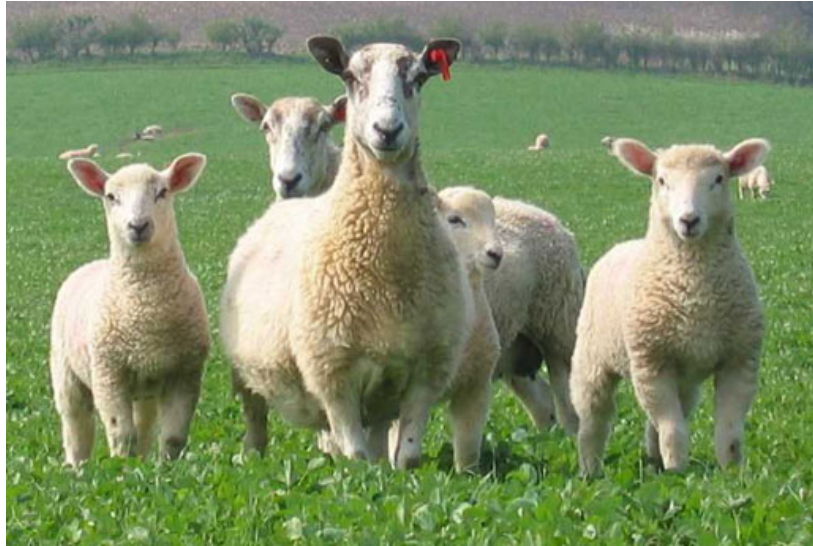


Sheep Ireland®



“To achieve the greatest possible improvement, from genetic and other factors, in the profitability of the national sheep flock, for the benefit of Irish Farmers & the sheep industry.”

Sheep Ireland - Structure

- **MALP (Maternal Lamb Producers Group)**
- **CPT (Central Progeny Test)**
- **LambPlus (Pedigree recording service)**

What is MALP?

- Allow us Demonstrate the benefits of using Genetic Evaluations when making Ram Selection decisions.
- Original Group of 22 Commercial Flocks
- Aim to record the 'Maternal' ability of Ram's daughters.
 - Maternal Lamb Producer Group
- 8000 Ewes/11,000 Lambs
- EID & DNA Technology – manage Parentage & Data recording
- Lambing, 40 Day/Weaning/Slaughter weights.
- Daughters to be retained & swapped between flocks.



Evolution of MALP?

- Group of 18 Commercial Flocks
- Following MALP ewes born in scheme only since 2010
- Flocks consist of over 50% MALP born ewes
- 5000 Ewes / 7500 Lambs

Future Possibilities for MALP- Split MALP

- 2nd generation MALP flocks which perform a linkage and genetic evaluation role.
- Set of test flocks for commercial farm services



Technology in MALP

- Pratley Auto drafter- essential for recording of large numbers of animals.
- EID tags- enables instant recording of data. Works in conjunction with Sheep Ireland software developed for handheld scanners.
- Real time connection with server. Data can be uploaded immediately.
- DNA used to determine parentage. Mixed results depending on relationships within flocks. Sire matches run from 96% down to 68%. Dam matches run from 80% down to 50%.
- Issue's can be unknown sire within flock. Example 50% above.
- Relationships between Dams is also issue- grandmother, daughter and granddaughter in same flock.

Central Progeny Test

- CPT Objective:
- Assess a large number of Rams for economically important traits through their progeny & link this information to an even wider number of animals throughout that Breed's Pedigree System.
- 3 Commercial Flocks and University College Dublin Research Farm Flock
- 2100 Ewes
- 100% Laparoscopic AI
- 75%-88% Conception rate

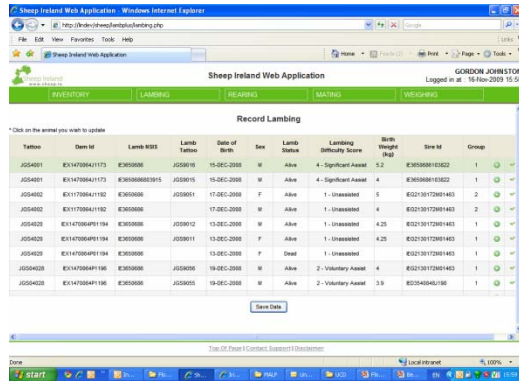


Central Progeny Test

- CPT is not a Breed Comparison – more a Ram & Trait comparison.
- Focussed on identifying the best genetics regardless of Breed.
- Intention to evaluate as many new Rams each year as possible whilst maintaining linkages through Breed ancestry systems.
- 2012- 2745 lambs born. All Lambs in CPT Flocks are linked to their Dam at birth.
 - Birth Weight Recorded.
 - Lambing Difficulty Recorded.
 - Sex Recorded.
 - All data recorded through Electronic Handhelds & sent back to Sheep Ireland database.



Technology & Sheep Breeding Data



Sheep Island Web Application - Windows Internet Explorer

Sheep Island Web Application

GORDON JOHNSTON
Logged in at: 16-Nov-2009 15:58

Record Lambing

Tattoo	Doer ID	Lamb ID	Lamb Tattoo	Date of Birth	Sex	Lamb Status	Lambing Difficulty Score	Birth Weight (kg)	Sex ID	Group
JDS4801	EX14708641173	EC360006	JDS0016	15-DEC-2008	M	Alive	4 - Significant Assist	5.2	EC360006103622	1
JDS4801	EX14708641173	EC360006080915	JDS0016	15-DEC-2008	M	Alive	4 - Significant Assist	4	EC360006103622	1
JDS4802	EX11708641150	EC360006	JDS0051	17-DEC-2008	F	Alive	1 - Unassisted	5	EC3110172801463	2
JDS4802	EX11708641150	EC360006	JDS0051	17-DEC-2008	M	Alive	1 - Unassisted	6	EC3110172801463	2
JDS4829	EX14708641134	EC360006	JDS0012	13-DEC-2008	M	Alive	1 - Unassisted	4.25	EC3110172801463	1
JDS4829	EX14708641134	EC360006	JDS0011	13-DEC-2008	F	Alive	1 - Unassisted	4.25	EC3110172801463	1
JDS4829	EX14708641134	EC360006	JDS0011	13-DEC-2008	F	Dead	1 - Unassisted	EC3110172801463	1	
JDS4829	EX14708641134	EC360006	JDS0006	16-DEC-2008	M	Alive	2 - Veterinary Assist	4	EC3110172801463	1
JDS4829	EX14708641134	EC360006	JDS0005	16-DEC-2008	M	Alive	2 - Veterinary Assist	3.9	EC3110172801463	1

Save Data

Internet Screens



EID – DNA Tags



Electronic Handheld Units



Pratley Auto-Drafter

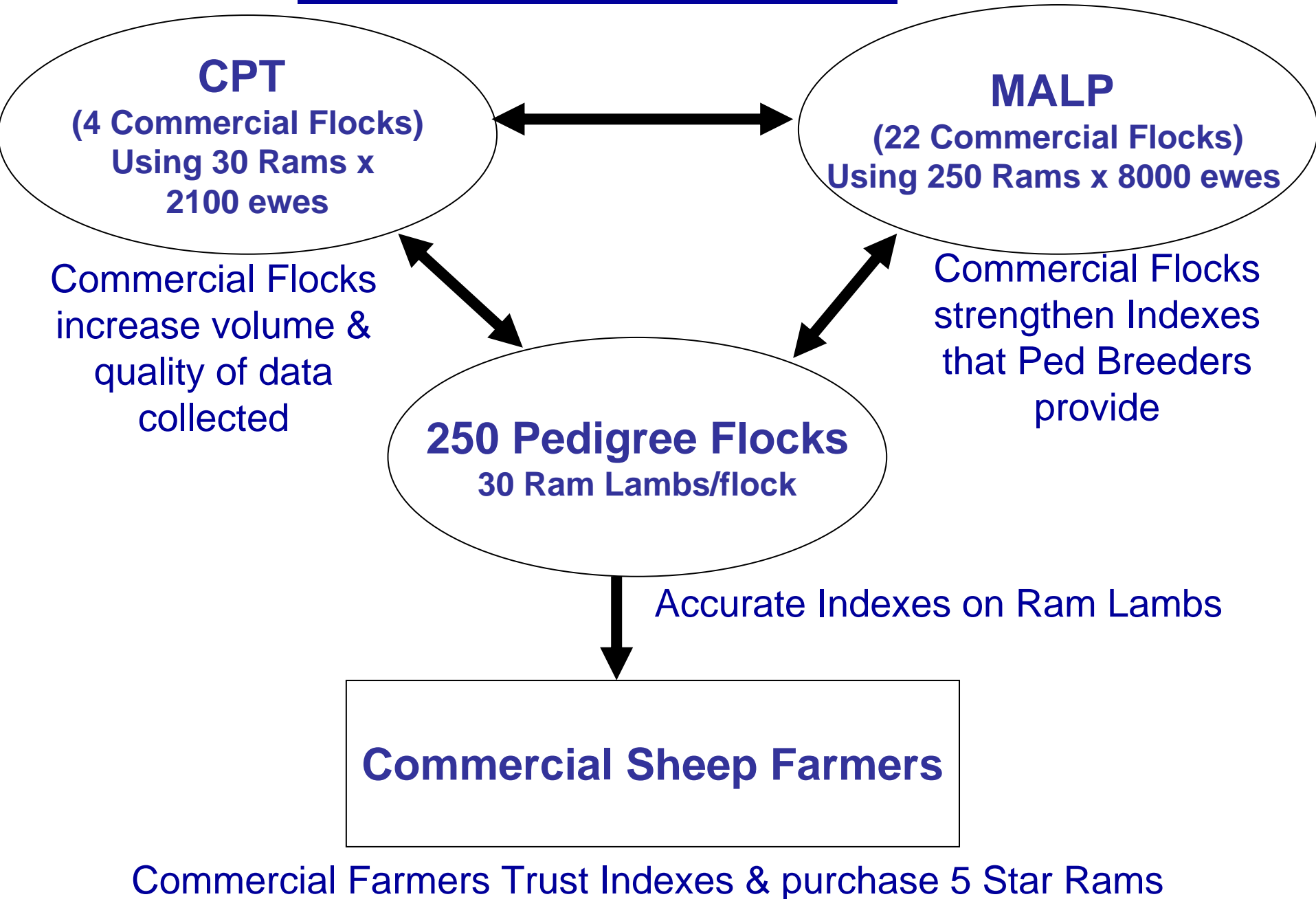


DNA Parentage Analysis



Artificial Insemination

Sheep Ireland Structure



Sheep Ireland Database and Genetic Evaluation System

Leadership

Services

Information

Data

Performance
recording

LambPlus flocks

Data

Data

Data

Genetic links

Rams

Superior
rams

CPT

MALP

Commercial sheep
farmers

Commercial
farmers
demonstrating
benefits and
capturing
data

Meat processors

AI and
detailed
records



Increasing Preformance recording Culture

- Issues facing commercial farm recording
- Identification of parentage a big issue
- Artificial Insemination gives timely records of parentage but is costly. Tagging Lambs at birth required to match lambs to dam.
- DNA technology assigns a high percentage of sire and dam info but is costly and there is a delay in due to processing volumes. No Tagging of Lambs at birth required to match lambs to dam but it would be a help.
- Single Sire Mating is cheaper but requires proper facilities on farm. Increase in workload to farmer , perceived workload is often greater to actual increase but this acts as a barrier. Tagging Lambs at birth required to match lambs to dam.

5 Star Rams v 1 Star Rams

	Lambing Sub-Index	
	★★★★★	★
Number of Rams	38	18
Number of Progeny	2021	782
% Easy Lambing	90%	81%
	Production Sub-Index	
	★★★★★	★
Number of Rams	32	36
Number of Progeny	1749	1343
40 Day Weight	19.1 Kgs	18.4 Kgs
Weaning Weight	31.3 Kgs	30.2 Kgs

■ 5 Star Rams: Less Lambing Difficulty & Higher Growth Rates in progeny

Bigger Differences will be seen once selection of 5 Star Ram's increases