



THE GLOBAL STANDARD
FOR LIVESTOCK DATA

Sheep & Goats Meat & wool International survey

Joanne Conington, UK; Jean-Michel Astruc, France
Sharon McIntyre, NZ; Dan Brown, Aus; Cesare
Mosconi, ICAR ...and more..



Background

- ICAR Sheep & Goat Committee – guidelines for small ruminant dairy production published
- No ICAR guidelines yet exist for recording meat & wool characteristics
- ‘New’ interest in meat production from sheep meat –producing nations & emerging economies

e.g. Australia - Change in focus from wool to meat

— Rob Banks, ICAR 2017, Edinburgh

Year	Merino Ewes to meat rams (millions)	Merino Ewes to Merino rams (millions)	% “Meat” Matings
1990	9	51	15%
2002	20	25	44%

Background – cont'd

- Increase in requests for knowledge
 - Performance recording guidelines
 - Which traits - how to measure
 - Models used
- Scope for new international evaluations
- Working group initiated 2017
 - Aim to draw up guidelines for recording sheep & goats meat + wool

First step – survey

- Initial survey sent to countries already known (and some unknown)
- Gathered info on traits, breeds, number of animals, % flock recorded etc

Survey results summarised from **18** respondents
from **13** known countries

What we know from the survey

- Type of individual collecting data for evaluations

Farmer 4/17 – Technician – 7/17 - 'Other' 6/17

- WHO (names of organisation) is delivering genetic evaluations in each country
- WHY performance recording is done
- WHICH traits



Sheep performance recording system?

Network. Guidelines. Certification.

	Fine Wool	Maternal (Replacements, Meat & Wool)	Terminal (Meat)	Total
Have a performance recording system:	3(15.79%)	9(47.37%)	7(36.84%)	19
From birth to weaning:	2(11.76%)	8(47.06%)	7(41.18%)	17
From weaning to slaughter:	2(14.29%)	6(42.86%)	6(42.86%)	14
Female lifetime performance:	2(15.38%)	7(53.85%)	4(30.77%)	13
Total Responded to this question:			11	61.11%
Total who skipped this question:			7	38.89%
Total:			18	100%

Meat 7/11

Maternal (replacements) – 9/11

Wool 3/11



Sheep performance recording system

How long are they recorded for?

Network. Guidelines. Certification.

	Fine Wool	Maternal (Replacements, Meat & Wool)	Terminal (Meat)	Total
Have a performance recording system:	3(15.79%)	9(47.37%)	7(36.84%)	19
From birth to weaning:	2(11.76%)	8(47.06%)	7(41.18%)	17
From weaning to slaughter:	2(14.29%)	6(42.86%)	6(42.86%)	14
Female lifetime performance:	2(15.38%)	7(53.85%)	4(30.77%)	13
Total Responded to this question:			11	61.11%
Total who skipped this question:			7	38.89%
Total:			18	100%

Birth- weaning
Weaning to slaughter
Female lifetime



Traits used in evaluations

Network. Guidelines. Certification.

	Fine Wool	Maternal	Terminal	Other	Total
Reproduction (lambs born, reared):	3(16.67%)	7(38.89%)	6(33.33%)	2(11.11%)	18
Lamb survival:	2(14.29%)	7(50%)	5(35.71%)	0(0%)	14
Lamb growth:	3(17.65%)	7(41.18%)	6(35.29%)	1(5.88%)	17
Adult size:	2(28.57%)	3(42.86%)	2(28.57%)	0(0%)	7
Meat (carcass characteristics):	2(18.18%)	4(36.36%)	5(45.45%)	0(0%)	11
Wool:	3(50%)	3(50%)	0(0%)	0(0%)	6
Fleece weight:	3(50%)	3(50%)	0(0%)	0(0%)	6
Fleece quality:	3(60%)	2(40%)	0(0%)	0(0%)	5
Total Responded to this question:				9	50%
Total who skipped this question:				9	50%
Total:				18	100%



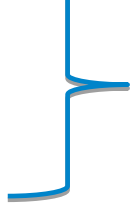
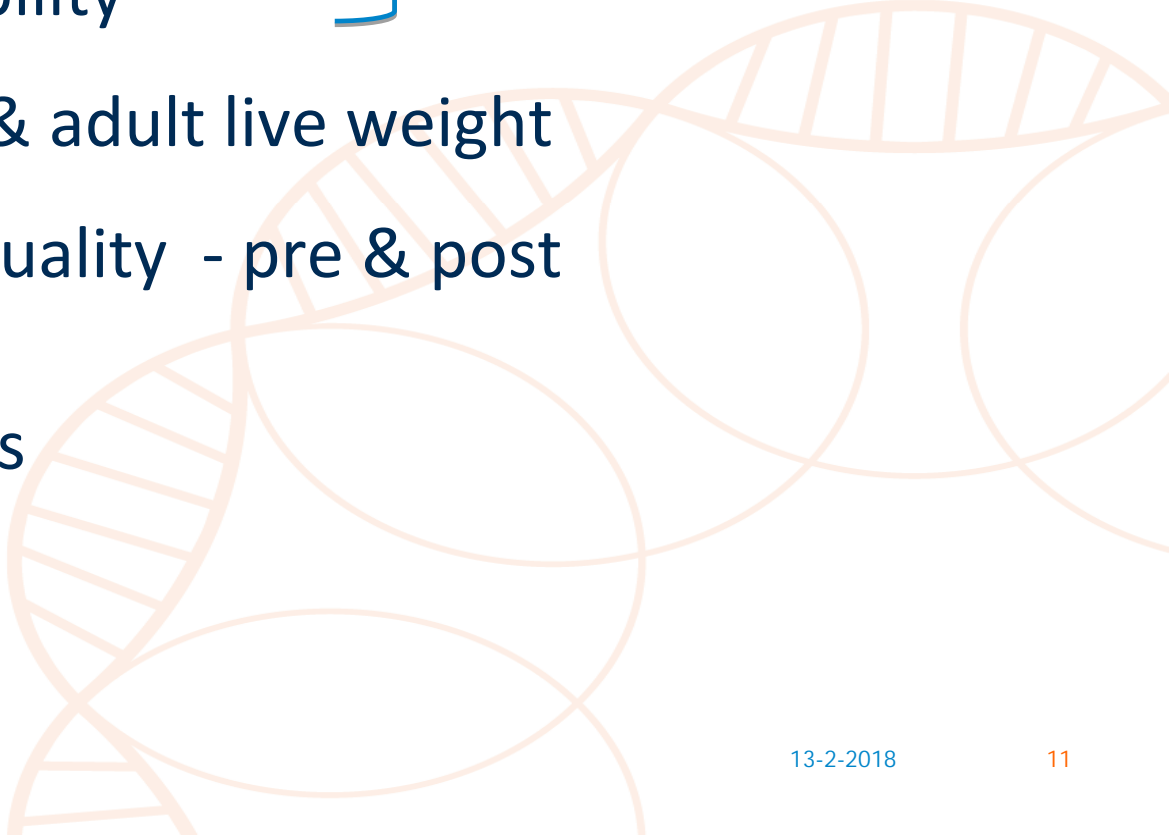
Reproduction trait recording

Network. Guidelines. Certification.

Depends on recording category

- 5 / 9 of maternal/ replacement use pregnancy scanning information
- 2/ 9 for fine wool recording

Other groups of traits – varied response

- Lamb survival
 - Ewe survival/stayability
 - Lamb/ kid growth & adult live weight
 - Carcass and meat quality - pre & post slaughter
 - Wool characteristics
- 
- 

Frequency of genetic evaluations & publication of results

Big variation

- Ranged from weekly to annually
- Depends on 1) Trait, 2) test station result timings, 3) breed
- ..and other reasons..

On-farm data collection or performance test?

- Performance test station 4/9 YES
- On-farm data collection 8/9 YES



International evaluations

Network. Guidelines. Certification.

Yes 2/10
No 8/10

If Yes, which breed a

Considering 7/9

	Responses	Percent
<input type="checkbox"/>	2	20%
<input type="checkbox"/>	8	80%
<input type="checkbox"/>	2	20%
Question:	10	55.56%
Question:	8	44.44%
Total:	18	100%



Are you using genomic selection?

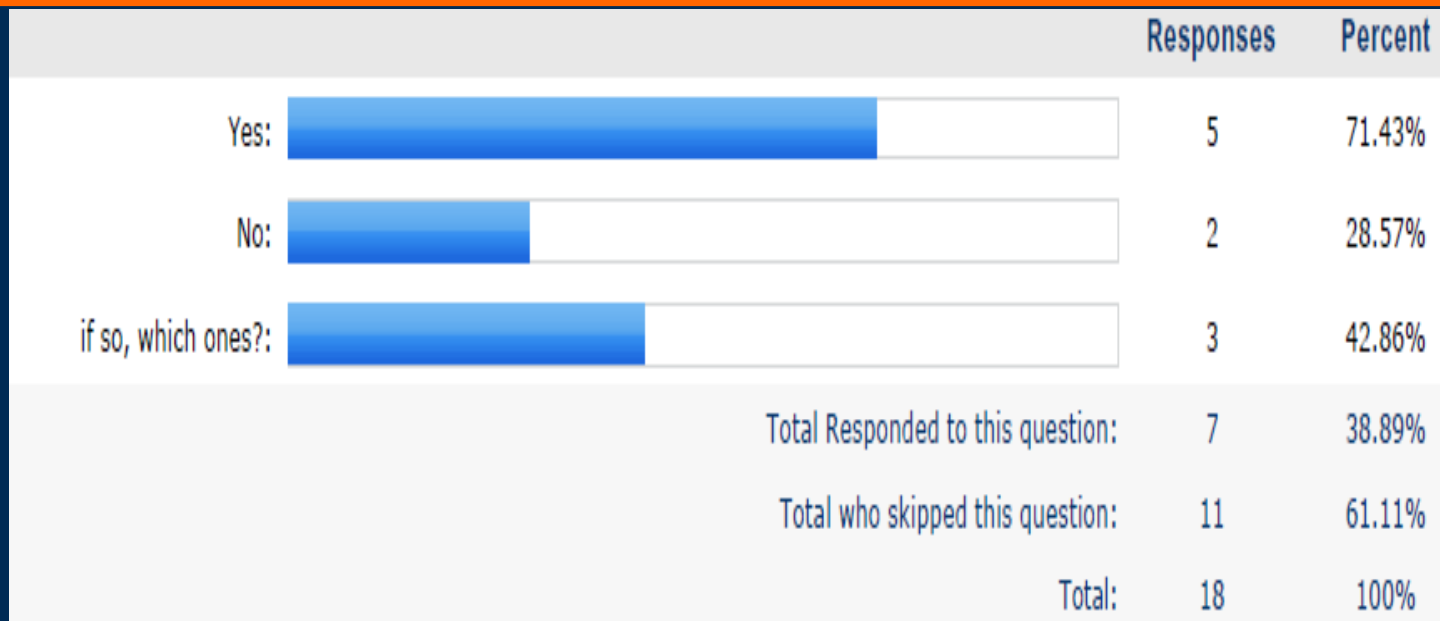
Network. Guidelines. Certification.

		Responses	Percent
Not considering If relevant, which technology do you plan to use? chip, genotype by sequencing	Yes – now	2/10	20%
	Planned	4/10	40%
	Future	4/10	40%
	Not considering	0	0%
		2	20%
		10	55.56%
		8	44.44%
		18	100%



Are single/major genes reported?

Network. Guidelines. Certification.



Next steps

- Propose examples of recording for some key traits
- Growth ✓
- Wool
- Meat ✓
- Maternal
- Collate examples and finalise into new ICAR reporting format
- Report to ICAR 2019

Improving yield, efficiency, quality and acceptability



Delivering guidelines for performance recording

