



An examination of current attitudes towards wildlife and disease transmission within the Scottish farming community

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BACKGROUND

Agriculture and wildlife live together in our countryside and disease transmission occurs between them. For farmers and smallholders this can represent an economical loss as well as animal welfare issues. The aim of this study was to evaluate the views of farmers/smallholders in Scotland to disease transmission from wildlife to their animals.

MATERIALS & METHODS

A convenience sampling approach was taken to recruit farmers and smallholders in Scotland to take part in the study. Information was gathered through the use of a structured questionnaire, available both online and in a paper copy. Awareness of the project was raised through the Moredun Foundation, farming/smallholding press, breed societies, agricultural merchants and auctioneers, veterinary surgeons and online through forums and Facebook.

RESULTS

61 responses from 46 farmers and 15 smallholders were received. 38/61 thought wildlife was an important source of disease. The predominant diseases thought to be associated with wildlife were bovine TB (15/61), Johne's disease (9/61) and liver fluke (8/61). However toxoplasmosis, bovine viral diarrhoea virus, louping ill, cryptosporidiosis, foot and mouth disease and leptospirosis were also thought to be associated with wildlife. 49/61 thought that wildlife numbers should be controlled, with badgers (26/61), foxes (26/61), rabbits (21/61) and deer (19/61) predominating. However, it was clear that farmers and smallholders recognise the importance of wildlife:

'want to control (wildlife), not eradicate'
'need a balance'

'only control enough to ensure other wild species (e.g. lapwings) can thrive'

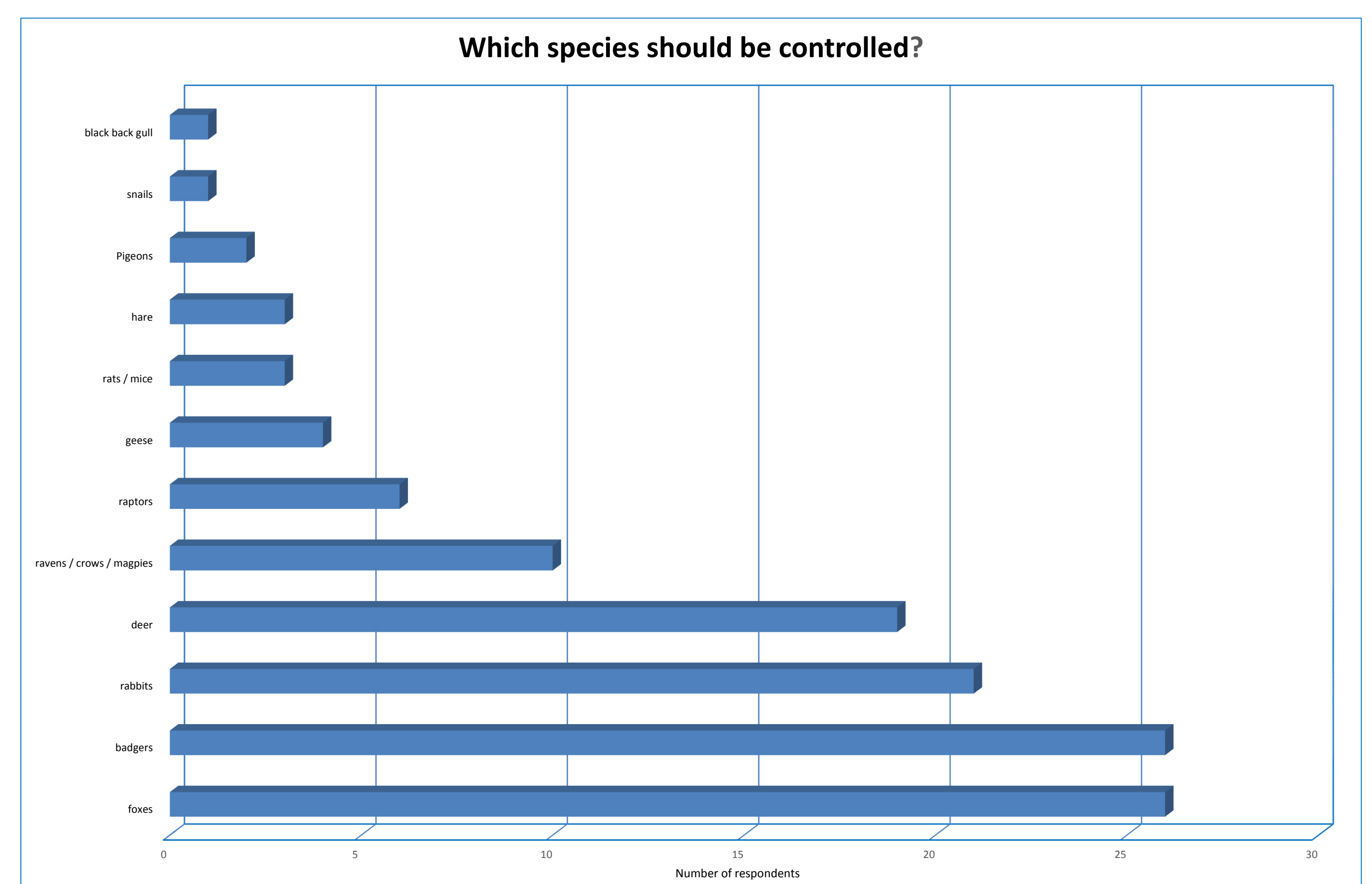
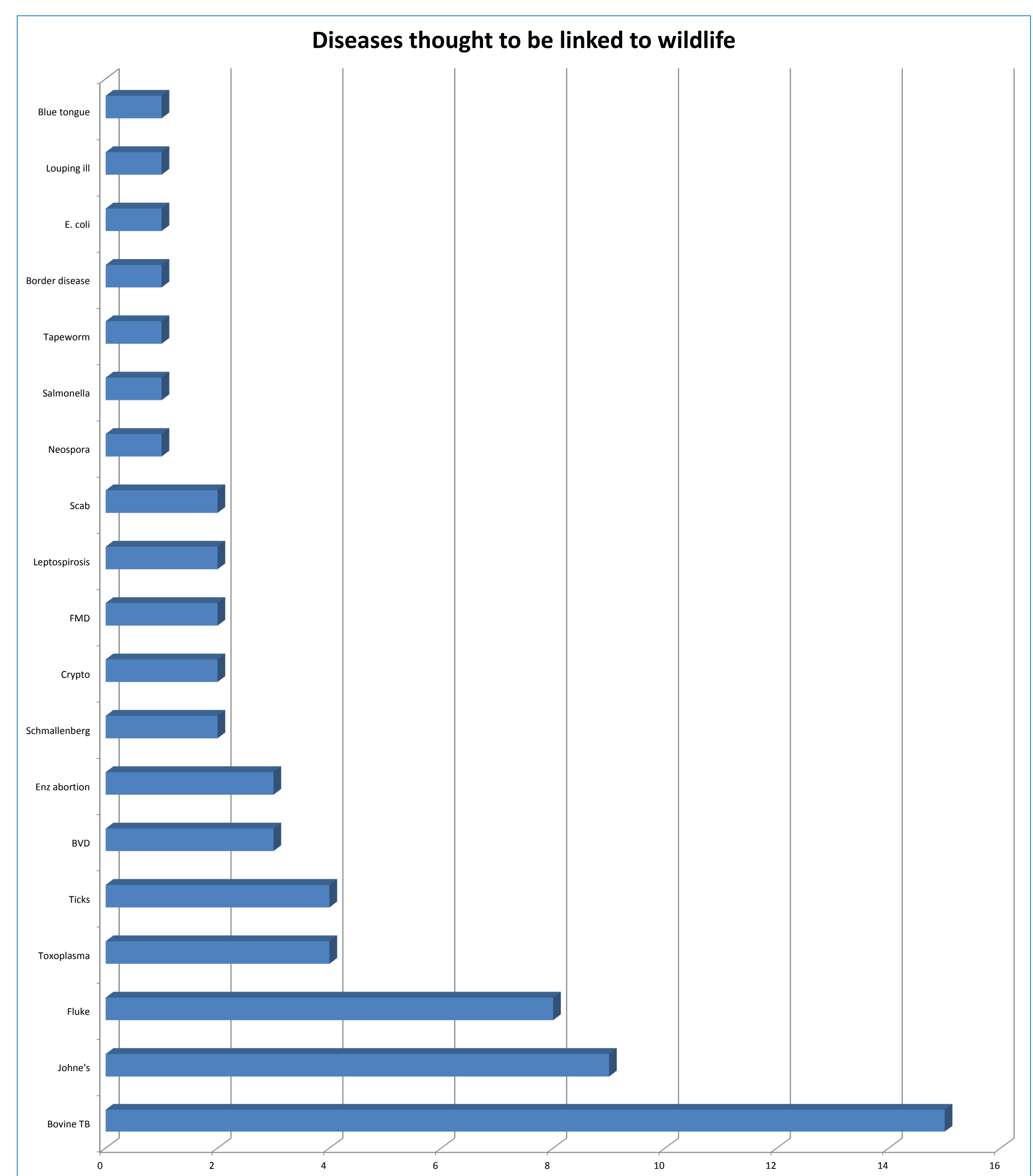
DISCUSSION

More than half of the respondents thought that wildlife were important in disease transmission to their animals. Surprisingly bovine TB was the most commonly mentioned disease, despite Scotland's current TB free status. Animal keepers are aware of the dramatic effect this disease can have on their livestock and did appear to be concerned about the disease affecting their animals.

Of the 15 respondents who mentioned bovine TB, all but one were farmers and all of the 9 respondents mentioning Johne's disease were farmers. This demonstrates that awareness of these conditions is greater amongst the farming community than smallholders.

It was surprising that only a small number of respondents thought that leptospirosis and cryptosporidiosis could be associated with wildlife. These results show that whilst there is some understanding of disease cycles amongst farmers and smallholders provision of information about these diseases could be improved. Data on the transmission and prevention of infectious diseases should also be highlighted for smallholders where access to farming press etc. is sometimes restricted. There is an overall need for veterinary scientists to engage more with farmers and smallholders providing accurate up to date information regarding disease presence, risk of spread and interaction between wildlife and domestic livestock.

There was no real surprise that control of badgers, foxes, rabbits and deer was considered necessary. Whilst the majority of farmers and smallholders recognised that wildlife species have to be controlled to minimise disease they wanted to work alongside wildlife, with some respondents highlighting a preference for vaccination instead of a badger cull.



CONCLUSION

This research makes it clear that animal keepers in Scotland are concerned about TB, despite Scotland being currently free of this disease. They also recognise the role that wildlife can play in the dissemination of disease (e.g. Johne's), although more education in disease transmission is needed. This study highlights the importance of working alongside farmers and smallholders when deciding on wildlife related matters, to ensure that wildlife can thrive with agriculture.

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