

Surveillance of sheep and beef cattle diseases: Farmer opinions and behaviour

H.H. Nijs¹, L. Genever² and L.E. Green¹



BACKGROUND

Qualitative research methods provide more insight into opinions and thoughts of participants. Focus group discussions were conducted with beef cattle and sheep farmers to investigate the feasibility and value of a new surveillance system for important livestock diseases that benefits both producers and the industry.

METHODS

Separate **focus groups** were held for sheep and beef farmers in the **Midlands, North** and **Southwest of England** (Fig. 1 & 2):

- Semi-structured guidelines
- Audio-recordings

Thematic analysis:

- Qualitative analysis through identifying themes
- Evidenced by farmers' quotes

SHEEP FARMERS (14 IN TOTAL)

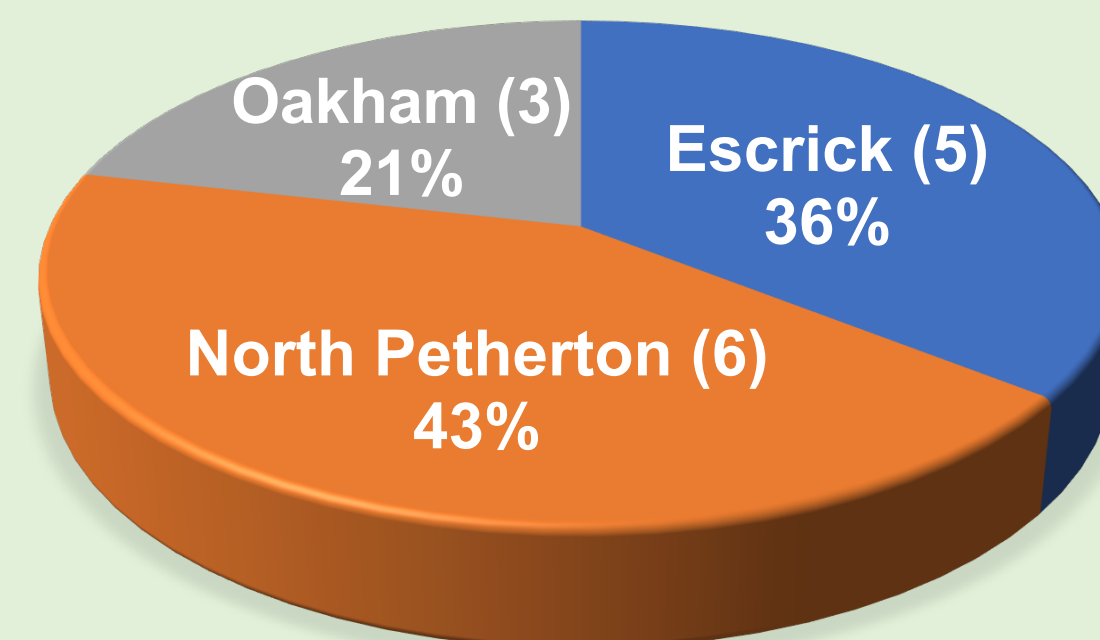


Fig. 1. Number of farmers for sheep groups

CATTLE FARMERS (10 IN TOTAL)

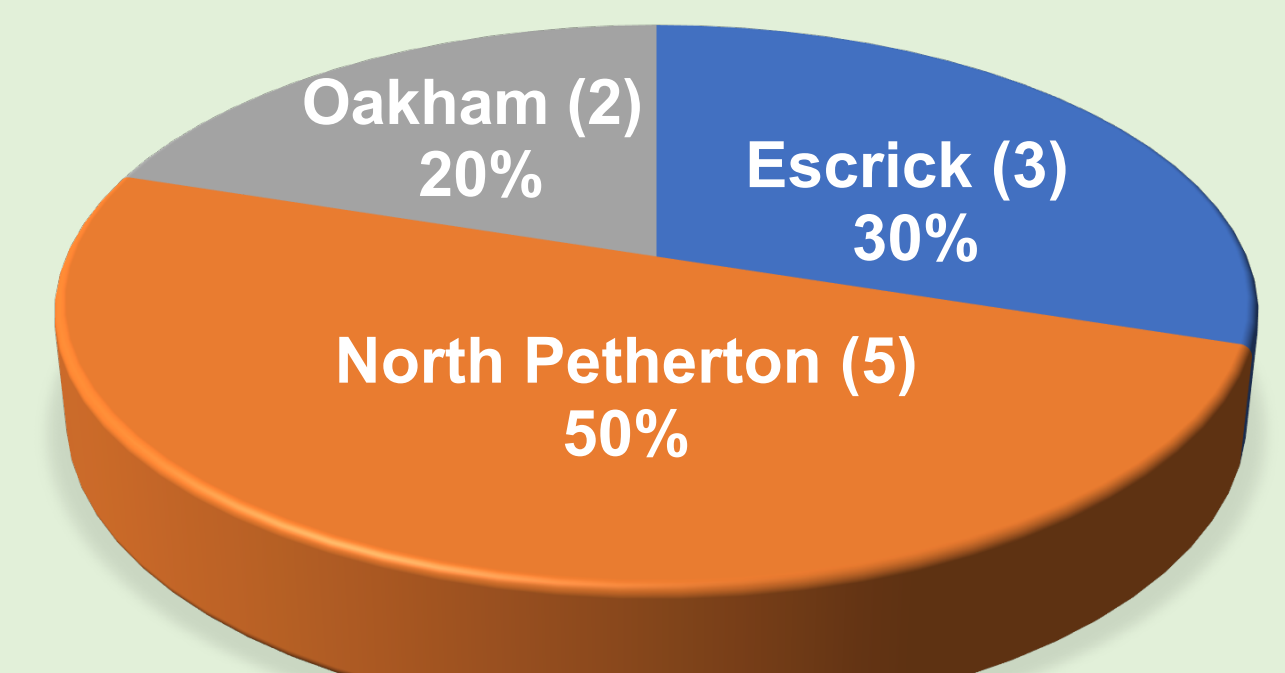


Fig. 2. Number of farmers for beef groups

RESULTS THEMATIC ANALYSIS

Health status own flock/herd:

Diagnostic feedback

Biosecurity

Management

Decision-making

Disease characteristics:

Spread and transmission

Raising awareness

'At the moment I need to know is it something where I can satisfactorily fatten it and get it to something suitable for human consumption or am I going to pour food into this and watch it go downhill. That's the decision. And is it going to spread and affect other cattle...'

'I'd like to know how my neighbours are doing in case they ever get in with ours. We double fence to keep them away, but whereas we're a closed herd, they are going buying from markets and bringing cows and calves in next doors. So we have to keep vaccinating because they could be bringing something that gets to ours, as they're naive to it.'

'We tend to keep a closed herd, we just buy good pedigree bulls in, occasionally when we need them, and we rear our own, so we haven't got no issues really with any diseases.'

'If we can use [a monitoring system] to raise the awareness to get people to do something, yes. I think that's the key, raising awareness.'

'It would be useful to know if a disease is on the increase or on the decrease, I think.'

'To be fair: I don't know a lot about TB. I don't know if deer can give it to the cows, I don't know if there's TB in the badger population... But you know, I don't really know a lot about TB and I probably wouldn't until I...until I got it.'

'It needs to be... yes for [the lab results], it can't just be a couple of calves got scours [...] 'cause that could be any number of reasons [...], it needs to be diagnosed through a lab.'

'I don't care what I buy at market, as long as I can see it's big boned, big frame, it's gonna make money, three hundred quid you know in no time at all... gone...I don't care who buys it, I just want that money.'

'I think it's understanding how they're transmitted as much as anything and if we had a greater understanding.'

'There's a benefit to knowing what's... what's going on in your own place. I don't think many people know that.'

'If we had more people aware of what they've got and be prepared to sum on a piece of paper, say 'this flock has achieved this sort of certification' [...] which gives you some confidence of buying from us, so that's a sort of biosecurity angle.'

'There's always a reason why something dies, it's just how much it costs to find out.'

'But certainly something like enzootic [abortion], then obviously if your neighbouring farmer has it, it'll be very nice to know that, so you can be prepared for it or try to implement extra biosecurity to try and eliminate it.'

'We only started blood testing last year and I didn't realise I had a problem until I blood tested. But when I found that about sixteen percent of my ewes had got Johne's, I had to make a decision [...] and so therefore we're culling as fast as we can.'

'I think that's some of the [diseases] that are more important to learn about really, the iceberg diseases and the ones that less people talk about... you know, CLA, Johne's...Maedi-Visna...'

SO... WHAT'S NEXT?

Pilot surveillance system launched for farmers:

- **5 sheep diseases** and **5 cattle diseases** selected
- Focus group participants
- **2000 farmers** from across England
- Invite to complete **annual questionnaire** (online)
 - March 2018: record diseases diagnosed in 2017
 - Jan/Feb 2019: record diseases diagnosed in 2018

Value and importance of **other data sources?**

- Post mortem examinations
- Dairy (e.g. Johne's testing of milk samples)
- Abattoir records
- Lab test results

ACKNOWLEDGEMENTS

Dr Rachel Clifton and the Green Research Group
AHDB Beef & Lamb
All participants in the studies

CONTACT

Hanne Nijs
School of Life Sciences | University of Warwick
Gibbet Hill Campus | CV4 7AL | Coventry
E-mail: h.nijs@warwick.ac.uk

