

Advanced Training Partnership (ATP)
for Sustainable and Efficient Food Production

Pasture-Based Agriculture



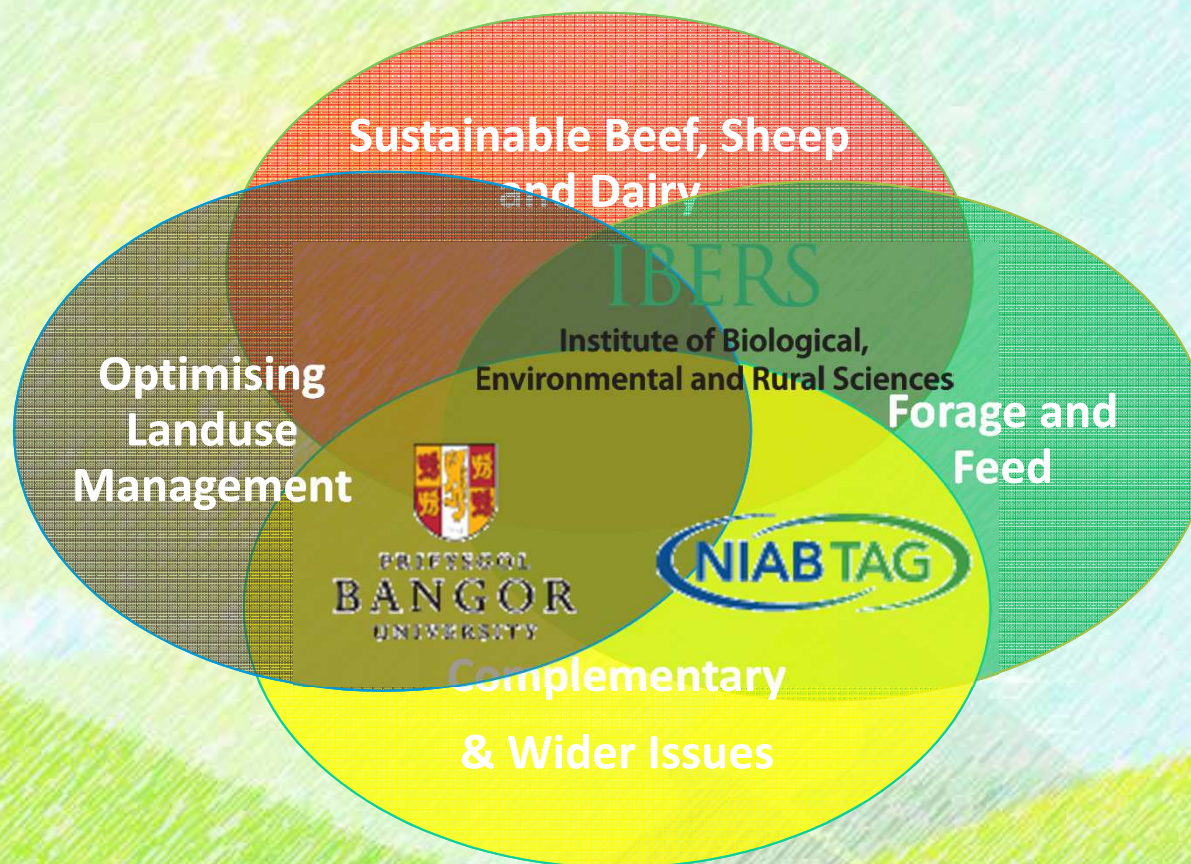
What are ATPs?

- Training programmes providing specialist scientific skills for the UK's agri-food sector
- Four in UK funded by  **BBSRC**
bioscience for the future
- Movement of expertise and skills between the research base and the agri-food Industry.



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Partners Expertise



Target Audience

Pasture-Based Agriculture

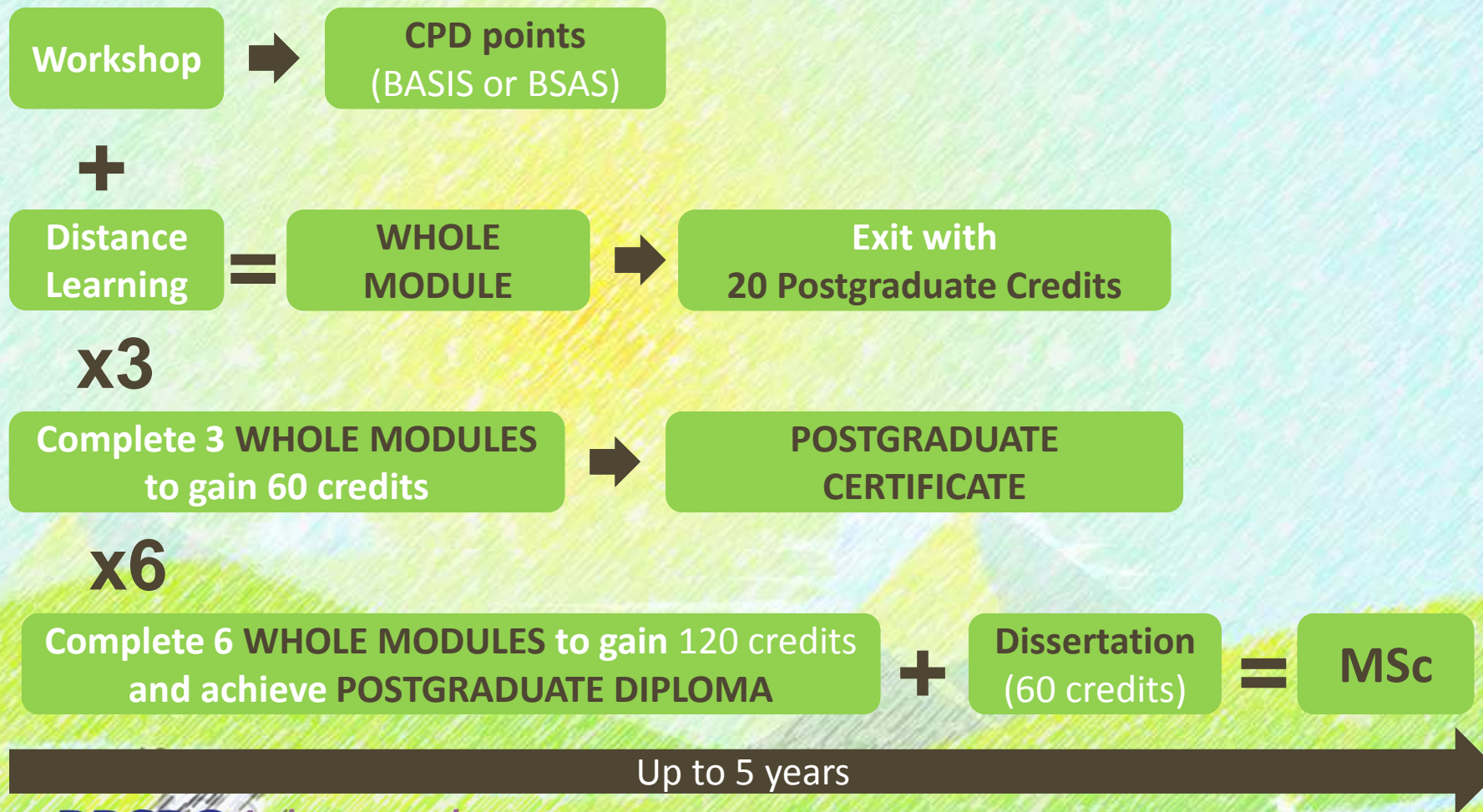
- Large diverse sector
- Poor history of innovation uptake

Professionals regularly giving technical advice to farmers – e.g.



- Supply chains attached to large retailers
- Agricultural suppliers' technical teams
- Vets
- Advisors for agri-environmental schemes
- Farmers and Farm managers

Flexible Learning Structure



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Subjects Covered This Year



Sustainable Grassland Systems



Carbon Footprinting & Lifecycle Assessment



Ruminant Nutrition



Upland Farming Systems



Improved Silage



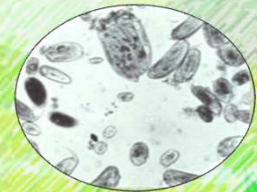
Improving Animal Production



Soil Management



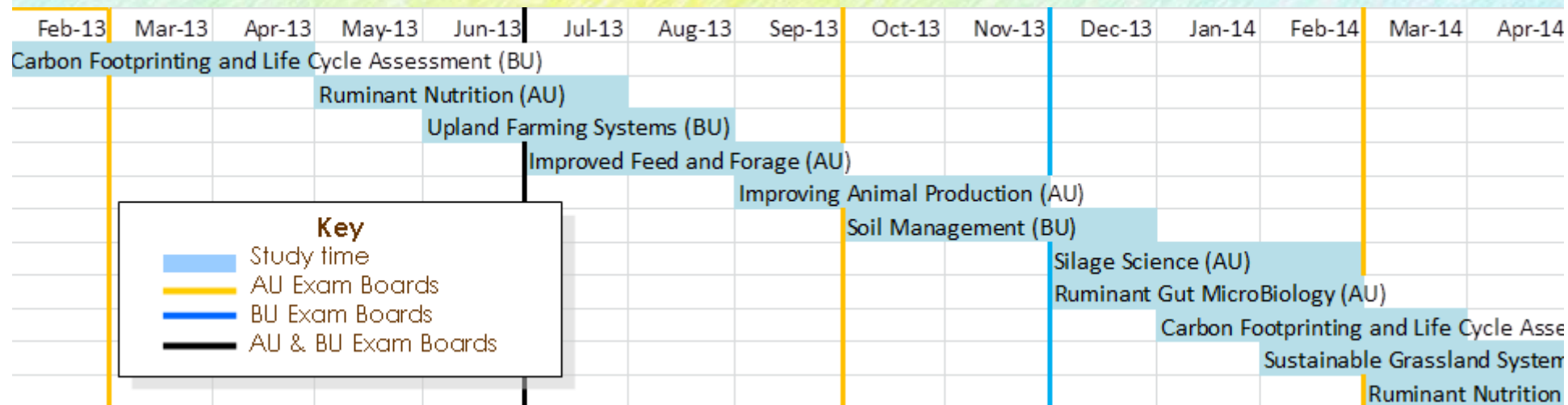
Improved Forages & Feeds



Ruminant Gut Microbiology

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Rolling Programme



Workshops

- 2 days
- Central or relevant locations
- Site visit
- Big name speaker
- Overview of issues
- Emerging research
- Discussion
- CPD points (BASIS, DairyPro, BSAS)



Example Workshop: Ruminant Nutrition

Day 1- Principles of Rationing:

- **Prof Jamie Newbold** - how the rumen functions and pathways through it
- **Dr Mike Rose** – measuring feed values and formulating rations

Site visit - Frank Write Trou **feed analysis lab**

Day 2 - What's New in Ruminant Nutrition Research?

- **Prof Liam A. Sinclair** Harper Adams University
- **Prof Nigel Scollan:** fatty acid metabolism
- **Prof Jamie Newbold:** feeding to reduce environmental impacts
- **Facilitated discussion:** manipulating diet to meet consumer and environmental demands

Distance Learning

- Guided learning peppered with research case studies
 - reading, videos, podcasts, mobile devices, forums, group and individual assignments.
- No exams
- 20 postgrad credits
- 13 weeks
- Max 15 hrs per week work

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Example of Distance Learning Module

Sustainable Grassland Systems

Overview

Unit	Description
0	Distance Learning for Beginners
10%	Multiple choice quiz
1	Range and distribution of grasslands
2	Characteristics of forage species
3	Grassland composition
15%	Short answer quiz
4	Managing pests and diseases in a changing environment
5	Soil quality and low input systems
6	Grazing
25%	4 critical abstracts: The influence of management and environment on pasture composition and forage cropping programmes (500 words each)
7	Forage breeding
8	Forage Preservation and bio-refining
25%	A trade-style review article (e.g. Farmers Weekly) on the potential of either: new forage varieties; or grass biorefining (1000 words)
9	Animal Nutrition
10	Grassland Systems
25%	Electronic workbook based on nutrient requirements and pasture supply for grazing cattle and/or sheep.

(3) Grassland Composition

- Overview of grassland composition
- Reseeding Pasture



Research Case Studies:

1. Can certain mixtures of species maintain yield and quality whilst reducing inputs? - **Dr Rosemary Collins**
2. Do the lays used currently provide an optimum system? - **Dr John Warren**



(5) Soil Quality and Low Input Systems



Assessment of soil quality



Research Case Studies:

- PROSOIL

Healthy Soil-Healthy Grass-Healthy Livestock

- NIAB's low input trails



(6) Grazing

Grazing options and their rationale

Research Case Studies:

- Pre-tupping grazing in sheep
- Forages trial

Dr Christina Marley



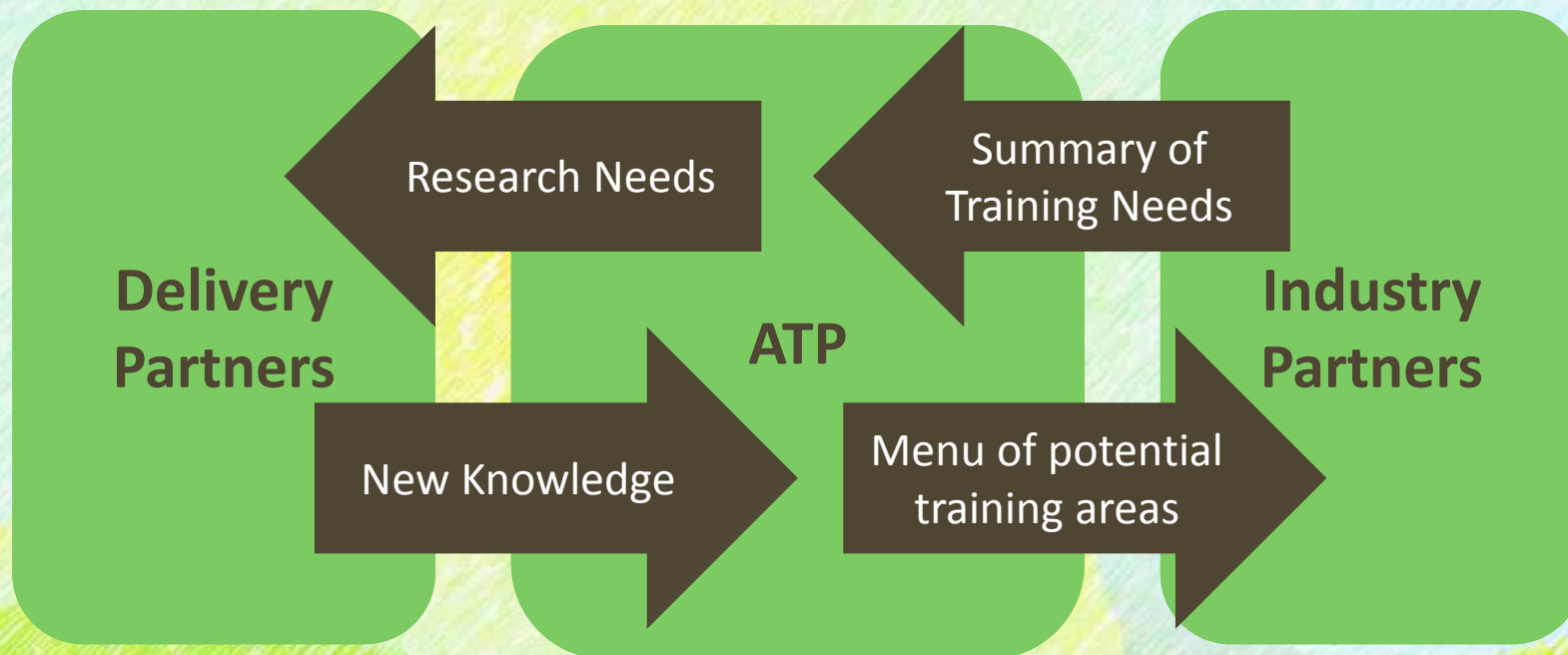
Grassland Development Centre

– Research behind FarmGraze App

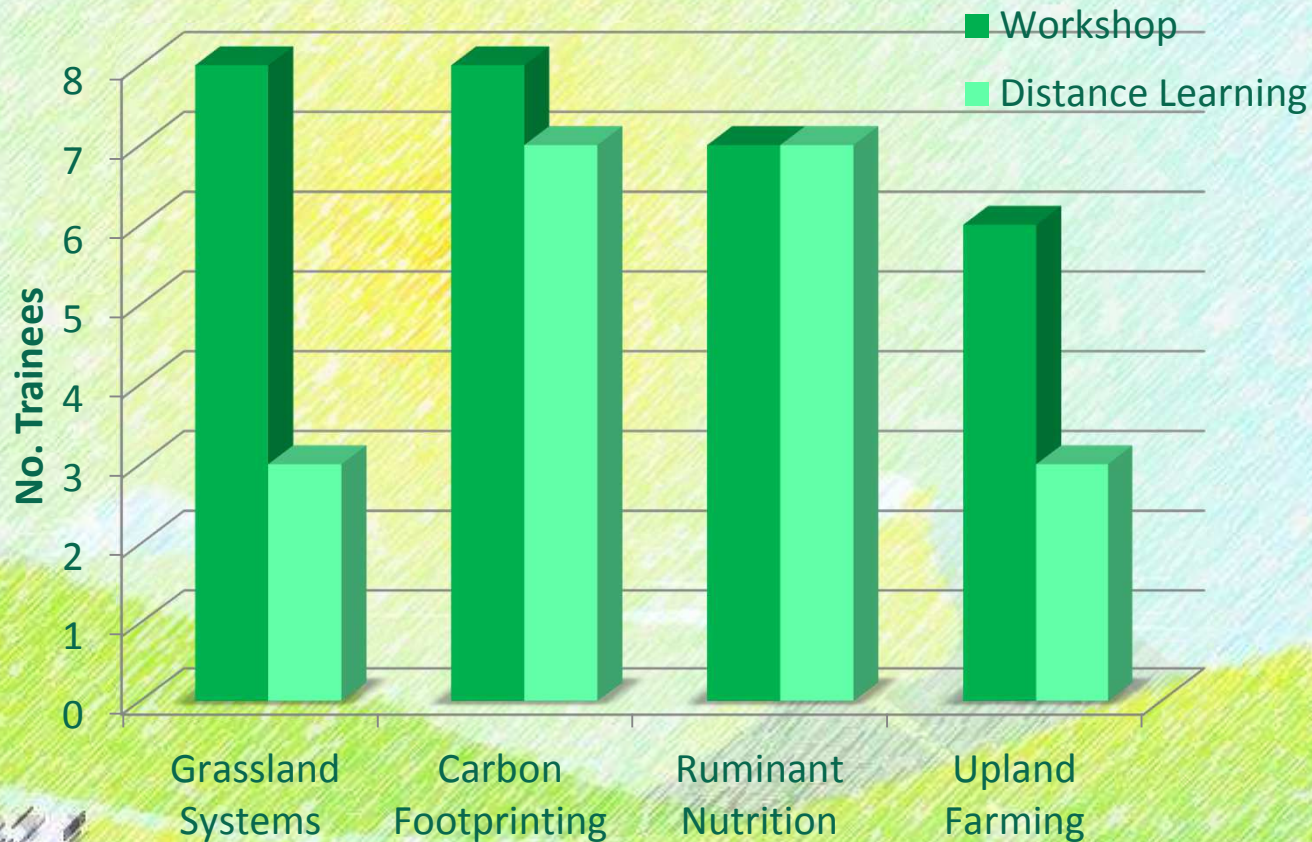


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Responsive Development

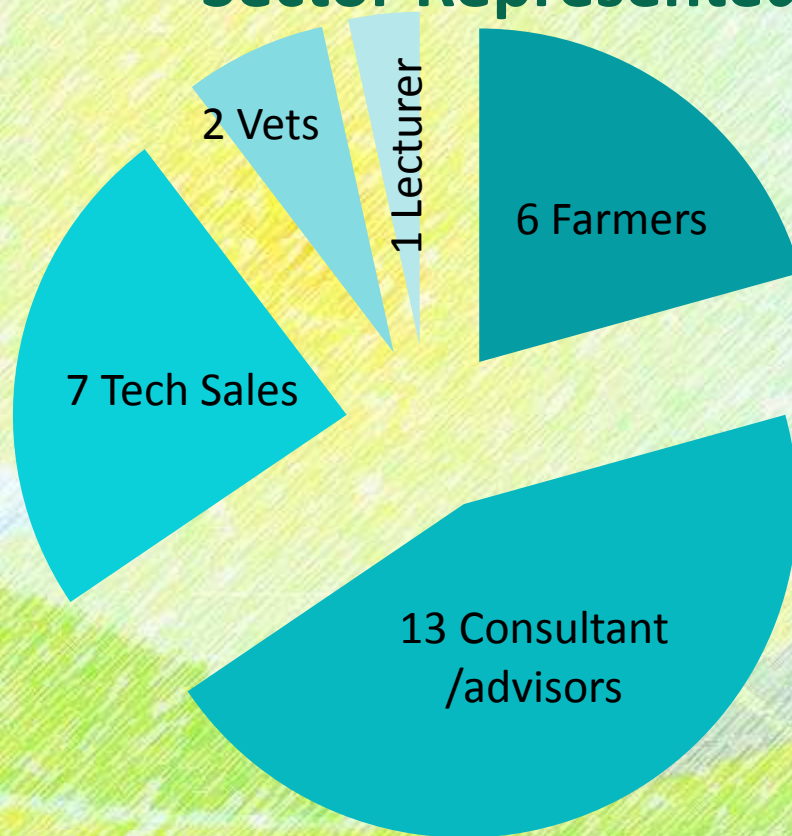


Engagement Since October 2013



Participation So Far

Sector Represented



Fees and Bursaries

Fees	UK Fees	UK Fees with Bursaries*
Workshop Only	£580	£116
Whole Module (Workshop & Distance Learning)	£1,200	£240

BBSRC Bursaries*

Available to:

- Graduates – or equivalent
- Currently employed fulltime in the UK agri-food industry

Publically funded posts are ineligible for bursaries

NEXT Workshops: Improved Feed and Forage

27th and 28th June— IBERS Aberystwyth

New developments in forage and feed crops bred for both animal production and environmental gains drastically improve the viability of domestically sourced feed and forages.

- What are the domestic alternatives for a complete feed ration?
- What traits are plant breeders breeding for?
- What impact can using new varieties have on feed quality and cost?

Alan Lovatt, Sandy Cowen, David Lloyd, Heather McCalman - IBERS

Dr Philip Murray—Rothamsted Research

Dr Simon Kerr - NIAB

Supporting the Pasture ATP

- **Feedback and suggestions for training development**
- **Promoting our training**
- **Considering bursary applications**

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Thank You

