“If it flies, it dies”: Profit, Workplace Pressure and Bird of Prey Persecution

Abstract

Persecution has continued to negatively impact the density and range of many Bird of Prey (raptor) species, both nationally and internationally, despite existing legal protection. Departing from the relatively small body of statistical analyses indicating elevated raptor mortality in proximity to shooting estates, this qualitative study draws on in-depth interviews with retired (hence, free from employment pressure) gamekeepers. New insights and findings are unfolded into the nature and extent of employment-related pressures (from employers) to commit raptor persecution. The findings offer a new narrative in the discourse on the problem, revealing that economic, community and lifestyle pressures co-exist within the gamekeeping industry. It is argued that regulatory design and enforcement strategy and tactics should be mindful of these pressures in order to reduce raptor persecution in both individual criminal liability and vicarious liability settings.

Key words: raptor persecution; crime; workplace pressure; grouse shooting

Introduction

Raptor persecution can be identified as a threat on a global scale (Bird Life International, 2017). Recent research examples of raptor persecution include: farmer-raptor conflict in Zambia (see Nyirenda, Musonda, Kambole, & Tembo, 2017); falconiformes in Rome (see Cianchetti-Benedetti et al., 2016); the harpy eagle in Ecuador (see Muñiz-López, 2017); and the illegal poisoning of vultures in Sub-Saharan Africa, whereby ivory poachers contaminated elephant carcasses with poison, as circling vultures can reveal the poachers’ position (Ogada, 2014). Between 2012 and 2014, 11 poaching-related incidents in seven African countries were recorded, in which 115 elephants and 2,044 vultures were killed. Vulture mortality associated with ivory poaching has increased rapidly and now accounts for one-third of all vulture poisonings recorded since 1970 (Ogada, 2014).

Similarly, Illegal hunting is a widespread problem in the Maltese Islands and is often identified as one of the main ‘bird poaching’ hubs in Europe. Malta lies on one of the key bird-migration routes linking Europe and Africa. Consequently, thousands of protected species (the majority of which are birds of prey) are persecuted each year during migration (Raine, Gauci & Barbara, 2015). BirdLife Malta recorded thousands of incidents of illegal hunting and trapping annually, including many reports of hunters deliberately targeting protected species (see Raine, Gauci & Barbara, 2015).

Such illegal activity is also evident within the UK. Raptor persecution is a UK wildlife crime priority and involves the poisoning, trapping, shooting or nest destruction of Birds of Prey (Gosling, 2017; RSPB, 2015; Wildlife & Countryside Link, 2018). This illegal activity is under-

reported and has continued to negatively impact the density and range of many raptor species, despite existing legal protection under the Wildlife and Countryside Act 1981 (Bird Life International, 2017). For example, recent research from the Wildlife and Countryside Link (2018) recorded 197 incidents of raptor persecution in 2017 compared to 156 in 2016. However, fewer cases in 2017 (n = 58) had criminal offending 'confirmed' when compared to the previous year (2016; n = 67). More recent statistics from the Royal Society for the Protection of Birds (RSPB) recorded a total of 87 confirmed incidents of raptor persecution in 2018 (RSPB, 2018). “Confirmed” incidents are often supported by evidence including post-mortem/toxicological analysis or reliable eyewitness evidence (RSPB, 2018). Therefore, RSPB statistics focus on ‘confirmed’ incidents for publishable figures due to their high evidential weighting, rather than including ‘probable’ and ‘unconfirmed’ incidents in the total sum. Most reports, such as ‘*Bird Crime’* and their associated mapped data thus only represents a fraction of the incidents that occur. Figure 1 highlights confirmed raptor persecution incidents recorded by the RSPB between 2012 and 2018.

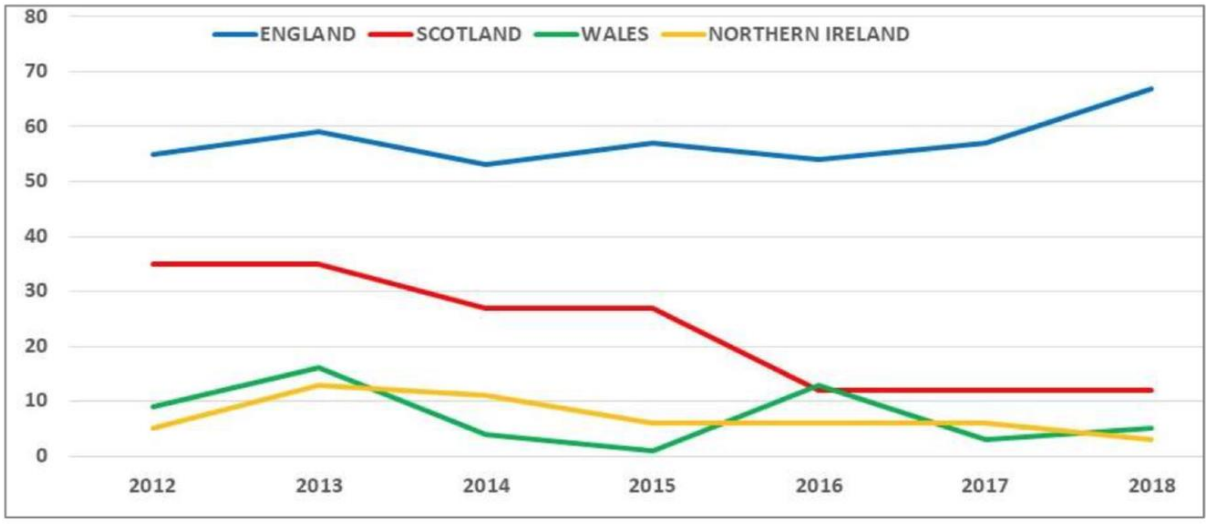

Figure 1. Confirmed raptor persecution incidents from 2012-2018 split into UK countries (taken from RSPB, 2018).

The continued development of intensive game management, for recreational shooting purposes, has created variations in the abundance of many wildlife species (Hanley, Czajkowski, Hanley-Nickolls, & Redpath, 2010). Raptors have continued to be identified as ‘problem predators’ within the shooting industry, accused of limiting game bird population numbers and reducing shooting bags to an extent whereby this ‘sport’ becomes unviable (Redpath & Thirgood 1997, 1999). Therefore, any predation reducing gamebird abundance could exert a direct economic impact on shooting estates, alongside other parts of the rural economy (Park, Graham, Calladine, & Wernham, 2008). Such conflicts can quickly become controversial, since the resources concerned are of high economic value, and the predators involved are legally protected and often have a high public profile (Woodroffe, Thirgood, & Rabinowitz, 2005). Table 1, for example, highlights data from the Game Shooting Census (Guns on Pegs, 2018) detailing the typical annual and daily spend by guns on shooting, together with bag size shot. Overall, the 12,143 respondents from the survey shot over 138,000 days and spent £26.6 million on their sport (Guns on Pegs, 2018). Table 1 clearly highlights the high sums of money involved in the shooting industry which can often be linked

to significant employment pressures on gamekeepers to control predators (legally or illegally) that threaten their game bird population.

It should be noted that the primary role of a gamekeeper involves conducting game bird releases and overseeing shooting during the hunting season, game bird and habitat management, and controlling predators that threaten their livestock (Reynolds & Tapper, 1996). Interestingly, this is a reversal of the historical role of gamekeeping in Britain, where the central role of a keeper was to serve to protect the gentry and royalty's land from poaching gangs. Hunting and poaching played significant roles in medieval England with almost all monarchs immersed in deer-hunting culture and its symbolic language of violence (Manning, 1993; Thompson, 1975). Interestingly, Manning (1993, p.171-172) notes that "*some gamekeepers were reformed poachers and displayed loyalty to their masters and great courage in repulsing poachers, but others continued to conspire with their old friends among the poaching fraternity* (for a comprehensive review of the historical status of gamekeepers, see Manning, 1993, pp. 189-195). It is clear that the role has changed significantly over time, with many gamekeepers now playing a pivotal role in wider landscape conservation and biodiversity management.

Table 1: Daily and annual spend per gun on shooting in the UK and typical bag size for 2017/18 (adapted from Guns on Pegs, 2018).

	Lower-spending guns (<£1,000 pa)	**Middle-spenders (£1,000 – 10,000 pa)**	**Higher-spenders (£10,000+)**
Expected spend per annum on shooting	£680	£3,300 (most expect to spend £2,000 - £4,000 a day)	£18,700 (only a few spent over £20,000)
Spend per day	£160 (76% spend less than £200 per day)	£370	£1,100 (89% spend £400 or more per day)
Bag size shot (per shoot)	73 birds (15% shoot bags of 150 birds or more)	123 birds (23% shoot bags of 150-199 birds. 18% shoot bags of more than 200 birds).	212 birds (70% shoot bags of 200 birds or more).

Grouse shooting is considered by many as an important component of the upland economy in Britain, with wider conservation benefits such as maintaining heather habitat and its associated avifauna and biodiversity (Robertson, Park, & Barton, 2001; Tharme, Green, Baines, Bainbridge, & O'Brien, 2001). For example, shooting is estimated to be worth £2 billion (GVA*) to the UK economy per annum (PACEC, 2014). Conversely, 'driven' grouse shooting, which requires high grouse densities to remain economically viable, typically remains associated in wider literature with raptor persecution and disturbance (Redpath, Amar, Smith, Thompson, & Thirgood, 2010; Thompson, Amar, Hoccom, Knott, & Wilson, 2009).

Raptors are often illegally persecuted due to their perceived predation impact on gamebird species (Park et al., 2008; Valkama et al., 2005); with the majority of raptor persecution

incidents associated with intensively managed grouse moorlands (Amar et al. 2012; Etheridge, Summers, & Green, 1997; Green & Etheridge, 1999; Melling, Thomas, Price, & Roos, 2018; Smart et al., 2010; Whitfield & Fielding, 2017). Evidence from the RSPB suggests that 67.2% of those convicted of raptor persecution were gamekeepers at the time of the offence, though with many other offenders suspected of being known associates or hired criminal conspirators (RSPB, 2018).

Utilising data from 58 satellite tracked hen harriers, Murgatroyd, Redpath, Murphy, Douglas, Saunders and Amar (2019) concluded that the likelihood of death or disappearance significantly increased in proximity to grouse moorlands. From a landscape scale, satellite fixes from the hen harrier's last week of life were distributed disproportionality on grouse moorlands in contrast to the overall use of such areas (Murgatroyd et al., 2019). It was also reported that similar patterns were documented in protected areas in northern England, and the study concluded that hen harriers in the UK suffered elevated levels of mortality on grouse moorlands which is most likely the result of illegal persecution (Murgatroyd et al., 2019).

Despite the wider conservation benefits of gamekeeping, this industry remains increasingly associated with high levels of raptor persecution and disturbance. Therefore, this paper sets out to explore the motivations behind raptor persecution incidents, focusing on the nature and extent of employment-related pressures on gamekeepers to commit offences in contravention of the Wildlife and Countryside Act 1981. The next section will include a brief review of the previous research evidence-base surrounding employment-related pressures within the shooting industry.

Employment-related Pressure to Commit Bird of Prey Persecution: A Brief Review

Earlier work regarding gamekeeper-raptor conflict centred almost exclusively on quantitative and data analytical approaches regarding the impact of predation on game bird species (e.g. Park et al., 2008; Redpath & Thirgood, 1999; Thirgood, Redpath, Rothery, & Aebischer, 2000). Although, more recently, there has been research focusing on understanding and managing these conservation conflicts through both ecological science and social science (see Redpath et al., 2013). To date, however, theoretical work has largely focused on producing broader typologies for wildlife crime offenders (Nurse, 2011), or motivations for poaching (von Essen et al., 2014), with minimal reference to economic and employment-related pressure.

Nurse (2015) argued that wildlife offenders are often treated as a homogenous group with policies that attempt to address wildlife crime largely failing to differentiate between different types of offenders. Yet, to present a more holistic and beneficial outcome, policies must consider the differences in motivations for wildlife offenders. Nurse (2015) also reinforced the view that offenders committing wildlife crime are also the victims of wildlife crime's impacts. For example, gamekeepers can be encouraged to kill legally protected raptors, and other predators, in order to preserve healthy game bird populations for shooting enterprises (Nurse, 2011, 2013). The offending activity of wildlife offenders is often the target of the Criminal Justice System, which adopts an individualised approach to much wildlife crime. However, there has been little effort from the Criminal Justice System to address the inequality of employment power relations which may cause wildlife offenders to commit offences (Nurse, 2011).

Nurse (2011) identified four (relatively) distinct types of wildlife crime offenders as defined by their primary motivator. This study focused on the "economic criminal", who commits wildlife crime primarily as a result of economic and employer-pressure. These pressures to commit such crimes, and the personal consequences (loss of job and property) should they fail, provide strong motivations to commit wildlife crime (Merton, 1968). Thus, Nurse (2011) proposed that any policy approach must involve penalties for the employer, alongside the risk of unemployment as a direct result of committing wildlife crime. Culpability for landowners or employers in raptor persecution cases has been adopted in Scotland through the introduction of the principle of vicarious liability (i.e. strict *respondeat superior* liability – translating from the Latin as 'ask the master') under section 24 of the Wildlife and Natural Environment (Scotland) Act 2011. However, such legal advances are yet to be implemented in England and Wales in this specific criminal context and thus individual criminal liability applies.

von Essen et al. (2014) can also be called upon to shed light on the phenomenon of employment- related pressure on gamekeepers to commit raptor persecution offences. This review analysed how the illegal hunting phenomenon can be framed by wider research. In particular they identify an earlier study by Muth and Bowe (1998) which offers an extensive list of the drivers for illegal hunting. Drawing on that work the motivation of illegal hunters to 'protect self and property' may be pertinent to some gamekeeper's motivation to commit raptor persecution offences. For example, Muth and Bowe's (1998) study stated that fauna and avifauna can be controlled through illegal means if the perpetrator perceived them to be a significant threat to their property, livelihood or gamebirds. Subsequently, the perpetrator can ensure economic gain and maintenance of lifestyle (Muth & Bowe, 1998). However, they suggested that their work should be interpreted with caution given the "...speculative nature of the literature from which it is derived" [p.13]. Arguably this body of work may not be adequately representative of all gamekeepers within the field sport industry, with many playing a pivotal role in wider landscape conservation and biodiversity management (National Gamekeepers Association, 2011). Nonetheless, this body of work may have the potential to provide an insight into, and highlight, many possible motivations and pressures for those who do illegally kill raptor species.

More recently, a paper by Tickle and Von Essen (2020) discusses the pressure to deliver for paying clients and how this consequently triggers one of several ethical or moral lapses in all those involved. Overtime, there has been an increasing tendency to assign monetary values to nature and wildlife (Bauer & Alexander, 2004). Tickle (2019) highlighted that outfitters can often hold themselves to high hunting standards and display significant knowledge regarding wildlife, however, pressure can also be felt if the outfitter is unable to produce a successful hunt. This situation could perhaps also be applied to UK gamekeepers, highlighting that commodification introduces significant situational pressures onto them, which can also be reinforced by their superior (head keeper or land owner). Consequently, this triggers ethical and moral lapses which, in some cases, could be displayed in the form of illegal activity. This study, again, reinforces the significant pressures faced by gamekeepers to use illegal means to control legally protected predators.

Raptor Persecution through an Economic Lens

Following the standard Becker (1968) logic employees would only intentionally commit a crime if the benefit exceeds the expected cost. Typically, social welfare is maximized when individuals do not engage in any crime such that the social cost (harm) of the crime, H, exceeds the social benefit (b) of the crime. He also highlights that society cannot expect individuals to make optimal decisions in respect of the number of crimes as they act in their own self-interest. However, society can deter harmful crimes by sanctioning a fine (f) on criminals such that their expected liability equates to the harm generated (H). Inevitably, authorities in any given jurisdiction cannot detect and try every crime incident so that each criminal faces a probability of being fined equal to Pf where P is necessarily less than 1 and variable depending on how severe the state deems the crime in focus. This implies the optimal fine, f* is equal to H/P.

However, what happens when the employee works for a firm (in our context, a grouse shooting estate) and they are fully complicit in the commissioning of the crime of raptor persecution? In this context what is being committed is a corporate crime by employees with an intent to benefit the firm. As Arlen (2012) highlights firms can induce crimes because,

> "…they control the compensation, promotion, and retention policies that often determine the degree to which employees benefit from crimes committed in the scope of employment." [p157]

Raptor persecution is thus being undertaken on behalf of the shooting estate firm and that the employee perpetrator only benefits if the firm benefits in the short and long run and that the employee outwardly and formally bears the liability costs. With individual criminal liability and no compelling evidence of corporate conspiracy (written instructions, text messages, emails etc) or witness testimony, the firm does not face any sanction beyond the possible cost of (possibly temporarily) replacing some gamekeepers while they are incarcerated. Yet if raptor persecution by employees is an intrinsic feature of its business model of operation the firm will need to induce employees to continue undertaking the crime. One means of doing this is by firm generated incentives and sanctions. This may involve non-pecuniary mechanisms such as developing and deepening social bonds of trust with employees such that extrication from them (say, via witness testimony) is psychically costly and/or pecuniary benefits, such as bonus payments to wages and/or making credible commitments to continued employment and covering individual litigation costs, monetary fines and compensation for spells of imprisonment. Another not mutually exclusive route is by threat signalling. For example, this might serve to raise the expected probability of employment dismissal for the individual, but also dismissal, or not hiring other family members. If such threats were realised, in rural communities with few employers and a restricted social network, this can be a devastating and enduring negative outcome for family members.

With vicarious liability, it is the shooting estate (firm) owner who faces the financial penalties or potentially incarceration sentence. In a competitive market this could also impact on employee compensation, promotion and retention if the fine or sentence was significant. Thus, if raptor persecution continued to be a central feature of the business model within a vicarious liability setting, then substantial trust would be needed among firm owner perpetrators and employee perpetrators.

The Qualitative Investigation

In-depth semi-structured interviews with recently retired gamekeepers [n=9] were conducted to explore employment-related pressures to commit raptor persecution. Interviews typically lasted around 30 – 60 minutes, with questions focusing specifically on duties and working conditions, job-related benefits (transport and housing), economics of a shoot (bird rearing prices, peg prices, transport, pest losses), predator control (experience of pressure to both legally and illegally control predators), and how raptor persecution could be minimised or prevented. In this way, the interviews were able to centre on gamekeepers' careers and the challenges they faced more broadly rather than directly focusing on illegal activity and thus alienating them. It should be noted that eight gamekeepers worked on pheasant, duck and/or partridge shoots in England, followed by one participant from a Welsh grouse estate, and one with experience on a grouse moorland in Scotland (liability settings vary between countries). Gamekeepers currently employed in the industry were not included in the study. Instead, the target respondents were retired gamekeepers and experts in game and countryside management. This alleviated the risk of reputational harm to the gamekeeper or their past employers. Given the focus of this topic and the paucity of research on employment-related pressures on gamekeepers to commit raptor persecution, this study sought to ensure that the gamekeeper's voice was central to this research process, as this area has received substantial media attention in recent years.

In order to recruit participants, a snowball sampling method was adopted, inclusive of an 'opt in' approach. Snowball sampling was the most effective strategy for this research study. Indeed, it is often described as an effective method for contacting hard-to-reach target groups (Sadler, Lee, Lim, & Fullerton, 2010). Moreover, Sadler et al. (2010, p. 369) state that individuals involved within groups or communities that have been stigmatised either by personal circumstance or by association, present significant recruitment challenges within research. In our context, there is, perhaps, an element of taboo with regards to discussing popular public causes such as conservation, animal rights and species justice in the present climate that consequently put the hunting/shooting community on edge (see von Essen & Nurse, 2017).

The interview responses were transcribed verbatim and thematic coding was used to analyse data. The anonymised, personal data is stored, and will remain, in a secured file on Google Drive with a second back-up also kept on the [NAME OF UNIVERSITY] N Drive. This will be kept for a minimum period of 10 years in accordance with the [NAME OF UNIVERSITY] retention schedule for research data and the UK Data Protection Act 1998.

Results

Employment-related pressure was highlighted by most participants as a significant issue within the game management role. Two main types of employment-related pressure were experienced and discussed by participants: *economic* and *lifestyle*.

First, economic pressure was identified and is highlighted by participants in the following quotes:

"*...there is financial pressure on [gamekeepers], it's a business."* (GK6)

"*...it is an economic pressure in the sense that someone is paying an awful lot of money to run a shoot...they want what they pay for..."* (GK7)

"*The pressures are huge...When a boss is putting an awful lot of money of his or her own into a shoot, then the pressure is there to make sure that they get a return from it.*" (GK9)

Interestingly, participants from commercial or corporate shoots emphasised higher economic pressures than participants employed on private shoots (smaller shoots by invitation only). It could be suggested that this may be linked to the increasing demand for commercial/corporate shoots to produce higher gamebird numbers due to the accumulating intensification of the industry (Robertson, Mill, Rushton, McKenzie, Sage, & Aebischer, 2017; Wightman & Tingay, 2015). For example:

"*...commercially speaking, there's a lot of pressure from the guns to have a good day because they're paying good money for it."* (GK1)

"...well the shoots that I have been on are...farmer owned and it's invite-only, there is no paying guests, there is no top end pressure like on big shoots." (GK8)

"*I preferred the private sort of sector because you weren't under those sorts of pressures.*" (GK3)

In the study, 5 out of 9 participants stated that gamekeepers can experience employment-related pressure to illegally control raptor species. This is supported in wider literature with Nurse (2011) arguing that some offenders can commit wildlife offences as a direct result of economic or employment pressures. These pressures, alongside the personal consequences (loss of job and property) should they fail, provide strong motivations to commit such offences (Merton, 1968). Several participants were aware of estates that pressured keepers, whilst others spoke of historical industry standards:

"*Some estates I know do pressure keepers a lot...*" (GK1)

"I do know an awful lot of gamekeepers who are put under that sort of pressure." (GK3)

"*In the '60s, '70s, '80s and early '90s it was absolutely industry standard. If it flies, it dies. If it's not a grouse, shoot it. It was that clear cut.*" (GK9)

GK9's response suggested that attitudes towards the illegal killing of raptors differed significantly in the 20th century when compared to the present day. Interestingly, Newton (1979) also argued that legislation was largely ignored in the late 20th century, despite full legal protection, particularly by hunting communities. In addition, effective law enforcement during this period was difficult on private land (Newton, 1979). More recently, there has been an increase in public and political support regarding the protection of raptor species leading to the modern conservation movement in the 21st century (Pohja-Myrkä, Vuorisalo, & Mykrä,

2011). This has arguably led to the emergence of regulatory bodies (e.g. National Wildlife Crime Unit) to assist in the prevention and detection of wildlife crime.

Within the interviews, participants also stated that employment-related pressure can often be inferred rather than direct. For example:

> "*He might not say go out and kill the bloody buzzards, but the gamekeeper might think, oh I'm crap, I've got to go out and kill the bloody buzzards*." (GK3)

> "...*gamekeepers know it's breaking the law. No one's ever going to send a text message saying it. But there is...a huge amount of insinuation or a huge amount of pressure and I'm guessing if you went 'no', it can be very, 'right I found five pheasant carcasses, they've all obviously been predated by buzzards. Boys, we need to sort this out'...that's the attitude of it*." (GK9)

The significance of economic and employment-related pressure can perhaps be related to, in some cases, the increasing demand for gamekeepers to supply higher gamebird numbers. This increase may be associated with the industrialisation and commoditisation of the shooting industry. Some commentators report that recreational shooting has transitioned from a quaint country sport into a multi-million-pound industry (Starkey, 2019). Participants within this study also emphasised the relationship between economic pressure and the intensification of the shooting industry overtime. GK2, in particular, explained how the industry had changed dramatically from 1953 when he was first employed compared to the present day:

> *"...it's the "numbers game", which I'm not a great believer in. I think a day out is a social day out and I'm afraid business is creeping into it..."* (GK2)

> …*"it's supply and demand, I mean there's so much demand now for shooting...a few years back, you know, they were probably happy to shoot 200 and now that same 10 guns want to shoot 400."* (GK3)

> *"...there are lots of things that happen in shooting that really piss me off because it has changed so much from when I started. You know, the commerciality of it, is offensive in some ways, to me."* (GK7)

Robertson et al. (2017) identified a general pattern of increased release numbers of pheasants in the past 50 years with approximately nine times as many pheasants released in 2011 compared to when monitoring began in 1961. There is currently no legal requirement to record the percentage of birds being reared or shot, however, estimates put return ratios between 35-40% of the total amount of birds released (Roberston et al., 2017). Wightman and Tingay (2015) noted that the management of grouse moorlands has also intensified significantly in recent years with increased levels of intervention on the population of red grouse. The Game and Wildlife Conservation Trust (2015) found a 90% increase in post breeding red grouse densities from 171 per km2 (1990-1994) to 325 per km2 (2010-2014) in England. In addition, a 74% increase was found in Scotland over the same period from 81 to 141 per km2. Interestingly, GK9, who had 27 years of working as a gamekeeper, identified a potential solution to the increasing intensification of the shooting industry:

> *"if you...make them pay for an experience, it doesn't matter if you've got a few hen harriers or buzzards [predating gamebirds] ...because we're not here to shoot a hundred pheasants, a hundred grouse. We're here to have an amazing day in the countryside. And that I think is the only real solution to it because it then removes the pressure from gamekeepers to take risks and puts the pressure back on them to just be damn good at their jobs."* (GK9)

Participants provided different responses regarding who places employment-related pressure on gamekeepers to commit raptor persecution. However, GK1, speaking with four years experience as a gamekeeper, stated that economic pressure can come from a higher management position (head-keeper) rather than the contractual employer:

> *"Some estates I know do pressure keepers a lot...I don't think it's ever really the boss. It's more like the head-keeper pressuring the under-keeper, sort of thing, 'cause he's going to get it in the neck."* (GK1)

The evidence presented in this study is a useful addition to knowledge, highlighting that employment-related pressure is not only enforced by the direct, contractual employer. Furthermore, participants also emphasised that economic pressure can be in the form of a chain of command:

> *"I mean the first thing is from the employer or the agent of the employer and then from some head keepers, basically. The agents are quite ruthless and if the head keepers don't do what they require of them then they are gone."* (GK7)

> *"...ultimately, you know, it...has to start with the landowner...your landowner's going to speak to your head-keeper who is then going to speak to the beat-keepers who are then going to speak to the under-keepers."* (GK9)

These responses inferred a pyramid of seniority (see Figure 2). GK9's response suggested that the landowner has a level of accountability and personal responsibility to ensure that his employees are working within the law. In legal terms, Scotland recognises the accountability of the landowner, shooting business or manager under section 24 of the Wildlife and Natural Environment (Scotland) Act 2011. This group can be held criminally liable for the actions of their employee(s) under the law of vicarious liability. Indeed, the findings from the current study may suggest that policy in England and Wales should follow this model and introduce vicarious liability.

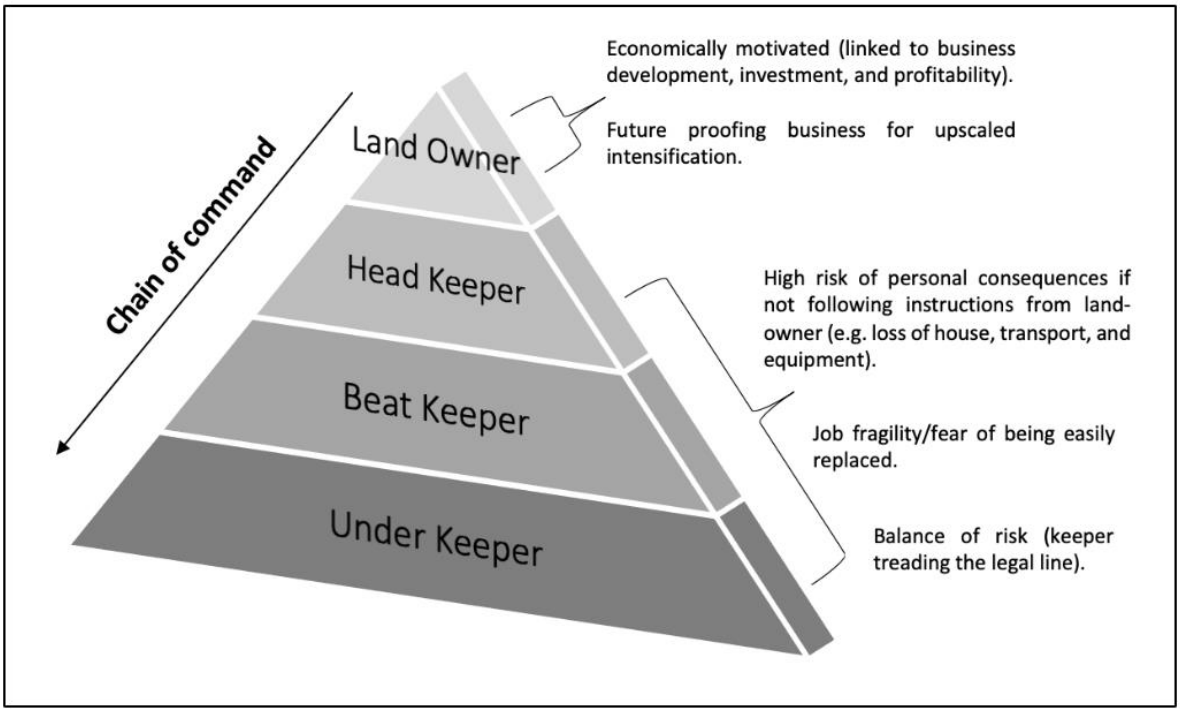

Figure 2. Pyramid of seniority, based upon participant responses.

The above pyramid of seniority also displays the participant's personal experience of employment-related pressure to commit raptor persecution. For example, 2 participants stated that this direct pressure to illegally control raptors came from their landlord/boss:

> *"He [The landlord] mentioned it. He did it in a roundabout way, they need shooting, you know, but I wasn't having any of that...I wouldn't be put under pressure like that."* (GK6)

> *"I've worked on an estate before where the boss has come up to me and said, 'I've just [gone] for a walk down such and such, a glen, and I saw two pairs of peregrines. I'm going for a walk again there next week and I'd rather not see them again'. And that's it, word for word... 'I'd rather not see them again'. Which is just out and out, go and shoot them."* (GK9)

Wider literature has shown that gamekeepers can be encouraged to illegally kill protected raptors to secure healthy game bird populations for shooting enterprises (Nurse, 2011, 2013; Wyatt, 2013). The offending activity of wildlife offenders is often the target of the Criminal Justice System, which adopts an individualised approach to much wildlife crime; crucially however, there has been little effort from the Criminal Justice System to address the inequality of power relations that cause wildlife offenders to commit offences (Nurse, 2011).

Despite the apparent prevalence of employment-related pressure on gamekeepers to commit raptor persecution, no study to date, has discussed the significance of this issue. Studies mentioning employer-pressure have almost entirely focused on producing typologies for wildlife crime offenders more generally (e.g. Nurse, 2011) or the motivations for poaching (e.g.

von Essen et al., 2014). Therefore, this study is a useful and enlightening addition to knowledge.

It is, however, important to note that some participants believed that employment-related pressure in the industry is minimal, that regional differences exist, or that they had not personally experienced this type of pressure. For example:

> "*...in my first job, controlling anything illegal, that was not allowed. Like, my boss said that to me when I joined because the owner of the estate was quite a well-known individual, and in his industry, if he was found out to be doing that sort of stuff, that would have damaged his business as well as his personal life*." (GK1)

> *"...previous to me going to [redacted] there had been a court case where someone, one of the keepers had killed a [raptor species redacted]...so when I went to [location redacted] then there was absolutely no pressure to do anything illegal basically."* (GK7)

> *"...I think you'd be very hard pushed to find a gamekeeper that would resort to doing something illegal."* (GK8)

GK1's response indicated that the reputational values of the estate owner can, in some cases, be the main driver for ensuring no illegal activity occurred on the estate. Whilst GK8's response highlighted the principled and lawful character of many workers within the game industry. Conversely, GK7's response inferred that legal action perhaps did inhibit such practice.

In addition to economic pressure, participants reported experiencing lifestyle pressure whilst employed as a gamekeeper. Whilst job salary remains low in the region of *circa* £21,100 for a single-handed keeper (Savills, 2018), there are a number of lifestyle benefits afforded with the role mentioned by participants:

> "*...you can receive an accommodation package with your role as being gamekeeper, and you will also get a vehicle...that's a...perk of the job*..." (GK4)

> *"I started out in a mobile home but very quickly got moved into like a real nice three-bedroomed house by myself...and I had a Land Rover truck."* (GK1)

> "*...you are cushioned really. It is only when you leave the profession that you realise how lucky you have been*." (GK7)

The Savills Shoot Benchmarking Survey (2018) reported that, for 90% of single-handed keepers, housing was included as part of their job package. These lifestyle pressures and the burden to ensure the continuity of lifestyle is therefore heightened by the benefits that gamekeepers are provided with in their job description. Dismissal from the gamekeeping role would mean relinquishing such benefits. The following lifestyle pressures were stressed by GK3, who had a range of experience through working on 6 different estates:

> "...*the main pressure is the fact that you are beholden to [a] house, you know, company vehicles*..." (GK3)

GK9, who has a wife and three children, emphasised that:

> *"My sole income is this job...Without this house and this job, I'm a bloke with a wife and three kids whose skill sets [are] around essentially countryside management and being quite good at shooting things. I can't just go and get another job. I've just got a homeless family…So am I going to take a risk and try and keep my job? Absolutely of course I am. And that's what people need to try and understand when they go through this."* (GK9)

These lifestyle pressures could mean that gamekeepers may be more likely to take economically motivated risks, treading a thin legal line. Lifestyle pressure was also discussed in the form of job fragility or the fear of being easily replaced:

> *"...gamekeepers are very often treated as completely expendable tools..."* (GK9)

> *"No one's going to say, that drive went badly 'cause the boss didn't buy enough food for the pheasants. They're going to say, that drive went badly 'cause your gamekeeper's crap, get a new one."* (GK9)

Ultimately, the fear of such economic and personal lifestyle consequences for a gamekeeper if they are found to have illegally killed a raptor should provide strong motivations not to commit such crimes. This was highlighted by participants:

> *"...if you commit all these crimes, you're going to lose your guns instantly. You lose your guns; you lose your job. You lose your job; you lose your house. You lose your house, you lose your truck, your wage, everything."* (GK1)

> "...*if you are going to be a gamekeeper and you are going to make it a career for life and you enjoy it, why jeopardise it? Because you will lose everything, you know, it's not just a case of, oh I've lost that job, it's a case of...I've lost my house, I've lost my farm's ticket, you know...it's just too risky."* (GK3)

Nevertheless, it is suggested that most raptor persecution incidents go undetected, with many occurring in remote locations, where evidence is likely to be concealed or destroyed (Amar et al., 2012; Elston, Spezia, Baines, & Redpath, 2014). Therefore, perpetrators may consider the possibility of personal consequences as minimal, due to the low probability detection rate. This highlights the need for more effective monitoring, and the implementation of preventative measures to reduce raptor persecution.

Interestingly, within the study presented here, the introduction of vicarious liability in England and Wales as a legal preventative measure was mentioned by participants. Culpability for landowners, shooting businesses or managers for the actions of their employee(s) has recently been implemented in Scotland through the introduction of vicarious liability. Nurse (2011) argued that any policy approach must involve penalties for the employer whilst also creating the risk of unemployment as a direct result of committing wildlife crime. The legal advances adopted in Scotland are yet to be implemented in England and Wales.

Given the evidence-base presented in the current study, it seems pertinent that a practical way of dealing with individuals who commit raptor persecution could be the threat of unemployment in field sport industries, whilst also issuing appropriate penalties to the employer. In this regard, one participant mentioned an advantage of adopting vicarious liability in England and Wales:

> "*...it's certainly a way of making people above the gamekeeper think of the consequences.*" (GK7)

However, this participant also expressed reservations about the effectiveness of vicarious liability:

> "*If you are just going to punish or try and punish the landowner then, you know, people are devious enough to come up with other ways of doing what they have got to do...you have got to give people the opportunity to work within the law."* (GK7)

A recent commissioned report from Sansom et al. (2016) found "no evidence" that raptor persecution had reduced in Northern Scotland. Whilst this report did not specifically mention the impact of vicarious liability, given their concurrent timings, this would suggest there has been little or no change in culture or behaviour following the introduction of this offence in 2012. Perhaps even more compelling, there have only been two successful prosecutions since vicarious liability was implemented as part of raptor crime cases in Scotland (see BBC, 2014, 2015; RSPB, 2019).

Policy Implications

The research presented in this paper has discussed a complex problem, whereby multiple sources of pressure, including land ownership, converge and centre on the intensification of the shooting industry. In particular, economic pressure through the chain of command appears as a key theme; beginning with the landowner and ending with the under-keeper. Similarly, lifestyle pressure was clearly evident due to the benefits afforded with the job role. Participants emphasised this pressure in relation job fragility and the fear of being easily replaced. Although economic and lifestyle pressures are typically viewed in isolation, within this paradigm, they are inextricably linked. There is the economic pressure to ensure high gamebird numbers, however, if they fail to supply and do not make the desired profit for the employer, they can be treated as expendable and consequently will lose their job alongside their employment benefits. This relationship is best summarised in Figure 3.

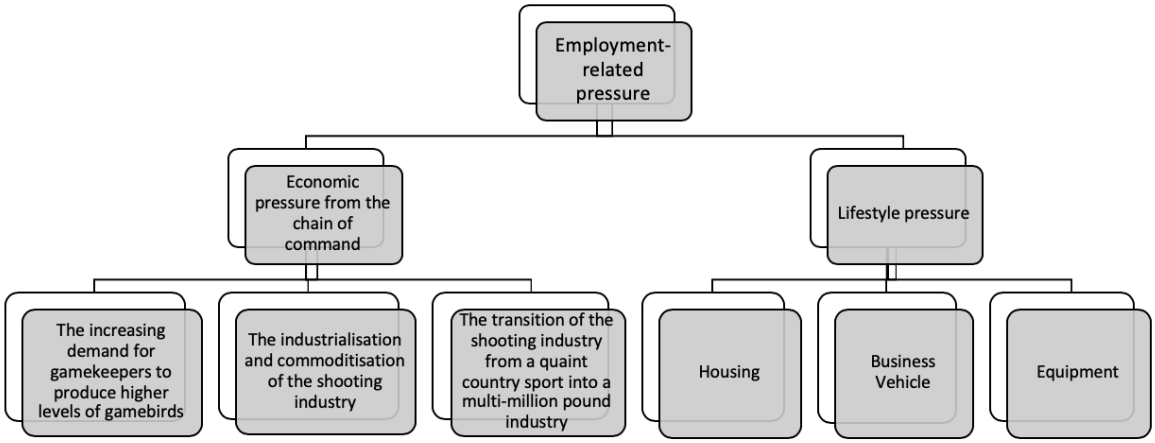

Figure 3. Key themes and findings associated with employment-related pressure on gamekeepers to commit raptor persecution.

The findings from this study suggest that policy in England and Wales should follow Scotland's legal model towards wildlife crime and introduce vicarious liability. Although, as stated earlier, there have been few convictions under this new law in Scotland (BBC, 2014, 2015; RSPB, 2019) it still appears as an important starting point for ensuring accountability rests with the landowner, shooting business, or manager for the actions of their employee(s). Doubts have, indeed, been raised regarding its effectiveness, and current reports show negligible impact on raptor persecution numbers (Sansom et al., 2016). Yet, as highlighted by Nurse (2011), it seems pertinent that any policy approach for wildlife crime should include penalties for the employer; and also creating the risk of unemployment in field sports industries (Nurse, 2011). On this basis, the study presented here recommends that relevant regulatory bodies should seek to gather a more complete and representative evidence base, including the experiences of stakeholders, and develop a more holistic strategy towards raptor persecution in the UK.

Summary and Concluding Remarks

A central theme of this study was to begin to develop a deeper understanding of the prevalence of employment-related pressures on gamekeepers to commit raptor persecution offences. This is a research area which has received scant attention in the past, but this study may present a foundation for this important issue. Despite the small-scale, exploratory nature of this research, the study provides a timely, and detailed, analysis of the economic and lifestyle employment-related pressures that gamekeepers can face; exploring their links to raptor persecution offences. The new narrative presented in this study, from participants, revealed that both economic and lifestyle pressures do exist within the gamekeeping industry. Economic pressure was shown to be connected to the increasing intensification of the shooting industry; whilst lifestyle pressure was associated, and reinforced by, the occupational benefits related to the gamekeeper job role. Lifestyle pressure reflected job fragility and the fear of being easily replaced. However, somewhat significantly, the findings from this study have also established that economic and lifestyle pressures do not exist in isolation; they are inextricably linked. Lifestyle pressures may result in gamekeepers being more inclined to take economically motivated risks, in extreme cases overstepping the legal line. This study presents a body of evidence that indicates that gamekeepers can be subject to employment-

related pressure to commit raptor persecution offences. These new findings should be carefully considered within future research and practice.

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