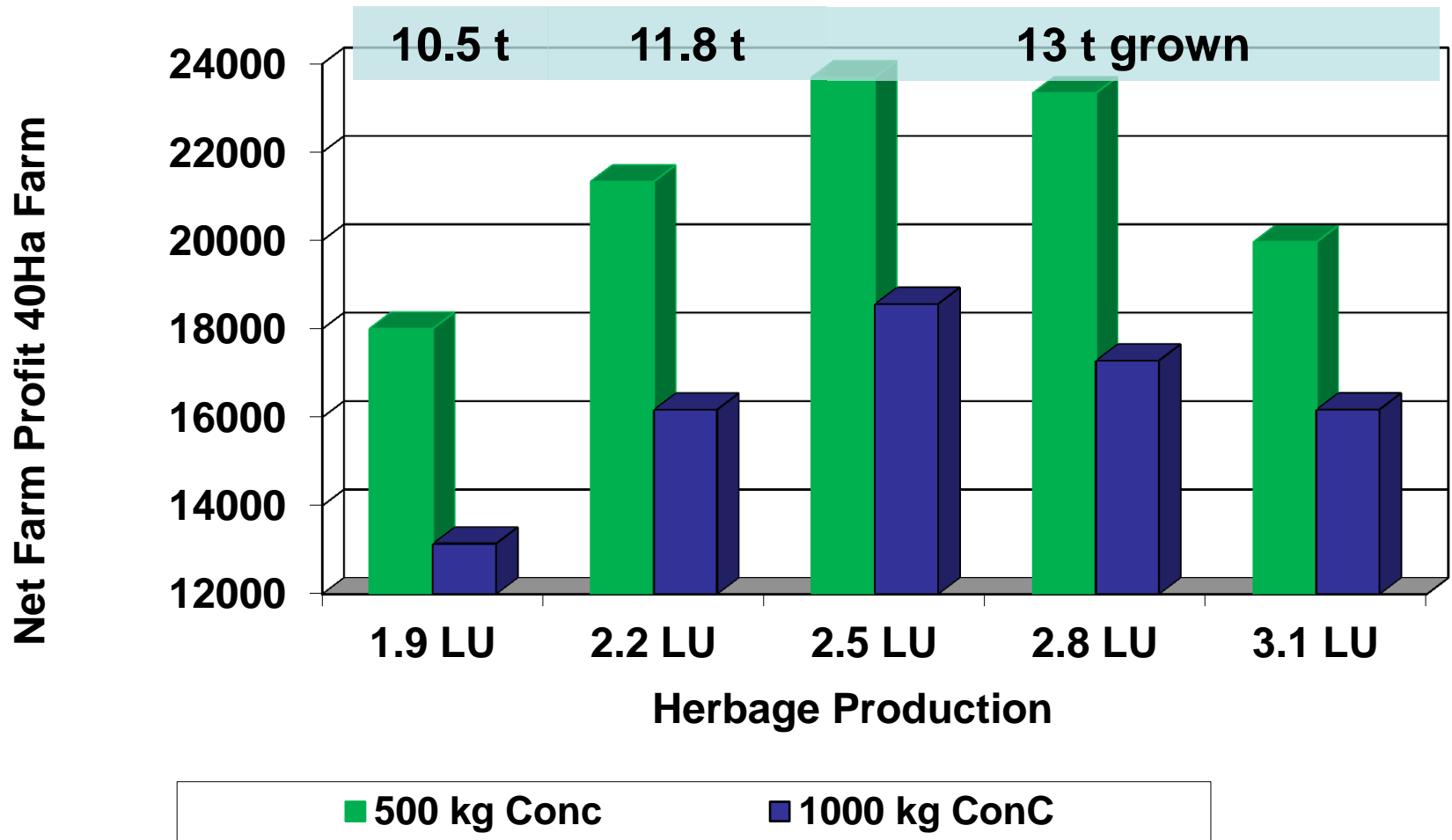
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## Optimum stocking rates

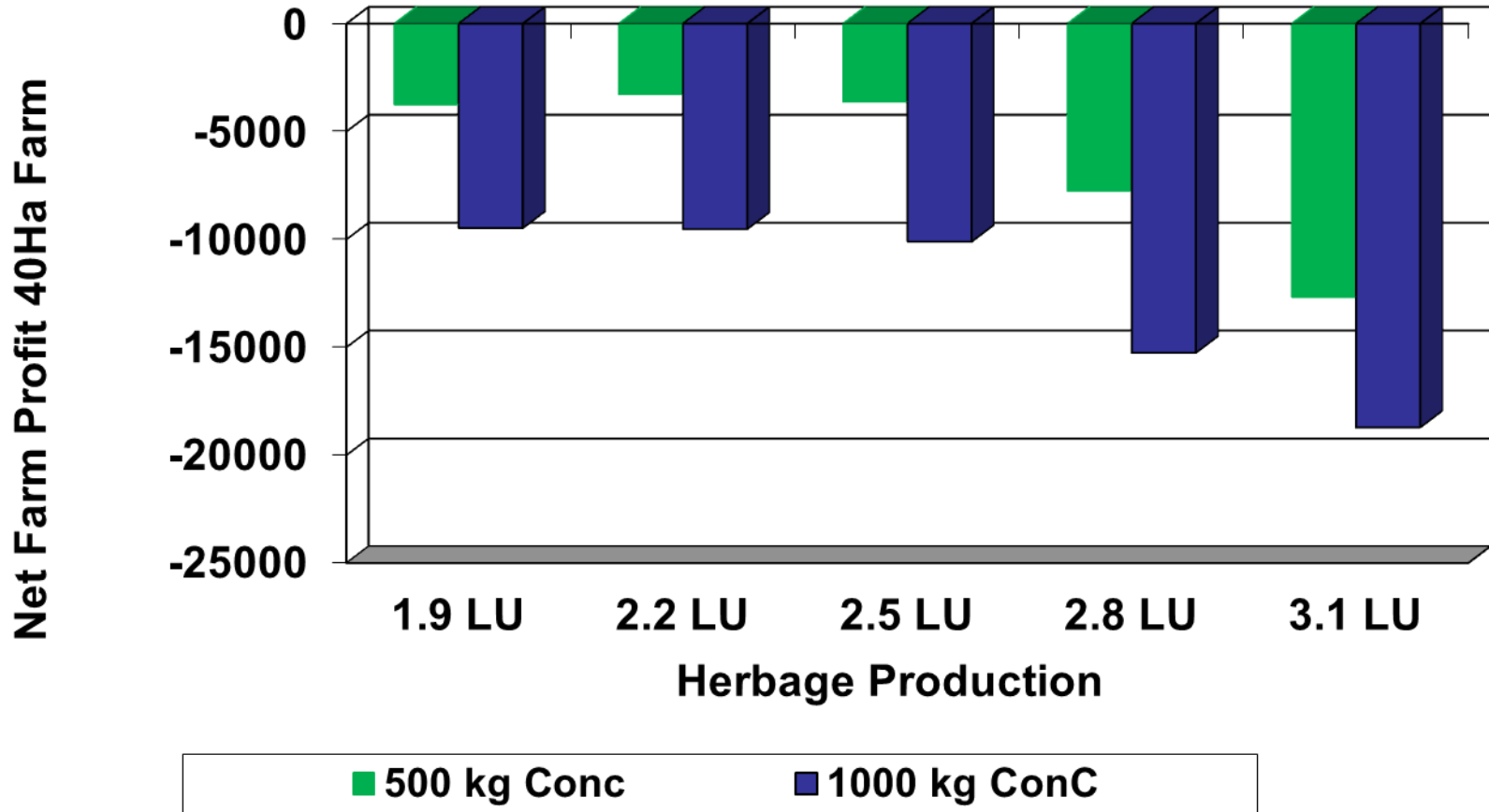
- Outputs form a whole range of studies combined into one single model
  - 5 stocking rates evaluated 1.9 - 3.1 (LU/Ha)
  - 2 levels of concentrate supplementation 500 - 1000(kg/cow)
  - 3 levels of Nitrogen Fertiliser 160 - 250 (kg/Ha)
  - 3 different levels of grass growth 10.5 - 13.0 tDM/Ha
  - Full labour costs
  - Capital costs associated with expansion included

# 40 Ha Farm 29.5 c/l

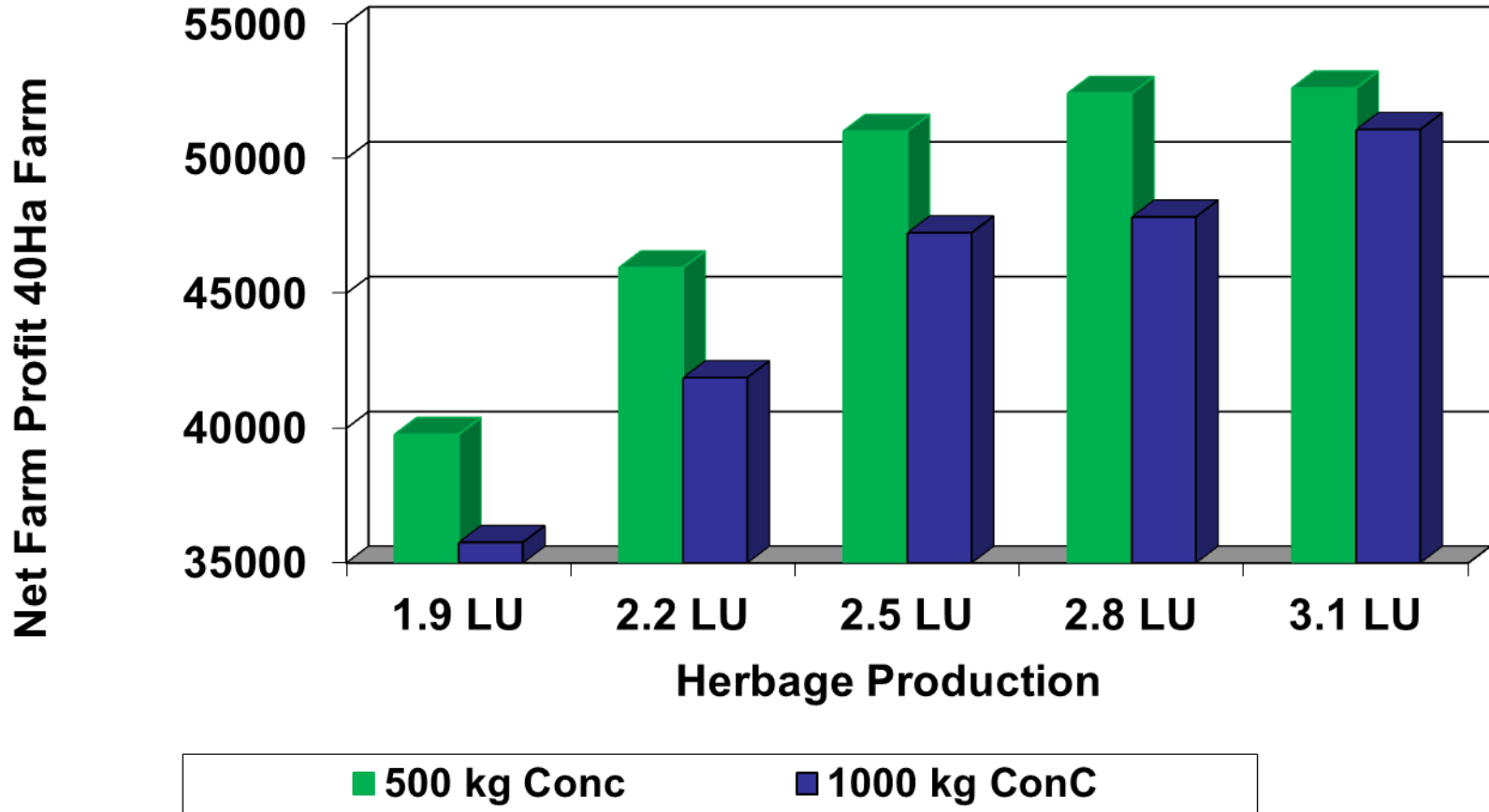




# 40Ha Farm 24.5 c/l



# 40 Ha Farm 34.5 c/l

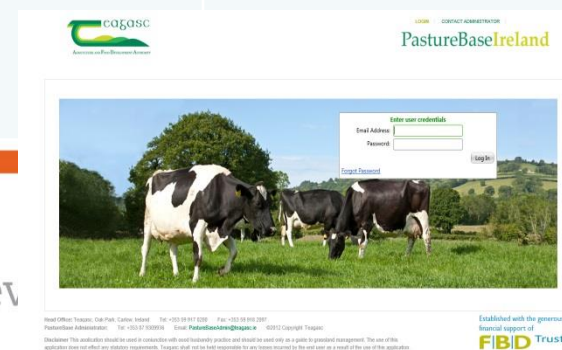


# Consistently Profitable Expansion will be associated with utilising more grass on farm

- Sustainable expansion at farm level will be associated with;
  - Increasing Grass growth
  - Increasing grass utilisation
  - Maximising the conversion of grass grown to milk
  - Minimising supplementary feed
  - Minimising the capital investment with expansion

# Farm Performance - Dairy (t DM/ha) 2013

	Average	Maximum	Minimum	Range
Total Grass Production	12.5	18.0	7.3	10.7
Grazing DM Production	10.3	16.8	6.2	10.6
Silage DM Production	1.9	5.0	0	5.0
Number of Grazings	6.2	9.14	4.57	4.58



The screenshot shows the PastureBaseIreland website interface. At the top, there are logos for 'eagasc' and 'PastureBaseIreland'. Below the logos is a navigation bar with 'LOGIN' and 'CONTACT ADMINSTRATOR'. The main content area features a large photograph of several black and white cows grazing in a green field. Overlaid on the right side of the photo is a login form with the heading 'Enter your credentials'. The form includes fields for 'Email Address' and 'Password', a 'Forgot Password?' link, and a 'Login' button. At the bottom of the screenshot, there is a small footer with contact information and a disclaimer.

# National DM Production (t DM/ha)

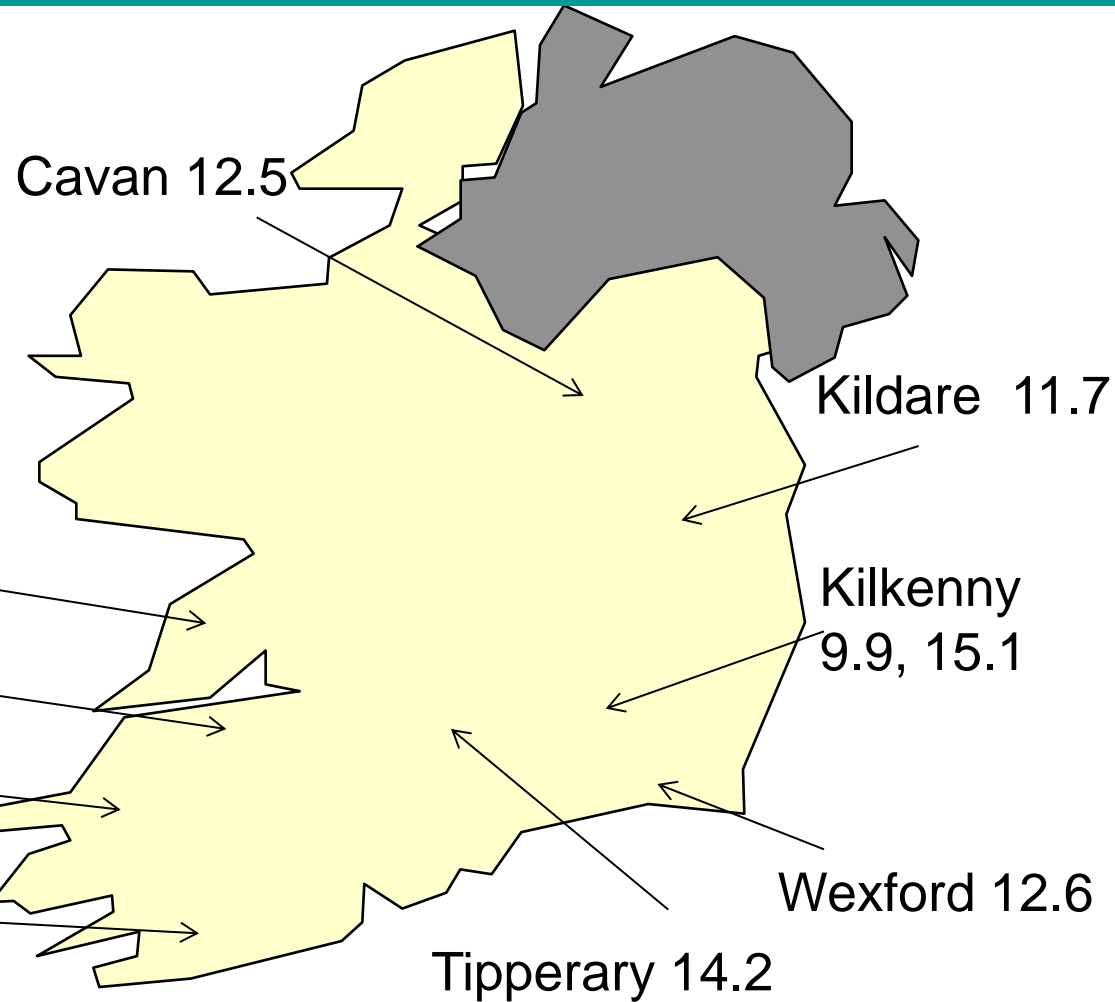


LOGIN CONTACT ADMINISTRATOR  
PastureBaseIreland



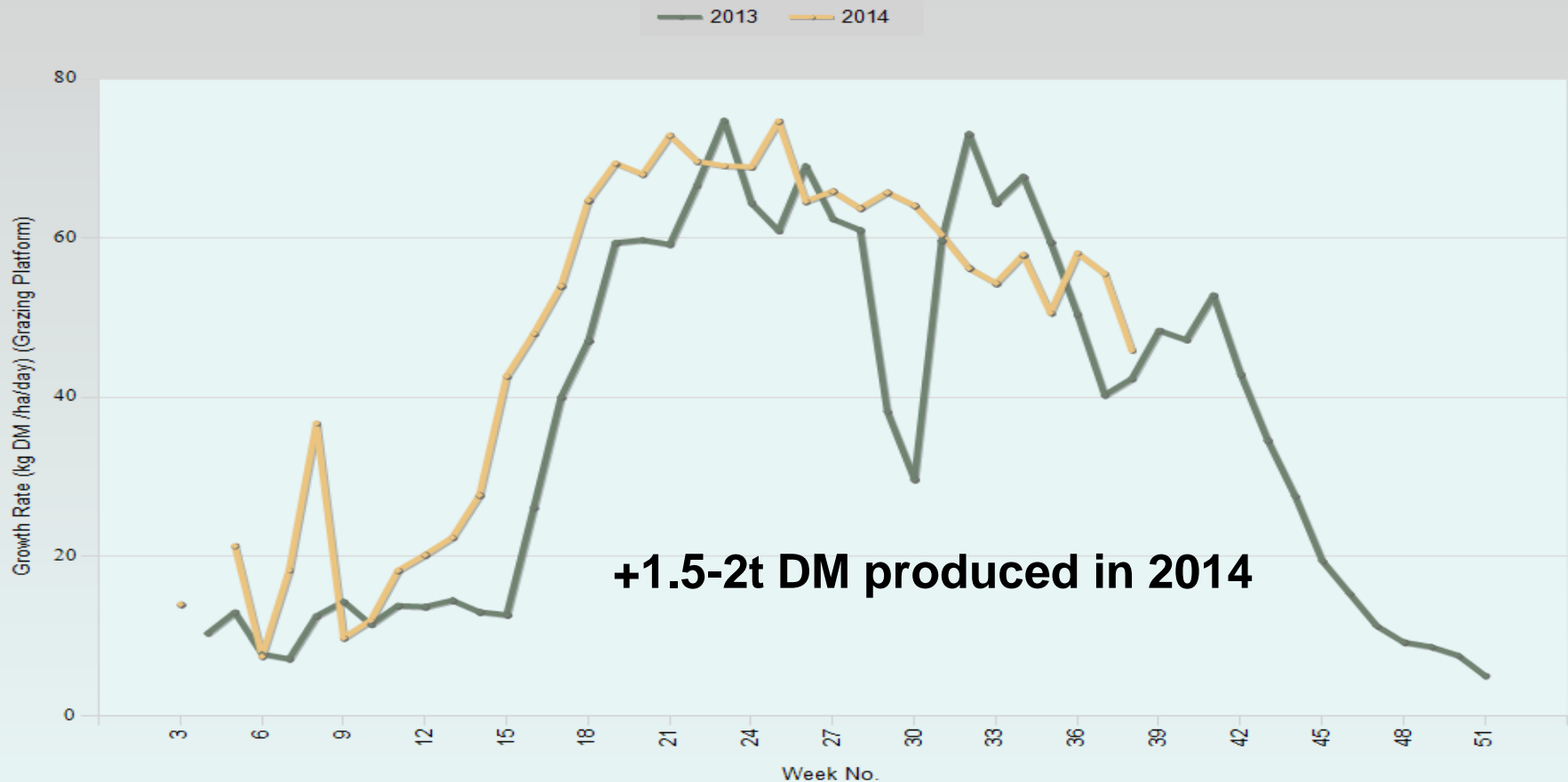
Head Office: Tralee, Oak Park, Carlow, Ireland Tel: +353 59 917 0200 Fax: +353 59 919 2097  
PastureBase Administrator: Tel: +353 87 9099136 Email: [PastureBaseAdmin@teagasc.ie](mailto:PastureBaseAdmin@teagasc.ie) ©2012 Copyright Teagasc  
Disclaimer: This application should be used in conjunction with good husbandry practice and should be used only as a guide to grassland management. The use of this application does not affect any statutory requirements. Teagasc shall not be held responsible for any losses incurred by the user as a result of the use of this application.

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# Comparison of 2013 versus 2014 grass growth profile

Distribution of Growth



## Expansion Strategy – Driven by the business Plan

1. Invest in technologies to increase grass growth
  - Fertility
  - Grazing infrastructure
  - Sward renewal
2. Increase stocking rate on the milking platform to match grass growth
3. Move out any alternative enterprise from the milk platform
  1. Outside block
  2. Contract rearing
4. Increase the stocking rate on the milking platform with dairy cows only
5. Additional land options

# Overview

- Where do I want to go?

- What is the profitable expansion potential from my

**Warning!**

**Expansion Process will reduce efficiency**

- Land Mobility and career Progression



# Expansion on productivity and efficiency

- Lag in return for investments made
- Reduction in animal productivity
- Increases in stock rearing costs
- Increase in costs associated with sward renewal, roadways, drainage, soil fertility
- Increases in the amount of hired labour

# Lag in Return for investments

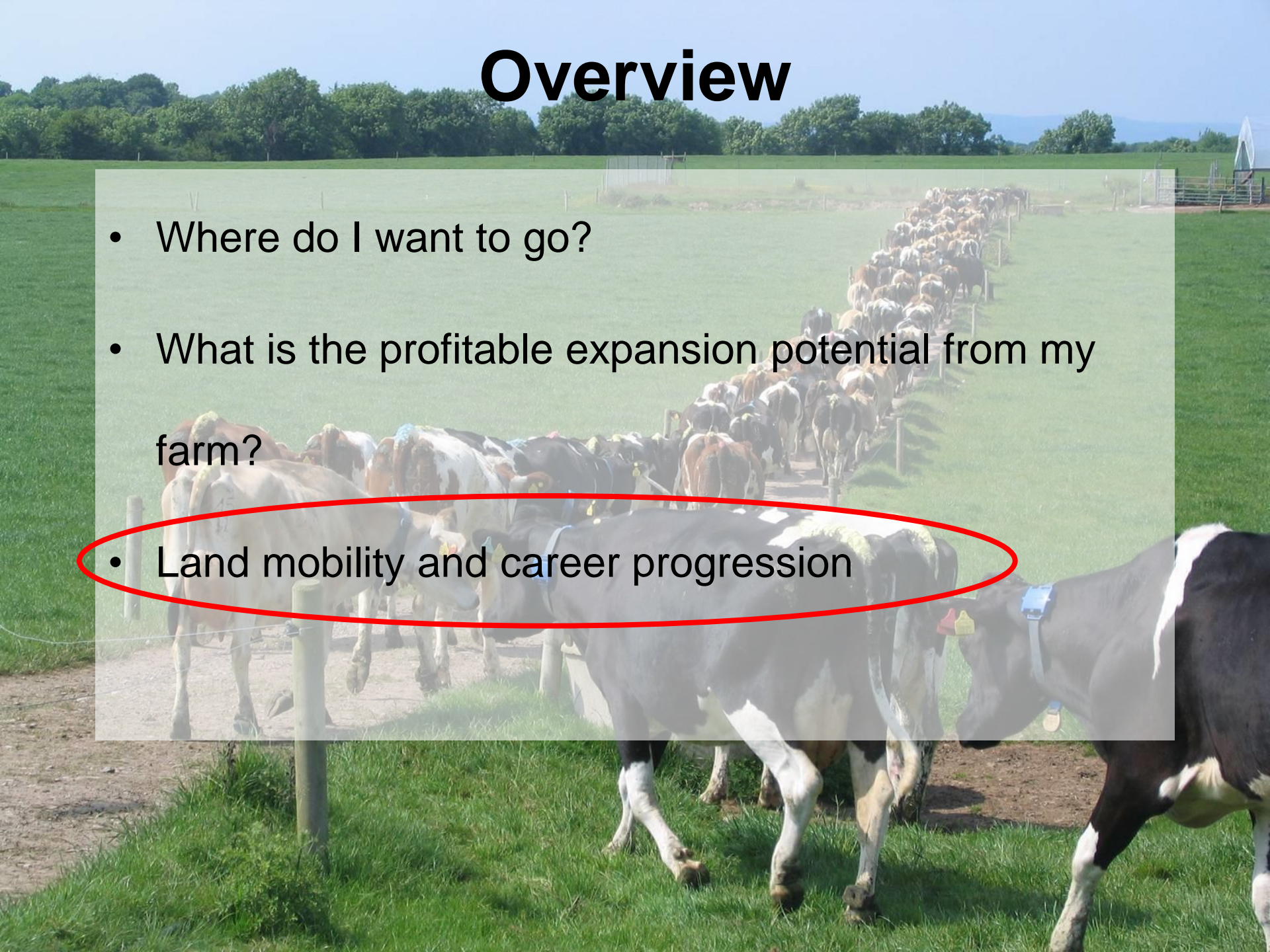
- There are significant investments made as part of the expansion process (€3,000-€6,000 per cow)
  - Grazing infrastructure
  - Winter housing and slurry storage
  - Milking facilities
- Stock numbers growth generally lag behind the investments made

# Reduction in animal productivity

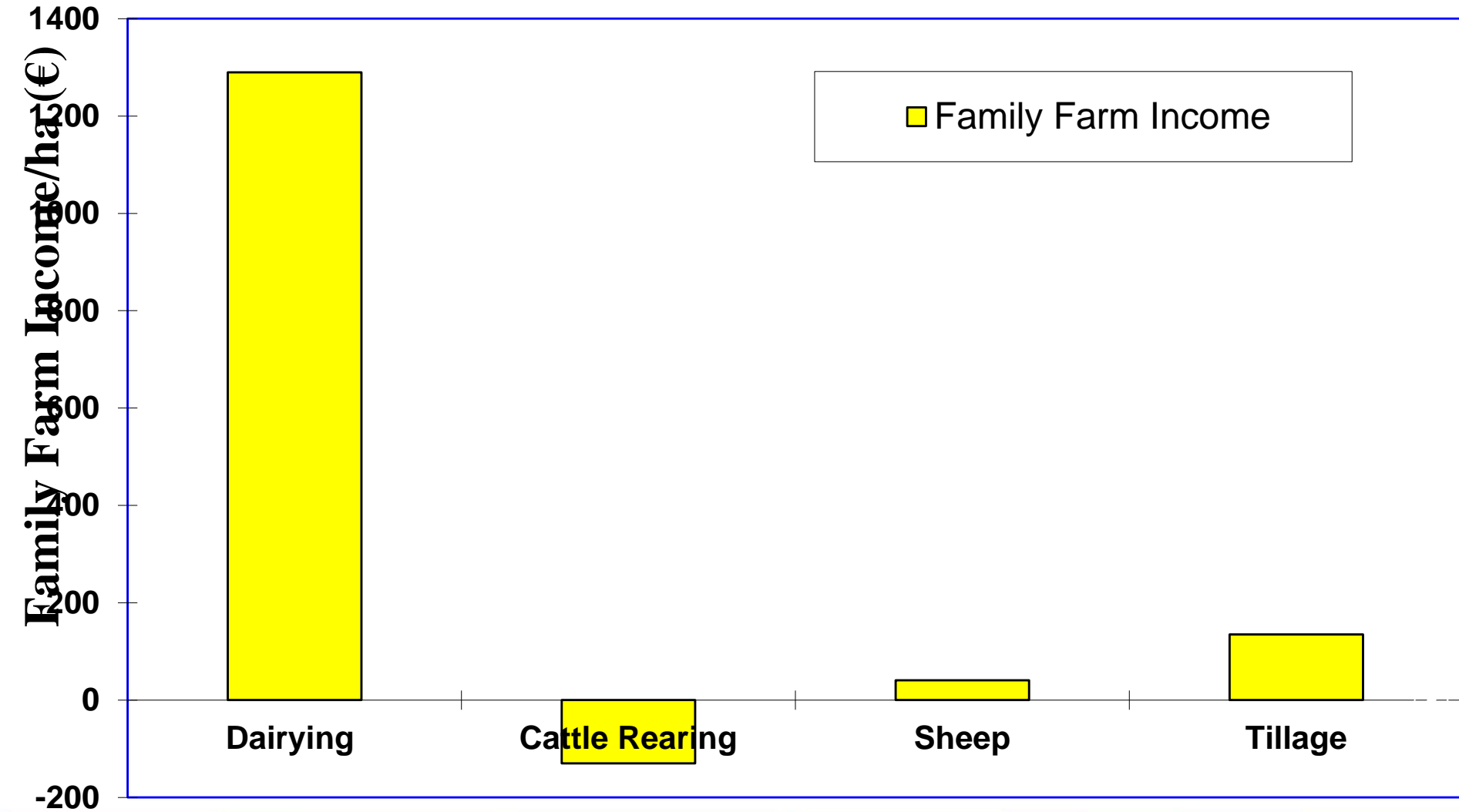
- Increased proportions of younger animals as well as animals that would potentially have been culled
  - Age Profile of herd
- Increased numbers of older animals that would ordinarily have been culled
  - Increased SCC levels
- More animals walking longer distances resulting in reduced performance
- Farmers operating at higher stocking rates
- Increased stock rearing costs

# Overview

- Where do I want to go?
- What is the profitable expansion potential from my farm?
- Land mobility and career progression



# Family Farm Income 2013



# Greenfield cost and return profile

	2010	2011	2012	2013	2014**
<b>Total Costs €</b>	397,831	537,640	527,654	608,626	575,073
<b>Milk Output kg</b>	83,183	108,552	110,881	121,500	120,000
<b>Costs €/kgMS</b>	4.78	4.95	4.76	4.95	4.70
<b>Profitability €</b>	118	81,433	45,323	90,283	90,632
<b>ROI %</b>	-	9	6	9	10
<b>ROE %</b>	-	23	13	20	17

\*\* Predicted

# Land leasing – Land Mobility

Typical land leasing may not be adequate in the future;

Risk sharing

Profit sharing

Capital investment

Depreciation period – Longer the better

On-going investment

Dependent on the numbers of years left in the plan

Releasing the security available from the land

Debt cant be secured against leased land

Budgetary developments are huge

# Partnerships – Land Mobility

Potential to increase scale by combining two different operations together

Generally associated with milk quotas to date

Potential improving the lifestyle of the different parties involved

Early career progression for within family situations



# Share farming – Land Mobility & Career Progression

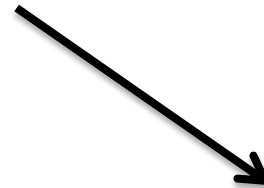
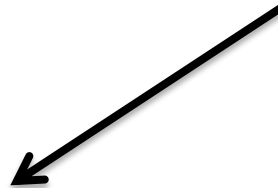
Farm worker

Learn skills in grass and stock



## Farm manager

Responsibility for grass, cows, people



**Ireland**

**New Zealand**

Dairy share farming

Share milking

Own cows, run your own business

step

# Career Progression

- Young trained farm business Managers will be cornerstone to dairy farm expansion
- Need a strong flow of business and technically skilled individuals
- Must create and demonstrate a career progression model;
  - Shows a pathway to the ownership of dairy farm business
  - Shows a pathway to wealth creation
  - That competes with best professions when discussed at school with career guidance
    - Dairy farming is not the afterthought
  - Facilitates young people from non farming backgrounds to enter dairying
  - That rewards efficiency at farm level

# Share farming Model for Ireland

- Development of a model that allows a young trained farm business managers with no existing financial resources to grow equity, carry risk, capture the rewards, ultimately creating the potential for farming in their own right within a reasonable timeframe
- Potential benefits;
  - Attract the right type of people into the dairy industry
  - Creates a system that incentivises efficiency
  - Increases the turnover of land
    - Enterprise shift
    - Farm business model

# Conclusion

- Shackles are off on April 1<sup>st</sup>
  - Does not mean free for all
  - No budget – No expansion (Plan for extremes)
- Match feed supply and feed demand
  - Invest in increasing farm pasture production (maximum return)
  - Maximum efficiency and sustainability will be achieved where grass supply and demand are matched
- A combination of all land mobility and career progression models will be required;
  - Create enterprise shift
  - Increase industry profitability
  - Create a career progression model for the next generation of the industry