

The Business of Farm Crime: Evaluating Trust in the Police and Reporting of Offences.

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Abstract

Annual estimates of the total cost of farm crime to the UK economy amount to the region of £45m (NFU, 2018). The purpose of this study was to assess the extent, effects and responses to farm crime from key stakeholders, principally the police and farming population. Survey responses collected from farmers (n=96) in rural Wales. Key findings suggest that the main categories of farm crime including machinery and livestock theft were similar to national patterns. Perceptions of organised crime groups from outside the local area being responsible for criminal activity were also prevalent. Satisfaction and trust in the police was generally healthy, despite awareness that the investigation and prosecution of farm and/or rural crime was often not being adequately resourced. The implications of this research propose that a broad lack of police training/experience, insight into farming issues generally, and wider organisational resource commitment, all hinder effective policing of farm business crime.

(150 words)

The Extent of Farm and Rural Crime

Establishing an accurate estimate of the cost of farm related crime is complex due to the diverse nature of agricultural business, further confounded by police reporting systems and wider classifications of farm crime(s) and business crime (Weisheit, 2016). Basic statistical data is often generated by insurance companies and farming unions; for example, the 2018 National Farmers Union (NFU, 2018) Rural Crime Report - regarded as one of the most comprehensive estimates of the nature and extent of rural crime - suggests costs to the UK economy of nearly £45m annually in the previous year. Regional differences were also substantial; the Midlands being the highest (£8.8m) and North-West (£3.4m) the lowest, with Wales (£1.9m) slightly above Scotland (£1.5m), but below Northern Ireland (£2.6m). With the exception of the North East of England and Scotland, all regions had experienced an increase from 2016 to 2017, with Wales the highest (41%), followed by the Midlands (32%) and the South East (30%). The overall cost to the UK has increased 13.4% from £39.2m to £44.5m; the most prevalent categories by value in 2017 were theft of agricultural vehicles (£5.9m), 4x4s and ATVs (£4.2m), and livestock (£2.4m). However, whilst many of these values appear high and the year-on-year changes substantial, it must be acknowledged these are largely unweighted figures based on claims data and take no account of demographics and land area. Hence, these figures are potentially skewed towards insurable losses and rarely include associated rural and environmental crime, for example, clearing land from fly tipping and pollution. Other organisations, such as the Countryside Alliance, regularly document farm crime trends alongside wider rural issues such as hunting and open access (Naylor and Knott, 2018).

The purpose of this research is to develop a general understanding around the extent, effects and responses to farm business crime. Specifically, it aims to examine how farm crime is perceived by those exposed to it (i.e. farmers), and how they view police response to these crimes, alongside wider issues of trust and police legitimacy. Significant changes in crime statistics can sometimes be more of a reflection on reporting trends, however, and as people become more aware of certain crimes then increases may simply reflect these changing values (Baumer and Lauritsen, 2010). The Office of National Statistics (ONS) publishes a summary report annually on Rural Crime Statistics. However, problems with establishing accurate estimates of rural crime continue to exist due to the majority of crime recorded on farms being generally grouped under commercial victimisation (specific rules exist for

classifying property usage on farms), meaning estimates remain equivocal¹ (Laub, 1983; Donnermeyer and Barclay, 2005). For example, some crime may be recorded under ‘other theft’ such as the trade in scrap metal, including farm gates and machinery (Coombes, Wong, Charlton & Atkins, 1994), which are all areas which are classified as farm based crimes (Barclay, 2016). Similar patterns emerge for other crime categories, including criminal damage and vehicle theft, although some police forces gather micro level data and occasionally publish extensive crime prevention advice (Gilling and Pierpoint, 1999). In general, what is a specifically agricultural crime (farm based) and how it is measured, and recorded is both varied and problematic (Barclay, 2016). Other initiatives, such as the National Rural Crime Network, are semi-official organisations funded by individual police forces, the Home Office and private companies, with the aim of getting greater recognition of farm and rural crime generally. The driving aim of the government and private organisations is to address farm and rural crime through increased reporting and to generate more robust statistics to support evidence based policing in this area.

The Policing of Farm Crime

Academic literature – principally from Criminology – has long been seen to favour urban representations of crime over rural issues (Donnermeyer and DeKeseredy, 2008; Donnermeyer, 2015). In particular, the focus on rural crime has been dominated with uncovering the hidden nature of criminality through the underreporting of criminal events and the wider community/contextual nature of these activities (Barclay, Donnermeyer, and Jobes, 2004; Philo, 1992; Barclay, 2016). The focus here, however, is primarily on agricultural crime and a number of victimisation surveys have shown that this form of crime to be extensive and involve large financial losses to farmers (Barclay and Donnermeyer, 2011). On average, 25% of farms will experience theft of machinery, equipment and livestock every year and domestic burglaries by nearly 1-in-10 – far in excess of urban rates (Ceccato, 2016; NFU, 2018). The juxtaposition between countryside as a place of business and recreation is seen to create situations where opportunistic crime can flourish and organised crime be concealed as legitimate leisure activities (Jones, 2012). Many under-researched topics linked

¹ A recent news feature based on FOI data from police forces in England and Wales (<https://www.bbc.co.uk/news/uk-england-47409199>) indicated only one criminal charge from a total of 10,000 sheep thefts.

to rural areas and agriculture include wildlife crime (von Essen, Hansen, Källström, Peterson & Peterson, 2015), environmental protection (Barclay and Bartel, 2015), the impact on the food chain (Soon, Manning & Smith, 2019; Manning, Smith & Soon, 2016; Smith, 2004) and terrorist training and bio-terrorism (Herrington, 2015), amongst others. Similarly, different regions, countries and periods of time make evaluating and comparing key research findings complicated.

The disparity in estimates of farm and related crime often limit the extent to which accurate estimates of the wider scale of the problem can be realised. Looking at the headline figures, Yarwood (2001) suggests that policy makers interpret lower crime rates in rural areas to mean that: “less of a problem means that there is no problem” (p.214). These assertions resonate with Jones (2012), in looking beyond the ‘rural idyll’ or rather the perception that the countryside – predominantly encountered as a place of leisure by urban populations – is both free of crime and social problems (see also Shucksmith, 2018). This debate is added to further to by Ceccato (2016), in that it should not be assumed that patterns of rural crime are homogeneous. Indeed crime in rural locations is both significant and serious to those communities experiencing these behaviours (see Owen and Carrington, 2015; Sommerville, Smith and McElwee, 2015), supporting Wooff’s (2015) findings that rural policing has been largely absent from geographic and criminology literature (see also Weisheit, Falcone & Wells, 2006). This is also supported more broadly with farmers feeling that not enough is being done to combat and deal with rural crime (NRCN, 2018).

The changing community structure in rural locations, through increased tourism and leisure opportunities has also impacted upon the fabric of ‘traditional’ reactions to crime and crime control. Mawby (2015; 2017) highlights the difficulties of identifying offenders and the extent of the problem where local businesses, local residents, occasional residents and temporarily resident people could be victims and/or offenders in the rural landscape. Mawby (2015) sees this as a critical gap; non-residents are potentially less likely to be victims in the rural landscape, but could quite possibly be offenders i.e. have the ability to interact with their victims from a distance. The nature of rural policing is changing due to resource constraints and in light of new challenges and increasing threats (Hogg & Carrington, 2006; Kaylen and Pridemore, 2011 & 2015). Smith and Somerville (2013) recognise the changing policing business model in rural areas and the effect of small rural police stations closing. In addition, Wooff (2015) acknowledges that some of the urban focused policing models are of

little use in the rural context due to some of the challenges faced by rural police, namely the scale of the environment and often lack of back up support. As such, rural policing, according to Wooff (2015), requires a different response based on community interactions and community knowledge. Yarwood (2007) proposed the need for distinct rural policing which requires a better understanding of its context, whereas Smith (2017) identifies that new ‘business models’ (principally rural crime strategies) have indeed seen the establishment of dedicated/specialist rural officers, by utilising empirical methods, such as Evidence Based Policing (EBP; see Sherman, 1998) - a form of resource allocation - to test and address priorities in relation to crime control policies (Llewelyn, 2017).

Evidence Based - Trust, Confidence and Legitimacy

The professionalization of the police force and Evidence Based Policing (EBP) are closely linked, and many of the recent models, such as performance management (Savage, 2007), intelligence-led policing (Ratcliffe, 2016) and community oriented policing (Sklansky, 2014), have included EBP as the core driver for implementation and accountability. Police legitimacy and overall trust/confidence in the police is a fundamental feature of law and social control; in the UK, the police service and ancillary organisations (including the security services, Border Force, etc.) are generally accepted as government agencies assuming responsibility for controlling and investigating crime (see Newburn and Reiner, 2007). Following many high profile disturbances and accusations of corruption in the 1980s, the culture shift from police *force* to police *service* introduced new standards designed to ensure accountability and satisfaction (O’Neill and McCarthy, 2014). Subsequently, developments such as community and intelligence led policing shifted the rhetoric from pursuing criminals to public protection and maintaining social control (Williams & Cockcroft, 2019). Community policing models necessitate engagement with the wider public and responses to specific crime and anti-social problems (Bennell & Blaskovits, 2019). However, despite such shifts, there is still a general feeling that Police services do not match the needs of the rural population, including farmers (NCRM, 2018)

However, as Newburn and Reiner note: “[b]reaches of the law outstrip police capacity to process them, so choices about priorities are inescapable” (2007; p.915). Hence, we see the legitimacy of police discretion being fundamentally linked to resource allocation;

undoubtedly this leads to pockets of disengagement (such as those described in rural communities) and scepticism in the police and their apparent priorities (Rogers, 2014). It is important to note that much of the writing on police legitimacy is focused upon urban populations and the associated issues of race, economic status, etc., and – common to much criminological research – rural crime and rural policing have been largely neglected (Donnermeyer and DeKeseredy, 2008). Within rural and farming communities, the allocation of police time and resources has been severely criticised, with accusations that farm crime is not taken seriously and levels of trust and confidence in the police to address these problems have diminished (Yarwood, 2010). As a result, much of the criminal activity experienced in rural locations – particularly uninsured losses – goes unreported and further reduces expectations of protection/prosecution.

Whether this trust in the police has an impact on the likelihood that crime will be reported has been the subject of many empirical studies, although the findings remain somewhat equivocal (see Tyler and Fagan, 2008; Jackson and Bradford, 2009). The basic premise for these studies centres on the assumption that trust is a function of the behaviour and actions of the police themselves, and that an increase in trust will lead to better overall relations and willingness to report crime. However, Jackson and Bradford (2010) highlight the extent to which the wider issue of ‘confidence’ in the police is a complex and multi-faceted construct, related to trust, legitimacy and accountability. Specifically, their models of London resident’s confidence estimations suggest trust is primarily ‘motive driven’ in that the police and community must align in enforcing social values and their ability to secure these through civic engagement. Importantly, in establishing trustworthiness, the resulting increase in social connections created further opportunities for civic engagement in a reciprocal and evolving partnership. The issue of trust and the reporting of crime then involves more than a simple linear relationship, not limited to the type of crime (property vs. interpersonal; see Bowles, Reyes and Garoupa, 2009), existing social control mechanisms (see Warner, 2007), and attitudes towards authority (see Bradford, Jackson & Stanko, 2009), amongst other wider structural variables, such as legitimacy (see Tyler, 2001). Reporting levels of crime experienced on farms has been traditionally low; issues including as trust and general apathy, have lead to farmers being reluctant to report crimes, particularly when there is no perceived benefit such as a high likelihood of prosecution and/or insurance cover (Kaarianinen and Siren, 2011; NCRM, 2018). In addition, these inconsistencies lead to inaccurate farm crime statistics and a potential underestimation of the type and extent of farm crime.

Key Issues in Rural Policing

Evaluations of police and community relations are driven by responses to particular incidents and more recently under the broader rhetoric of evidence-based policing (Mitchell, 2019). Assessments of policing activities and behaviour, for example, those developed by the Hillsborough Independent Panel (The Report of the Hillsborough Independent Panel, 2012), have often questioned police legitimacy, decision-making and competencies. Similarly, responses to large-scale public disorders and anti-social behaviour have led to community-based policing initiatives, designed to re-establish trust and legitimacy to police work (Gill, et al., 2014). Yet research and evaluations have not similarly been directed towards rural based crime. For the police, the issue of what is rural crime is one area that is an immediate challenge, with the notions of what constitutes 'rural' posing more than a semantic challenge (Scott & Hogg, 2015), identifying demographic, economic, social structure, cultural dimensions (Weisheit, Falcone & Wells, 2005). These debates are compounded by perceptions that in general crime is considered to be an urban, rather than a rural issue (Yarwood & Gardner, 2000). Safety in rural settings is part of the idyllic image people hold, as opposed to urban opposites of crime (Ceccato, 2015). Yet, Rurality has an effect on the nature of the crime, the type of crime committed, and the victims (Ceccato, 2015).

Farm crime and the police response to this growing crime problem has been the subject of much debate in both the academic (see Barclay, Donnermeyer, Doyle, & Talary, 2001; Smith, McElwee & Somerville, 2017) and professional literature (see NFU, 2018). Farm related crime, and the wider issue of rural crime, present both a broad and far-reaching impact upon victims, despite not statistically meeting the volume and potential seriousness of many urban crime trends. Examples of this broad sub-category of crime can include theft of livestock and machinery, vandalism and trespassing; less obvious crimes can include damage and intimidation caused by illegal hunting, drug cultivation and production, and even terrorist training (Bartel, 2016). Other forms of this crime sub-category are contamination of the food supply network, environmental pollution and people trafficking/modern slavery (Dwyer, Lewis, Hodkinson, and Waite, 2016; Donnermeyer, Barclay and Mears, 2011). Victims can experience loss of earnings, higher insurance premiums, costs associated with crime prevention initiatives, and loss of valuable breeding bloodlines. Alongside the financial costs, crime experienced by farmers can lead to broader social capital issues, such as isolation and community conflict through decreasing levels of trust and cooperation (Holmes and Jones,

2017). Hence, crime in rural communities and predominantly that of farm related crime, is a complex issue that has been recognised as requiring a tailored response by the police and associated agencies.

Understanding crime trends/problems and being able to effectively police rural areas is challenging, with even the gathering of data posing practical issues (Weisheit et al., 2005). The nature of policing in rural areas is also changing, with an increase in non-police working in crime work, privatisation of policing activities and resourcing issues (Ceccato, 2015). The latter of which is particular issue in rural areas under the auspices of economic austerity post 2008 financial crash. The context, being rural, also challenges the police to carry out tasks that don't often feature in standard police training (Woof, 2015). In addition to these issues, for farm based crime the particular issues of rural areas, such as roads, access, animal husbandry, weather, and specific to our context language all exacerbate the rural policing issues and make the need for more research apparent.

If farm based crime is to be better policed, then an understanding of the various stakeholders is required, and namely, how farm operators perceive police operations with respect to farm based crimes. This research speaks to farm business based crimes, specifically looking at crimes committed against farm based organisations, which are by nature rural in location and conceptualisation. Using interviews and a farm operator survey (n=96) drawn from a single police area (Dyfed-Powys in Wales), we investigate crime and crime reporting attitudes. Specifically, we investigate perceptions of crime, responses to crime, crime reporting and other social aspects, including trust, which has been linked to crime previously (Deller and Deller, 2010). The paper is structured as follows, firstly a background on rural and farm business crime, then discussion of rural policing, followed by sections on trust and social capital. These literature sections are followed by the methodology, result and discussion.

Research aims

The purpose of this research is to develop a general understanding around the extent, effects and responses to farm business crime. Specifically, it aims to examine how farm crime is perceived by those exposed to it (i.e. farmers), and how they sense police response to crimes alongside wider issues of trust. In doing so, the aim is to provide insight into Police policy and practice. Thus, we aim to examine three areas:

1. Farm crime is not taken seriously – it as low-level crime and/or is at odds with perceptions of farming. In reality, crime is widespread and spans criminal damage through to organised theft;
2. Farm crime is impossible to measure and/or prevent – many simple initiatives may have a large impact on victimisation (e.g. livestock tagging, etc.);
3. The Police don't take farm crime seriously and/or there is a lack of trust between authorities and farming community.

In doing so, we adopt the interpretation of farm business crime as any crime which impacts upon the farm business, including, fly tipping, machinery theft, stock theft, and damage to farm business (e.g. gates, fences etc.; see Barclay 2016 for a review). Thus we use the broader conceptualisation, including all aspects of farm based crime.

Methodology

To analyse the areas of interest brought forward, a cross-sectional survey of farmers is utilised. The questionnaire was based on previously used instruments, to allow for broader interpretation against various measures. The measures around crime and policing were based upon those from the CSEW, measures of social capital were based upon those from the European Social Survey and the UK Citizenship Survey. In addition to the sections on crime, policing and social capital, demographics were also included. The questionnaire was developed in consultation with the rural police team with additional input from farmers through contacts with farming unions and associated organisations. The key issues of trust, visibility and responses were developed through these background discussions for empirical examination in the formal survey. The questionnaire also contained open response sections, allowing respondents to write about each of the areas included.

To address the research questions around farm crime, research was conducted at a major agricultural show in the Dyfed-Powys force area. Research associates used mobile devices to run the web-based survey after approaching relevant parties, i.e. farmers living in the research location. Additional survey responses (<10% of total sample) were received via the web survey which was advertised through press released and social media outlets. The sample included both victims and non-victims of farm based crime. A non-probability purposive sample was selected as the most appropriate sampling method that allows the researchers to choose subjects from within a population (Etikan et al., 2015). The technique is suitable

when researchers are seeking a sample that has knowledge of a certain issue and are willing to share attitudes around this issue, who have particular characteristics that better able them to assist with this (Eitkan et al., 2015). Purposive sampling requires both judgement and a deliberate effort to recruit (Topp et al., 2004). The use of a judgement sample allows the researchers to sample farmers, those who have and have not been victims of crime. No attempt was made to seek out victims of crime, owing to the lack of reporting and other issues which would make it hard for researchers to predefine victims, rather, this method allows farmers to self-define as victims.

To analyse the data a mix of descriptive methods is utilised. Descriptive techniques allow us to better understand attitudes, and develop insights into how Police policy is working in with respect to rural farm crime. Some basic relationships between key variables were assessed using correlation. More complex statistical techniques – for example, regression models – were not appropriate for the level of data collected and the small sample size.

Results

A total of 96 farmers completed the survey, predominantly cattle and sheep enterprises. The survey data highlights that the total number of respondents whom had experienced a criminal event on their property was around 50% of the sample. The largest category of crime reported in the survey was farm machinery (approx. 50% of total), followed by livestock theft (25%) although these categories were not mutually exclusive (i.e. some experienced both). Other examples included theft of gates, beehives and tools; criminal damage (for example, dogs killing sheep and illegal hunting) was also recorded. Of the respondents that had been victims of farm business crime:

- 91% of victims reported the crime
- 49% of victims indicated machinery was the primary criminal target
- 30% of victims indicate stock was the primary criminal target
- 33% of victims felt the crime was committed by a local person

Clear opportunities exist here to address crime prevention at a basic level through both raising awareness of crime targets and through focused campaigns reflecting robust situational crime prevention techniques (cf. Barclay and Donnermeyer, 2002; Brantingham, Brantingham & Taylor, 2005; Carleton, Brantingham and Brantingham, 2014). Although near nine-out-of-ten offences were purportedly reported to the police, only half of respondents

stated that they were satisfied by the police response, citing an apparent lack of interest and slow response times as the main features for this lack of approval (see Ruddell and Jones, 2018). Nearly 90% of respondents reported that they were not aware of any conviction following the incidents reported, which led to over 80% of respondents to actively take precautions against crime.

A similar number felt that farm business crime was on the rise but that there was little chance of a prosecution (from Question 7a: please provide the reasons why you did not report the crime):

“We were witnesses to another crime and waited to be interviewed about that but no one showed up”

“There's no way they could have helped. We know who was responsible but unable to prove.”

Appraisals of where the source of crime had originated were mixed; clearly the low clear-up rate meant that many were unsure of the background of the offender(s), but there appeared to be a mixture of low-level ‘local’ crime and larger-scale organised crime from outside the area (from Q15. Who do you feel is responsible):

“Sheep have been stolen today from one neighbour by another up our road and no police have attended”

“I thought they were strangers but we have recently found out that machinery has been discovered locally by local people.”

More detailed analysis of the data indicated some broad trends associated with the type and level of crime experienced in the DPP force area and some tentative assessments regarding the likely perpetrators. It is clear from the [self-report] figures that machinery theft was the main type of farm crime experienced and that 2/3 of those experiencing theft believing it to be originating from outside the local area (from Q15. Who do you feel is responsible):

“Organised gangs who carry out surveillance before committing the crime”

“Range Rovers specifically targeted for export.”

In general, the perception was that the crimes committed against farm businesses are organised, with machinery being either ‘sold to order’ and/or by offenders with suitable disposal routes for specialised equipment.

Trust in the police appeared to be generally good and little difference was observed between those reporting crime and those who hadn’t, with 54% of the sample were satisfied with the police generally. Yet when asked how to improve general satisfaction with the police, the appointment of dedicated farm officers (62%) and taking farm crime more seriously (57%) were the main areas that respondents agreed with. Clearly the implications here are related to policy shifts in the manner in which police legitimacy is maintained, with investment in new approaches and modern technology (e.g. social media) appearing necessary. Existing models and practices, such as those developed in line by ‘Community Policing’ advocates may be well placed here to address key issues (Gilling, 2011; Pelfrey, 2007).

In terms of qualitative insights to improve satisfaction with policing:

“Please take the countryside and farming industry seriously. We are geographically isolated and some farms are highly vulnerable”

“Visibility of police in rural areas, markets along with adequate training of officers in order to raise the understanding of rural problems”

“Visit us - ask what our concerns are. Give advice and tell how they are working to reduce crime. They need to market themselves”

Example measures from the Crime Survey for England and Wales (CSEW, 2014) highlight that trust in the police amongst farmers in the current sample was 64% compared to a national average of 75% for rural respondents. Trust in the legal system more generally also demonstrated similar patterns, with 42% of farmers reporting medium to high levels of trust compared to 48% of rurally classified respondents from the CSEW (2014). There was also a moderate correlation ($r=.697$, $p>.001$) between trust in the police and trust in the legal system, suggesting that the actions of the police reflected wider issues in terms of legitimacy in the legal system more generally (Williams & Cockcroft, 2019).

Similarly, whilst rural crime is generally low - only 23% of respondents from the CSEW feel crime is on the rise - the sample of farmers surveyed here suggest that 85% believe it to be increasing. Finally, whether victims of crime are satisfied with the police (73% nationally) is

far greater than the 54% of victim's satisfaction in the DPP sample (from Q19. How might the police increase satisfaction for farmers reporting crime):

“There's no trust between the police and farmers as there's a feeling that they target farmers on the roads and prosecute them”

“The need to understand that farming can only be carried out on the basis of trust and the role of the police in reinforcing that trust in a proactive way and not merely responding to criminal acts.”

The caveat of rural vs. farm crime should be restated here and potential opportunities for specific data recording at force level of farm related crime is essential to accurately compare these groups. Overall, the perception is that interactions with the police were generally positive, but whilst the reporting of farm crime is high the chances of successful prosecution were low (from Q18. Lack of satisfaction with police response):

“Evidence gathered by the police but they never returned”

“They told us they were too busy to come out and that we were to go to sales and look on the Internet to see if it was listed. We felt they were not doing anything towards finding it”

“Lots of Farmwatch msgs to warn of potential incidents/suspects but no msg'd re their successes. Police.UK monthly reports generally show little success.”

Anecdotally, the comments made during the survey open-ended questions generally implicate slow response times, a failure to consider local intelligence and lack of evidence collection as causes for concern amongst farmers whom have reported farm crime (Kaariainen & Siren, 2011).

Discussion

The research undertaken here focused on gathering self-report data from the farming community on the levels of crime being experienced, alongside the more social and community oriented aspects associated with trust in the police and reporting/responding to crime. The headline self-report figures suggested that farm crime was highly prevalent in the area and had been experienced by approximately half of the sample; theft of machinery and livestock were the main targets. The figures analysed here are higher than estimates (1-in-4)

made by Barclay and Donnermeyer (2011), although the primary focus on livestock and machinery is similar in scope albeit comparing data from different countries. Interestingly, the source of these criminal enterprises was associated with organised criminal networks travelling into the area and resonates with the findings of Mawby (2015) and others (including findings in the NCRM, 2018 report) in recognising the importance of place in understanding criminal behaviour in rural communities (Carleton, Brantingham and Brantingham, 2014). However, with the number of prosecutions being relatively low, it is difficult to confirm these suspicions; potentially these concerns are more indicative of generalised trust in the community and potential vulnerabilities associated with a lack of confidence in the police to adequately respond to and protect the farming community from crime.

The data indicated that there was some level of dissatisfaction in the way the police responded to reports of farm crime, which corresponds with previous research (see NCRM, 2018). In particular, over a third of respondents would have liked to see the introduction of dedicated farm crime officers and a similar percentage simply requested that farm crime be 'taken more seriously'. This mismatch between the reporting of crime and general levels of trust in the police is wider issue in criminological research and the link remains equivocal (Tyler and Fagan, 2008). However, Jackson and Bradford (2010) suggest that the reporting of crimes is somewhat motive driven and that there exists a reciprocal 'community agreement' between the public and authorities into who and how issues such as crime are dealt with. Hence, there is scope to increase the links between the police and farming community in order to build social capital. Many respondents were aware of neighbouring forces (e.g. Avon and Somerset and North Wales), having a more focused response to farm crime; clearly these are models that could be emulated and the wider UK-wide network of rural crime prevention tapped into.

Following the preliminary analysis of the data, discussions with the rural police team raised several concerns, most notably the [limited] financial resources available (see NRCN, 2016). Paradoxically, until farm crime is taken seriously and the true costs and harms established, sufficient funds are unlikely to be acquired or diverted to this crime category and hence reporting/prosecutions will remain low. Others - drawing on personal experience - felt that officers with improved knowledge of farming would more likely receive a better response within the rural communities. In addition, observations from other police forces highlighted the increased use of social media, not specifically for reporting crime, but more to facilitate

engagement with hard to reach communities (Crump, 2011). Officers did raise concerns of the resource requirements in terms of the expertise of staffing such media tools. Evidence for the utility of these initiatives is complicated and often intangible (Williams and Hesketh, 2019); however, creating feelings of community connection and responding to criminal behaviour was generally a positive outcome.

Police research is a complex and difficult process, matching research agendas with political interests within the confines of social science methods (Ariel, 2019; Bennell & Blaskovits, 2019). Hence, naturally there are a number of limitations to the study and analysis and interpretation of the data. Whilst the sample size (n=96) is limited in terms of the statistical power for more complex interactions to be performed on the data, although for a general user satisfactions survey then the numbers are good and comparable to similar farm crime surveys (for example, see Smith and Byrne, 2017). In addition, generalizability to other regions and countries means that care should be exercised in assuming these issues are universal; with much of the already scarce literature stemming from as far afield as the US, Sweden and Australia, this disparity further supports the call for a more focused research in this area (see Ceccato, 2015; Donnermeyer, 2016). The trust items were adapted from the British Household Panel Survey and European Social Survey and it was the intention to cross-match these to baseline levels of community trust; potentially there are better metrics to ascertain the type of trust we were examining, but nonetheless these measures are well established and the potential to examine the data in this way can be undertaken. A follow-up study is planned to analyse the impact of the recommendations from this research implemented in the subsequent rural crime strategy (Dyfed-Powys Police, 2017). Alongside the comparative aspects of this repeat survey, new information on some of the initiatives, for example, the use of social media and introduction of dedicated rural crime officers, will enable forces to ascertain the impact of the rural crime strategy and inform future practice.

Conclusion

The main findings of this study supported by the data highlights that, although general satisfaction with the police as an organisation was high, the perception of the way in which reports of farm crime were actually dealt with was poor. This appeared to be a reaction to various issues; the most cited were slow response times, lack of realistic apprehension/prosecution and a perception of disinterest in rural crime generally. These responses for the DPP force area mirror the issues reported in the professional and academic

literature on the subject. A major feature of responding to crime trends is being able to establish key relationships with stakeholders in order to gather reliable and accurate data (Barclay and Bartel, 2015). Alongside creating avenues whereby farmers would be more willing to report crime (not just for insurance purposes, for example) might be to develop dedicated flags for farm specific crime. Current practices see this unique data being mixed up with residential and commercial surveys, further confounding the problem. Models of EBP require accurate data and evaluation of initiatives in order to establish priority areas and evidence of successful interventions (Sherman, 2015). Even with the best will in the world, without accurate information the allocation of resources will be potentially be misappropriated.

Further to the reporting and recording issues, there was some suggestion that the police were ill equipped to deal with farm crime. In contrast to the resources that have been allocated to, for example, fraud and Internet crime, farm crime as a specialist ‘activity’ is vastly under invested. Much of the larger-scale crime – theft of farm machinery and livestock – is not opportunistic and requires specialist knowledge and contacts in order to transport and dispose of the illegitimate goods. Farmers appear to be willing to invest in CCTV and join ‘Farm Watch’ initiatives, but without seeing positive results then these are largely futile and lack any momentum in creating a sense of cohesion between the farming community and police. As discussed above, the focus within criminology on the urban environment has recently experienced a shift as we become more aware of the environment, the source of our food and leisure activities linked to rural communities (White, 2007; Hall 2014). Hence, farm and rural crime is deserved of more attention and due to the specific issues associated with the context of these activities, requires specialist input, for example, in much the same way that financial and drug related crime is resourced. Whilst comparisons with other countries are useful, research needs to also address specific regional issues.

Police responses to farm and rural crime, however, are improving. For example, Hertfordshire was the first police force in England to pioneer the rural special constable initiative in 2009. Many forces, including North Wales, North Yorkshire and Devon and Cornwall, now run well-publicised and highly effective rural policing teams. Dorset police recently achieved national coverage for their rural policing initiative through a privately donated tractor complete with police livery. Hence, the use of ‘police’ tractors at shows, dedicated social media presence (Williams and Hesketh, 2019) and wider links with insurance companies and research facilities all help to raise awareness of the nature and

extent of rural crime. Much of the focus of these campaigns is to raise awareness and increase reporting; modern intelligence led policing/EBP requires accurate data of prevalence and patterns to be effective and secure funding allocation.

References

- Ariel, B. (2019). “Not all evidence is created equal”: on the importance of matching research questions with research methods in evidence based policing. In R. Mitchell and L. Huey (eds), *Evidence Based Policing*, Bristol, Policy Press (pp.63-86).
- Aust, R. And Simmons, J. (2002). Rural crime: England and Wales. *Home Office Statistical Bulletin 01/02*. London: Home Office
- Baucus, M.S. (1994). *Pressure, opportunity and predisposition: a multivariate model of corporate illegality*. *Journal of Management*, 20, 699–721.
- Barclay, E. (2016). Farm victimisation. *The Routledge international handbook of rural criminology*, 107.
- Barclay, E. & Bartel, R. (2015). *Defining environmental crime: The perspective of farmers*. *Journal of Rural Studies*, 39, 188-198.
- Barclay, E., & Donnermeyer, J. (2002). Property Crime and Crime Prevention on Farms in Australia. *Crime Prevention and Community Safety*, 4(4), 47-61.
- Barclay, E. and Donnermeyer, J. (2011). *Crime and security on agricultural operations*. *Security Journal* 24(1): 1-18.
- Barclay, E., Donnermeyer, J. and Jobes, P. (2004) *The dark side of gemeinschaft*. *Crime Prevention and Community Safety* 6(3): 7-22.
- Baumer, E., & Lauritsen, J. (2010). Reporting crime to the police, 1973-2005; a multivariate analysis of long-term trends in the National Crime Survey (NCS) and National Victimization Survey (NCVS). *Criminology*, 48(1), 131-185.
- Belyea, M. J., & Zingraff, M. T. (1988). Fear of crime and residential location. *Rural Sociology*, 53(4), 473.
- Bennell, C. & Blaskovits, B. (2019). The case for open police research. In R. Mitchell and L. Huey (eds), *Evidence Based Policing*, Bristol, Policy Press (pp.117-130).
- Bottoms, A. and P. Wiles (1997) Environmental criminology. Pp. 305–349 in M. Maguire, R. Morgan and R. Reiner eds, *The Oxford handbook of criminology second edition* (Oxford:

Clarendon Press)

Bowles, R., Reyes, M. G., & Garoupa, N. (2009). Crime reporting decisions and the costs of crime. *European Journal of Crime Policy Research*, 15, 365–377.

Brantingham, p., Brantingham., P & Taylor, W. (2005). Situational Crime Prevention as a Key Component in Embedded Crime Prevention, 47(2), 271-292.

Carleton R., Brantingham P. L., Brantingham P. J. (2014). Crime Specialization in Rural British Columbia, Canada, *Canadian Journal of Criminology and Criminal Justice*, 56(5): 595–622.

Ceccato, V.A. (2015). Rural crime and community safety (Vol. 18). Routledge.

Coombes, M. Wong, C. Charlton, M. & Atkins, D. (1994). Crime risk in urban and rural neighbourhoods: an experimental analysis of insurance data. *Environment and Planning B: Planning and Design*, 21, 489-504.

Crump, J. (2011). What are the police doing on Twitter? Social media, the police and the public. *Policy & Internet*, 3(4) 1-27

Deller, S. C., & Deller, M. A. (2010). Rural crime and social capital. *Growth and Change*, 41(2), 221-275.

Donnermeyer, J.F. (2015). The social organisation of the rural and crime in the United States: Conceptual considerations. *Journal of Rural Studies*, 39, pp.160-170.

Donnermeyer J. F. (2016). *The Routledge International Handbook of Rural Criminology*. New York: Routledge.

Donnermeyer, J. and DeKeseredy, W. (2008). Toward a rural critical criminology. *Southern Rural Sociology* 23(2): 4-28.

Donnermeyer, J.F. and Barclay, E. (2005). The policing of farm crime. *Police Practice and Research*, 6(1), pp.3-17.

Dwyer, P., Lewis, H., Hodkinson, S. and Waite, L. (2016). Socio-legal status and experiences of forced labour among asylum seekers and refugees in the UK. *Journal of International and Comparative Social Policy*, 32(3), 182-198.

Dyfed-Powys Police, (2017). Rural Crime Strategy 2017. <https://www.dyfedpowys>.

police.uk/en/newsroom/campaigns/dyfed-powys-police-rural-crimestrategy-launched/

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.

Gill, C., Weisburd, D.W., Telep, C., Vitter, Z. & Bennett, T. (2014). Community-oriented policing to reduce crime, disorder and fear and increase satisfaction and legitimacy among citizens: a systematic review. *Journal of Experimental Criminology*, 10, 399-428.

Gilling, D. (2011) Governing crime in rural UK: risk and representation. Pp. 68–79 in R. Mawby and R. Yarwood eds, *Rural policing and policing the rural: a constable countryside?* (Farnham: Ashgate)

Gilling, D. and Pierpoint, H. (1999). Crime prevention in rural areas. In G. Dingwall and S. Moody. (Eds.). *Crime and Conflict in the Countryside*. Cardiff: University of Wales Press.

Herrington, L. (2015). British Islamic extremist terrorism: the declining significance of Al-Qaeda and Pakistan. *International Affairs*, 91(1), 17–35.

Hogg, R., Carrington, K. (2006). *Policing the Rural Crisis*. Federation Press, Sydney.

Huey, L., Blaskovits, B., Bennell, C., Kalyal, H., & Walker, T. (2019). Identifying some misconceptions about evidence based policing: a research note. In R. Mitchell and L. Huey (eds), *Evidence Based Policing*, Bristol, Policy Press (pp.51-62).

Jones, J. (2008). *Farm Crime on Anglesey: Local Partners and Organisations Views on the Issues*. Second Report - Presented to Anglesey Joint Action Group Committee.

Jones, J. (2012). Looking beyond the ‘rural idyll’: some recent trends in rural crime: Jane Jones describes recent trends in the theft of livestock and agricultural machinery in the countryside. *Criminal Justice Matters*, 89(1), pp.8-9.

Kaariainen, J., & Siren, R. (2011). Trust in the police, generalized trust and reporting crime. *European Journal of Criminology*, 8(1), 65–81.

Kaylen, M.T., Pridemore, W.A. (2011). A reassessment of the association between social disorganization and youth violence in rural areas. *Soc. Sci. Q.* 92 (4), 978e1001.

Laub, J. H. (1983). Patterns of offending in urban and rural areas. *Journal of Criminal Justice*, 11, 129-142

Lindström, P. (2015). Police and crime in rural and small Swedish municipalities. *Journal of rural studies*, 39, pp.271-277.

Llewelyn, D. (2017). Dyfed-Powys Police and Crime Plan 2017 – 2021. Available at:

<http://democracy.carmarthenshire.gov.wales/documents/s11086/Report.pdf>

Manning, L., Smith, R. and Soon, J.M. (2016). Developing an organizational typology of criminals in the meat supply chain. *Food Policy*, 59, pp.44-54.

Mawby, R. I. (2008). Understanding and responding to crime and disorder: ensuring a local dimension. *Crime Prevention and Community Safety*, 10(3), 158-173.

Mawby, R.I. (2015). Exploring the relationship between crime and place in the countryside. *Journal of rural studies*, 39, pp.262-270.

Mawby, R.I. (2017). Travelling from Criminal Enterprises to Enterprising criminals', stopping at all points in between... Paper presented at symposium on Understanding the 'Insider–Outsider Dichotomy' and Illegal Rural Enterprise. Huddersfield University September 2017.

Mears, D.P., Scott, M.L. and Bhati, A.S. (2007). Opportunity theory and agricultural crime victimization. *Rural Sociology*, 72(2), pp.151-184.

Mitchell, R. (2019). A light introduction to evidence-based policing. In R. Mitchell and L. Huey (eds), *Evidence Based Policing*, Bristol, Policy Press (pp.3-14).

Mirrlees-Black, C. (1998). Rural areas and crime: Findings from the British Crime Survey. *Home Office Research Findings No. 77*. London: Home Office.

National Rural Crime Network. (2018) National Rural Crime Survey.

National Farmers Union. (2018) NFU Rural Crime Report 2018:

<https://www.nfumutual.co.uk/news-and-stories/rural-crime-report-2018/>

National Rural Crime Network (NCRN; 2016). Fair funding for rural policing. Online:

<http://www.nationalruralcrimenetwork.net/research/internal/fair-funding-rural-policing/>

Naylor, J., & Knott, J. (2018). A Pack of Dogs is More Effective at Flushing Red Foxes to Guns than a Pair. *Wildlife Society Bulletin*, 42(2), 338–346.

Neal, S., Walters, S. (2007). 'You can get away with loads because there's no one here': discourses of regulation and non-regulation in English rural spaces. *Geoforum* 38, 252e263.

O'Neill, M., & McCarthy, D. J. (2014). (Re) negotiating police culture through partnership working: Trust, compromise and the 'new' pragmatism. *Criminology & Criminal Justice*, 14(2), 143–159.

Pelfrey, W.V. (2007). Style of policing adopted by rural police and deputies: An analysis of job satisfaction and community policing. *Policing: An International Journal*, 30(4), 620-636,

Philo, C. (1992) Neglected rural geographies: a review. *Journal of Rural Studies*, 8 (2), pp. 193-207

Ratcliffe, J. H. (2016). *Intelligence-led policing*. Abingdon: Routledge.

Rogers, C. (2014). Maintaining democratic policing: the challenge for police leaders. *Public Safety Leadership Focus*, 2(2), 1-7.

Ruddell, R., & Jones, N.A. (2018). Policing the 'Middle of Nowhere': Officer Working Strategies in Isolated Communities, *Policing: A Journal of Policy and Practice*, 7, 1-14.

Savage, S. (2007). *Police reform: Forces for change*. Oxford: Oxford University Press.

Scott, J. & Hogg, R. (2015). Strange and stranger ruralities: Social constructions of rural crime in Australia. *Journal of Rural Studies*, 39, pp.171-179.

Sherman, L. W. (1998). *Evidence-based policing*. Washington, DC: Police Foundation.

Sherman, L. W. (2015). A tipping point for "totally evidenced policing" ten ideas for building an evidence-based police agency. *International criminal justice review*, 25(1): 11-29.

Skalansky, D. (2014). The promise and perils of police professionalism. In Brown J. (ed.) *The future of policing*. Routledge (pp343-354)

Smith, R. (2004). Rural rogues: a case story on the 'smokies' trade. *Int. J. Entrep.*

Smith, R., McElwee, G., & Somerville, P. (2017). Illegal diversification strategies in the farming community from a UK perspective. *Journal of Rural Studies*, 53, 122-131. *Behav. Res.* 10 (4), 277e294.

Smith, R. and McElwee, G. (2017). Researching Rural Enterprise Crime: Some Emerging Trends. Paper presented at the Symposium of Understanding the 'Insider-Outsider Dictomy' and Illegal Enterprise, 5/6th September 2017, University of Huddersfield.

Smith, R. & McElwee, G. (2015). Developing qualitative research streams relating to illegal rural enterprise: reflections on researching qualitatively at the margins of entrepreneurship research. *International Journal of Entrepreneurial Behavior & Research*, 21(3), pp.364-388.

Smith, R. & McElwee, G. (2013). Confronting social constructions of rural criminality: A case story on 'illegal pluriactivity' in the farming community. *Sociologia Ruralis*, 53(1), pp.112-134.

Smith, R. & Somerville, P. (2013). The long goodbye: a note on the closure of rural police-stations and the decline of rural policing in Britain. *Policing: A journal of Policy and Practice*, 7(4), pp.348-358.

Somerville, P., Smith, R. & McElwee, G. (2015). The dark side of the rural idyll: Stories of illegal/illicit economic activity in the UK countryside. *Journal of Rural Studies*, 39, pp.219-228.

Soon, J. M., Manning, L., & Smith, R. (2019). Advancing understanding of pinch-points and crime prevention in the food supply chain. *Crime Prevention and Community Safety*, 21(1), 42-60.

Sugden, G. (1999). Farm crime: Out of sight, out of mind: A study of crime on farms in the county of Rutland, England. *Crime prevention and community safety*, 1(3), 29-36.

Topp, L., Barker, B., & Degenhardt, L. (2004). The external validity of results derived from ecstasy users recruited using purposive sampling strategies. *Drug and alcohol dependence*, 73(1), 33-40.

Weisheit, R.A., 2016. Rural crime from a global perspective. *International Journal of Rural Criminology*, v3, n1 p. 5-28.

Weisheit, R.A., Falcone, D.N., & Wells, L.E. (2006). *Crime and Policing in Rural and Small-town America*. Waveland Press, Long Grove, Illinois.

Williams, E., & Cockcroft, T. (2019). Knowledge wars: professionalization, organizational justice, and competing knowledge paradigms in British Policing. In R. Mitchell and L. Huey (eds), *Evidence Based Policing*, Bristol, Policy Press (pp.131-145).

Williams, E., & Hesketh, I. (2019). Twitter: a new Tardis for policing? In R. Mitchell and L. Huey (eds), *Evidence Based Policing*, Bristol, Policy Press (pp.87-102).

Wooff, A. (2015). Relationships and responses: Policing anti-social behaviour in rural Scotland. *Journal of rural studies*, 39, pp.287-295.

Wright, S. (1921). Correlation and causation. *Journal of agricultural research*, 20(7), 557-585.

Yarwood, R. (2007). The geographies of policing. *Progress in human geography*, 31(4), pp.447-465.

Yarwood, R. (2010). An exclusive countryside? Crime concern, social exclusion, and community policing in two English villages. *Policing and Society*, 20(1), 61-78.

Yarwood, R. (2015). Lost and hound: The more-than-human networks of rural policing. *Journal of rural studies*, 39, pp.278-286.