

Report of the 5th UK national workshop (NWS 5)



Agris

Agencia pro sa chřba v agricultuře
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Eesti Maaülikool
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14th November 2023
Physical meeting

UK Sm@RT NWS5

OBJECTIVES

3 main objectives were identified for the fifth series of national workshops (NWS 5):

- Present Sm@RT project progress to stakeholders
- Present summary of Norway TNWS visit
- Highlight the Cost/Benefit Analyses completed for a selection of tools and get feedback

ORGANISATION AND ATTENDEES

For this series of workshops, a face-to-face format was encouraged. The generic agenda of the meetings is detailed in the annex 1. In the UK, the format was a face-to-face one day meeting at the Moredun Research Institute and their farm in Midlothian. The workshop was held in the morning, and the rest of the day was dedicated to a training session.

UK (MEAT SHEEP)

Date and place of the NWS 5: 14th November 2023, at Moredun Research Institute, Midlothian.

Present:

Number of participants: 16

Claire Morgan-Davies (SRUC, Coordinator), Ann McLaren (SRUC, NF), Fiona Kenyon (MRI), Cassie McGregor (MRI), Aimee Walker (SRUC), Eilidh Geddes (MRI), Jade Duncan (MRI), plus farmers Graeme Lofthouse, Lee Cairns, Iona Fisher, Millie Scott, Ali Cowan, Jenny Cowan, Alison Tinto, Lucy Tinto & Willie Aitken.

Apologies:

Daniel Stout (SAC Consulting)

Organisation:

The day was scheduled in 2 parts.

1. **The first part (morning) included the interactive workshop.**
 - Claire, Ann, Cassie & Fiona welcomed everyone and gave an outline for the day.
 - After a short update on the Sm@RT project progress, the participants heard about the previous TNWS held in Norway. They were shown a series of slides relating to the farms visited and the different tools and technologies seen during the trip. After further discussion, participants were then given 3 stickers and asked to vote on the boards displaying each tool/technology as to which ones they liked.
 - The results were:
 - o Drone – 6 votes
 - o GPS collars – 5 votes
 - o Shed cameras – 4 votes
 - o Farm management software & EID stick readers – 3 votes
 - o RealtimeID proximity loggers and tags – 3 votes
 - o Virtual fence – 2 votes



- Each participant was then asked to fill in a short questionnaire about the different tools that were going to be shown later in the day as part of the training session (EID stick reader, Tru-test weigh head, EID weigh crate & Automatic worming gun):
 - Do you have the tool? -> Yes or No
 - Do you think it is worth investing in it? -> Yes or No
 - Would you like to implement it on your farm? -> Yes or No
 - Level of practicality (1 to 5)

- The next section of the workshop covered the cost benefit analyses (CBAs) that have been carried out. The two covered in detail during this workshop were for the EID stick reader and the EID weigh crate. Each participant was given a copy of both CBAs and the group then went through each one in detail highlighting the answers given in the different sections relating to the associated costs and benefits for each tool or technology.



2. **The second part of the day was the training session.**

- The initial phase of the training session was held at the Moredun Research Institute building.
- Participants had some introductory training sessions using the Tru-test weigh head and the EID stick reader. During these sessions they were shown the capabilities of each tool and how to use them. All had a chance to handle the equipment and work through the different processes to set them up.
- Before heading on to the farm for further training, participants heard some short updates on the results from work carried on to investigate the TST (targeted selective treatment) method of worming lambs (Jade Duncan/Fiona Kenyon – MRI), the FEC Check app (Eilidh Geddes – MRI/SRUC) and the use of proximity loggers on sheep (Aimee Walker – SRUC). These generated a number of questions and discussion between the participants with all updates receiving positive feedback.
- The session then moved outside to the handling facilities at Moredun’s Firth Mains Farm. Here, the group were shown the EID weigh crate used on the farm (Ritchie Combi-clamp) and discussed the use of the Te-Pari automatic worming gun. Participants then had an opportunity to have a go at setting up the Tru-test weigh head, now attached to the EID weigh crate, with a drafting criteria (based on live weight) and use the EID stick reader to read the tags of lambs coming through to the crate for weighing. The EID stick reader was linked to the Tru-test so participants could see the tag numbers appearing on the screen, see the data being saved for each individual lamb and see the Tru-test deciding which pen the lamb should go to, based on the weight criteria set previously.



Demonstration of the Tru-Test



Demonstration of the worming gun



Testing the Tru-test in-situ



Testing the Tru-test and EID stick reader in-situ

Technologies presented during the training session and feedback:

- At the end of the training session, the participants were then asked a short series of questions, similar to those completed earlier in the day, on the technologies that they had been using during the training:
 - Do you think it is worth investing in it? -> Yes or No
 - Would you like to implement it on your farm? -> Yes or No
 - Level of practicality (1 to 5)

The results from both the before and after questionnaires are given below.

Each table is the synthesis of how many farmers / stakeholders answered each question.

Name of the tool		EID weigh crate (Combi-clamp)				
Number of answers	Yes			No		
BEFORE – Do you have the tool?	6			3		
BEFORE – Do you think it is worth investing?	1			8		
BEFORE - Would you put it on your farm?	1			5		
AFTER – Do you think it is worth investing?	2			7		
AFTER - Would you put it on your farm?	2			7		
Level of Practicality	1	2	3	4	5	
BEFORE	0	1	4	1	3	
AFTER	1	0	2	5	1	
Total number of participants	9					

Name of the tool		EID stick reader				
Number of answers	Yes			No		
BEFORE – Do you have the tool?	3			6		
BEFORE – Do you think it is worth investing?				9		
BEFORE - Would you put it on your farm?				7		
AFTER – Do you think it is worth investing?				8		
AFTER - Would you put it on your farm?	1			6		
Level of Practicality	1	2	3	4	5	
BEFORE			1	1	7	
AFTER				2	6	
Total number of participants	9					

Name of the tool		Tru-Test weigh head				
Number of answers	Yes			No		
BEFORE – Do you have the tool?	6			3		
BEFORE – Do you think it is worth investing?	5			4		
BEFORE - Would you put it on your farm?	4			2		
AFTER – Do you think it is worth investing?	1			8		
AFTER - Would you put it on your farm?	3			6		
Level of Practicality	1	2	3	4	5	
BEFORE	1	3	2	1	2	
AFTER		1	2	4	2	
Total number of participants	9					

Name of the tool		Automatic worming gun				
Number of answers	Yes			No		
BEFORE – Do you have the tool?	9					
BEFORE – Do you think it is worth investing?	5			4		
BEFORE - Would you put it on your farm?	4			3		
AFTER – Do you think it is worth investing?	9					
AFTER - Would you put it on your farm?	8					
Level of Practicality	1	2	3	4	5	
BEFORE	1	3	3	2		
AFTER	4	5				
Total number of participants	9					

Training questionnaire

- At the end of the day the participants were also asked some more specific questions relating to the training session and the tools and technologies covered. The questions were:

1. Did you have the tool on your farm?
2. Did you like it?
2. Was it easy to use?
3. Would you have the infrastructure needed to implement it?
4. Could you implement it on your farm easily?
5. Is it affordable to you?
6. Could you justify investing in it?
7. Do you think it would take long to pay it back?
8. Do you understand better after training?
9. Would you recommend to somebody else?
10. Do you think you need more training/guides/YouTube video to use it more often?

The data collected from the training questionnaires, for each tool/technology, are summarised below:

Name of the tool - EID weigh crate (Combi-clamp)				
Number of answers	1 (Not at all)	2 (No)	3 (Yes)	4 (Yes a lot)
1. Did you have the tool on your farm?		5	4	
2a. Did you like it?	1		5	3
2b. Was it easy to use?	1	1	4	3
3. Would you have the infrastructure needed to implement it?	1	3	4	1
4. Could you implement it on your farm easily?	1	3	4	1
5. Is it affordable to you?	1	2	4	2
6. Could you justify investing in it?	2	2	3	2
7. Do you think it would take long to pay it back?	2	2	4	1
8. Do you understand better after training?			5	3
9. Would you recommend to somebody else?	1		5	2
10. Do you think you need more training/guides/YouTube video to use it more often?		3	5	
Total number of participants			9	

Name of the tool - EID stick reader				
Number of answers	1 (Not at all)	2 (No)	3 (Yes)	4 (Yes a lot)
1. Did you have the tool on your farm?		4	5	
2a. Did you like it?			3	6
2b. Was it easy to use?			7	2
3. Would you have the infrastructure needed to implement it?			3	6
4. Could you implement it on your farm easily?			6	3
5. Is it affordable to you?			5	4
6. Could you justify investing in it?	1		3	5
7. Do you think it would take long to pay it back?	3	5	1	
8. Do you understand better after training?		1	3	4
9. Would you recommend to somebody else?			4	4
10. Do you think you need more training/guides/YouTube video to use it more often?		3	5	
Total number of participants	9			

Name of the tool - Tru-test weigh head				
Number of answers	1 (Not at all)	2 (No)	3 (Yes)	4 (Yes a lot)
1. Did you have the tool on your farm?		6	3	
2a. Did you like it?			3	6
2b. Was it easy to use?	1		5	3
3. Would you have the infrastructure needed to implement it?		3	3	3
4. Could you implement it on your farm easily?		3	3	3
5. Is it affordable to you?	1	2	2	4
6. Could you justify investing in it?	1	1	3	4
7. Do you think it would take long to pay it back?	1	4	3	1
8. Do you understand better after training?	1		4	3
9. Would you recommend to somebody else?			4	4
10. Do you think you need more training/guides/YouTube video to use it more often?		3	5	
Total number of participants	9			

Name of the tool - Automatic worming gun				
Number of answers	1 (Not at all)	2 (No)	3 (Yes)	4 (Yes a lot)
1. Did you have the tool on your farm?		9		
2a. Did you like it?	5	2	1	1
2b. Was it easy to use?	3	2	3	1
3. Would you have the infrastructure needed to implement it?	2	2	3	2
4. Could you implement it on your farm easily?	1	3	4	1
5. Is it affordable to you?	4	3	2	
6. Could you justify investing in it?	6	2		1
7. Do you think it would take long to pay it back?	1	2	4	2
8. Do you understand better after training?			4	4
9. Would you recommend to somebody else?	2	4	1	1
10. Do you think you need more training/guides/YouTube video to use it more often?		4	4	
Total number of participants	9			



ANNEXES

ANNEX 1 - AGENDA



Sm@RT
Sm@ll Ruminant Technologies





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Technology in Sheep Farming Workshop

14th November 2023

10:00am – 3:30pm

Moredun Research
Institute
Penicuik
EH26 0PZ

Free lunch and refreshments!

Morning: Workshop

- Sm@RT project update
- Assessing the costs & benefits of sheep technology

Afternoon: On-farm

- See different tools & technologies in action on farm
- Hear about:
 - FEC Check & TST
 - Uses for Bluetooth in sheep farming

Sign up and get your free tickets here!









ANNEX 2 – WORKSHOP CONTENTS PROPOSITION

Section	Timing	Objective of the section	Content – what are the participants doing	Who does what?	Material/props needed
Welcome and project progress	30' (30')	Reminder of the previous meeting (NWS + TNWS) Objectives for the workshop	Introduction, rules of engagement, health & safety rules, objectives, quick agenda. What do you remember from the last sessions?	NF NF or other colleague	PPT or oral
Feedback on the solutions seen Norway	40' (70')	Feedback on the TNWS in Norway and on tools and farms seen	Presentation of the TNWS, the farms and the tools Discussion: - What do you think about it? - Did some technologies interest you?	NF	PPT
CBA	40' (110')	Presentation of 1 or 2 CBA (from your country or another)	Select 1 or 2 tools and present the CBA of the tool. It could be from your country or another country or both and compare them. Discussion: - What do you think about it? - Could you invest in these tools?	NF	PPT Word

Feedback on farm demo	30' (140')	Presentation of 2 or 3 tools evaluated during a farm demo	Select 2 or 3 tools and present the results of the evaluation of the tool during the farm demo days of all countries (depending on the tool you can have the results for 1 to 8 countries).	NF	PPT
Conclusion	10' (150')	Next steps and how we value their input. Dates	Reminder of the website + social media Next steps – TNWS, etc. Use of paperboard for feedback: 2 questions with 3 smileys each : - Did you enjoy the meeting and discussions? - How was the meeting organisation?	NF	PPT Paper board pens

Farm demo or training:

You can have a demonstration on an innovative farm or a training on digifarm before or after the workshop. **Don't forget to have the farmers fill out the respective questionnaires.**



ANNEX 3 – QUESTIONNAIRES

Individual questionnaire: (to adapt based on the tools you will showcase in the morning) -


<i>BEFORE THE DEMONSTRATION</i>	Yes	No					
Do you have the tool?	<input type="checkbox"/>	<input type="checkbox"/>					
Do you think it is worth investing in it?	<input type="checkbox"/>	<input type="checkbox"/>					
Would you like to implement on your farm?	<input type="checkbox"/>	<input type="checkbox"/>					
		1	2	3	4	5	
Level of practicality (1=low, 5=high)							

<i>AFTER THE DEMONSTRATION</i>	Yes	No					
Do you think it is worth investing in it?	<input type="checkbox"/>	<input type="checkbox"/>					
Would you like to implement on your farm?	<input type="checkbox"/>	<input type="checkbox"/>					
		1	2	3	4	5	
Level of practicality (1=low, 5=high)							

ANNEX 4- SIGN IN SHEETS



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Attendance sheet

Sm@RT- National workshop 5 & Digifarm Training session – 14/11/2023

Name	Situation			Farmers' group			Signature
	Farmer	Consultant	Scientist	Creating value from sheep data	Maternal Sheep Group	Other group	
Ann McLaren			X				<i>Ann McLaren</i>
Claire Morgan-Davies			X				<i>Claire Morgan-Davies</i>
Fiona Kenyon			X				<i>Fiona Kenyon</i>
<i>Graham Leitch</i>	X						<i>Graham Leitch</i>
<i>LEE CAMUS</i>		X					<i>Lee Camus</i>



Name	Situation			Farmers' group			Signature
	Farmer	Consultant	Scientist	Creating value from sheep data	Maternal Sheep Group	Other group	
JADE DUNCAN			✓				
CASSIE MCGREGOR			✓				
AIMEE WALKER			✓				Aimee Walker
IONA FISHER	✓						I Fisher
Millie Scott	✓						M C Scott
Ali Cowan	✓						A Cowan
JENNY COWAN	✓						J Cowan
ANISON TINTO	✓						A Tinto
Lucy Tinto	✓						Lucy Tinto
Willis Arthen	✓						



Name	Situation			Farmers' group			Signature
	Farmer	Consultant	Scientist	Creating value from sheep data	Maternal Sheep Group	Other group	
Eilidh Geddes			✓				