Measuring the impact of bovine digital dermatitis research on knowledge and practice of biosecurity during cattle foot-trimming.

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SUPPLEMENTARY FILE

Foot trimming Hygiene Questionnaire

1.	How many farms do you foot trim on?					
	. How many cows do you trim in a typical week?					
3.	. How many herds that you trim have digital dermatitis?					
	Don't know/ Prefer not to say					
4.	How many do not have digital dermatitis?					
	Don't know/ Prefer not to say					
5.	Do you clean your hands during foot trimming? YES NO					
	If YES, how					
	often?					
	If YES, what do you use and what is your method?					
6.	Do you clean you hoof knives during foot trimming? YES NO					
	If YES, how					
	often?					
	If YES, what do you use and what is your method?					
	It would help us enormously if you would be prepared to help further					
	with this study. If you are happy to be contacted in the future with a					
	follow-up questionnaire, please provide your email address:					
	Many thanks for completing the questionnaire!					

Foot trimming Hygiene Questionnaire

- 1. Which country do you work in?
- 2. How many farms do you foot trim on?
- 3. How many cows do you trim in a typical week?
- 4. How many herds that you trim have digital dermatitis (DD)?
- 5. How many do not have digital dermatitis?
- 6. Have you seen the protocol published by the University of Liverpool and AHDB Dairy for best hygiene practices during foot trimming? (Please circle)

YES/NO

7. Have you seen any articles in the farming or veterinary press about best hygiene practice during foot trimming? (Please circle)

YES/NO

8. Please circle your response to each statement:

My awareness of the following has increased across the last year:

- a) The potential to spread DD during foot trimming
- Strongly disagree/ disagree/ neutral/ agree/ strongly agree
- b) Appropriate hygiene and disinfection to prevent spread of DD during foot trimming

Strongly disagree/ disagree/ neutral/ agree/ strongly agree

9.a) Please circle your response to the following.
My management of hygiene during foot trimming has changed in the last year
Strongly disagree/ disagree/ neutral/ agree/ strongly agree
b) If your management of hygiene during foot trimming has changed, please tick all changes that apply. If not, please go to question 10.
☐ Increased frequency of hand washing
\square Increased frequency of changing gloves
☐ Increased frequency of hoof knife cleaning
☐Method for hand hygiene has changed (Please specify)
☐ Method for hoof knife cleaning has changed (Please specify)
Other (Please specify)
c) If you have changed practice, do you consider that you/your client(s have observed a reduction in DD on farm as a result?

YES NO DON'T KNOW

10. What are the barriers to improving foot-trimming hygiene? Please tick your response to each statement.

	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
Water/ cleaning facilities are difficult to access on all farms					
It takes too long to disinfect each knife					
I don't think it is important					
I only have time to clean my knife after trimming a cow that had DD					
I don't like getting my hands wet because I think it makes them slippery and trimming is more dangerous					
I don't like getting my knives wet because I think it makes them slippery and trimming is more dangerous					

11.If you wish, please suggest improvements to the foot-trimming hygiene protocol.
12. What future research do you believe would be beneficial in this area?
If you wish to be entered into our prize draw, please provide your email
address. We will only use this information to contact you if you win a prize.*
Many thanks for completing the questionnaire!
*Winners will be contacted within one month of the questionnaire end date. If you do not respond within 14

days your prize will be void and another winner will be chosen.

Supplementary Table S1: Sampling and knowledge exchange strategy and engagement with relevant industry stakeholders at the three stages of the study.

Study phase	Initial questionnaire and knowledge exchange including advertising of foot-trimming hygiene protocol April- October 2019	Dissemination of initial questionnaire results and further knowledge exchange and advertising of foot-trimming hygiene protocol January-May 2020	Follow-up questionnaire (online only) April-June 2020	
Target group	Online	Online Video	(Online only)	
Foot trimmers	NACFT Facebook Group, WOHT Facebook Group Emails to NACFT, HTA and Dutch foot trimmers	NACFT Facebook Group, WOHT Facebook Group, Emails to NACFT, HTA, Dutch foot trimmers and email address list collected from first questionnaire	NACFT Facebook Group, WOHT Facebook Group, Emails to NACFT, HTA and Dutch foot trimmers and email address list collected from first questionnaire	
Farmers	Post on The Farming Forum	Post on The Farming Forum	Post on The Farming Forum	
Veterinary Surgeons	BCVA Facebook Group and BCVA website, Veterinary Voices UK Facebook Group	BCVA Facebook Group and BCVA website, Veterinary Voices UK Facebook Group	BCVA Facebook Group, Veterinary Voices UK Facebook Group, promoted via the Healthy Feet Programme Webinar organised by BCVA.	
All	Twitter, promoted by AHDB Dairy University of Liverpool Bovine Digital Dermatitis webpage	Twitter, promoted by AHDB Dairy Previously collected email addresses. University of Liverpool Bovine Digital Dermatitis webpage	Twitter, promoted by AHDB Dairy Previously collected email addresses. University of Liverpool Bovine Digital Dermatitis webpage	
	Offline	Offline		
Foot- trimmers	Presentation and questionnaire at NACFT conference 2019, questionnaire at CHCSB CPD day 2019.	Articles for NACFT magazine and HTA magazine		
Farmers	Attendance at TotalDairy conference Article for Farmer's Weekly	(Engagement via NFU unsuccessful)		
Veterinary surgeons	Presentations at European Bovine Congress 2019 and BCVA Congress 2019	Article for Livestock CPD magazine		
All		Poster Presentation AHDB conference 2020		

Industry Group Abbreviations

AHDB= Agricultural and Horticultural Development Board (UK)

NACFT= National Association of Cattle Foot Trimmers (UK)

HTA= Hoof Trimmers Association (USA)

CHCSB= Cattle Hoof Care Standards Board (UK)

BCVA= British Cattle Veterinary Association (UK)

NFU= National Farmers' Union (UK)