



Understanding Backyard Poultry Keepers and their Attitudes to Biosecurity



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Understanding Backyard Poultry Keepers and their Attitudes to Biosecurity: Preliminary Report

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Executive Summary

This document reports on preliminary findings from face to face qualitative interviews with keepers of small to medium numbers of poultry (<500) in Aberdeenshire and Fife. The research was undertaken as part of the Scottish Government's Centre of Expertise on Animal Disease Outbreaks (<http://epicscotland.org>). The purpose of the study was to assess the awareness, knowledge and practices of biosecurity amongst small-scale keepers, and to evaluate preparedness for an avian influenza outbreak. Owing to the marked increase in the number of people keeping poultry in recent years, there was also an interest in discovering the motivations for keeping birds, the types of birds kept and the attitudes towards welfare and husbandry.

Interviews were undertaken during the summer and autumn of 2016 in Aberdeenshire and Fife (prior to an outbreak of H5N8 Avian Influence in December 2016). These regions were selected



because of the high proportion of Scotland's large-scale commercial poultry farms in these areas. Subsequent research will involve interviews with managers of the large commercial units, to similarly assess their biosecurity practices and preparedness for an Avian Influenza outbreak.

In total, 37 keepers were interviewed, in addition to five veterinarian 'key informants'. The research participants were selected to represent a wide range of poultry keeping approaches, ranging from a few backyard chickens, to larger mixed groups, as pictured below.

Free range poultry: Source, Alexander Main¹

Perceptions of disease risk: Disease risks were generally perceived as low, owing to the small numbers of birds. Fife respondents were more aware than Aberdeenshire participants, owing to the January 2016 outbreak of Avian Influenza in a commercial flock.

Access to information: Most study participants were active knowledge seekers. In general, there is a substantial amount of easily accessible information through books and magazines. However, Facebook and the internet are popular information sources, but information quality is variable. Veterinarians were typically considered too expensive or lacking in knowledge about individual bird health. There was limited availability of information suited to small-scale keepers from other official sources (e.g. government web-sites).

Reaching small-scale keepers in the event of an outbreak:

Keepers who had registered their flocks (i.e. those with more than 50 birds) expected to hear directly from the government if there was a need to respond to an outbreak. Un-registered flock keepers preferred to be reached by multiple methods, such as Facebook, veterinary web-sites and local news broadcasts. Study participants believed that shows and sales would automatically be cancelled if there was an outbreak, and that they would therefore also receive this information from relevant show organisers.

¹ Please note that the keepers agreed to the use of their photographs in the research. As the copyright for these photographs is retained by the original photographers, participants were given the option to be identified as the photographers in the report.

Poultry movements: Study participants indicated that movements of birds occur primarily when they are first acquired (e.g. from auctions, specialist breeders, battery hen charities) and subsequently when they are shown. Both regions have a number of annual shows, which occur as part of larger agricultural shows. Poultry ‘fanciers’ (who typically also breed birds) travel across Scotland to reach shows. Poultry carcasses may also be placed in council waste bins or left in forested areas.

Biosecurity Practices: Practices varied widely, but levels of biosecurity were generally fairly low. Few participants indicated that they would isolate new birds coming into the flock, despite in some cases having no knowledge of their origin. No respondents routinely used foot baths or protective clothing. As small-scale poultry are included in family lifestyles, there was a reluctance to undertake precautions which were time consuming, or in situations of perceived low risk.

Response to the 2016 Avian Influenza Prevention Zone: Although not an initial part of this study, following the most recent (December 2016) outbreak of AI in the UK, the authors followed two specific Facebook groups; ‘Poultry in Aberdeenshire’ and ‘Fife Poultry’ which provided useful insights into the responses of members of those groups. In general there was substantial confusion over the nature of the legislation (e.g. why it was initiated without warning, what measures were truly required, implications of non-compliance). The inconsistency of the message was also questioned, particularly why shows and sales were not cancelled.

Introduction

Small-scale poultry keeping is becoming more common across Scotland, but very little known about the practices of small-scale poultry keepers. The overall objective of this research is to improve our understanding of the biosecurity practices (including poultry movements) of poultry producers, and how these relate to perceptions of disease risk (particularly in response to potential Avian Influenza outbreaks). The research is being conducted in two parts. Part A, reported here, addresses small-scale (‘backyard’) poultry keepers. Part B will be conducted with medium to large-scale poultry producers and will be reported separately. Both parts of the research are being conducted in case studies of Aberdeenshire and Fife. These regions were selected because they are the locations of largest poultry flocks in Scotland. Small-scale poultry keeping occurs across Scotland.

The aims of the research were:

- To assess poultry producers/keeper’s perceptions of endemic and epidemic disease risk
- To assess the access to information and awareness of poultry regulations and disease control by poultry producers at a range of scales
- To describe the practices associated with biosecurity over the life course of the bird and flock (including movements of poultry), and how these are linked or associated with other practices (e.g. other welfare activities)
- To assess how these practices change (or not) in the event of a disease threat, and/or disease outbreak (e.g. Avian Influenza)
- To characterise the movements of poultry on holdings of multiple scales, as well as the people and vehicles which move between poultry holdings, and associated risks
- To identify key barriers to maintaining high levels of biosecurity
- To identify potential means of reaching unregistered poultry owners with biosecurity information in the event of an outbreak

The research is primarily comprised of interviews conducted from July to November 2016. During the research, a new opportunity for data collection arose. In response to a heightened risk of an

Avian Influenza outbreak, in December 2016 Scottish Government put in place an “Avian Influenza Prevention Zone” covering the whole of Scotland. This requires that where possible all poultry and captive birds must be kept indoors, or otherwise kept separate from wild birds. Researchers monitored regional poultry Facebook sites to assess the direct response of these keepers to the new restrictions.

Research Structure

Research participants were recruited using purposive, snowball sampling, starting with our existing contacts and by accessing poultry groups on Facebook. Participants were selected to represent a wide range of ages, flock and land holding sizes, and both genders. Research was conducted using standard qualitative interviewing techniques. Study participants were asked open ended questions from a semi-structured question guide and encouraged to describe their perspectives and experiences in depth.

In total face to face interviews were conducted with 37 poultry keepers and 5 veterinarians. In Aberdeenshire, 17 keepers and 3 veterinarians were interviewed. In Fife, 20 keepers and 2 veterinarians, 1 of who also had their own poultry, were interviewed. The participants ranged from 15 to over 70 years of age, and included 15 men and 21 women.

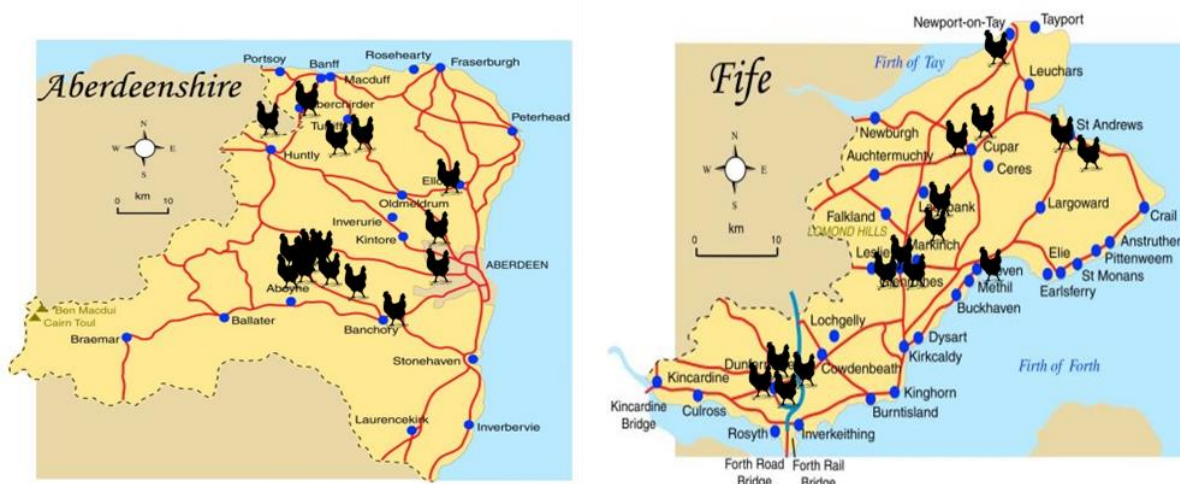


Figure 1 Location of participants in Aberdeenshire and Fife

The numbers of birds kept by individuals ranged from 3 chickens up to around 500 birds. A number of species were kept: chickens, ducks, geese, turkeys, guinea fowl, peafowl, pheasants and rhea². There was interest in a number of breeds including varieties of hybrid layers, rare breeds, traditional breeds and bantams with many people keeping a mix of species and breeds.

Participants were designated into one or more of the following categories

- 1 People with poultry but no other livestock
- 2 People with poultry as part of a smallholding (e.g. alongside horses, sheep, pigs.)
- 3 People who show birds
- 4 Urban/village poultry holders (people located within town or village limits)
- 5 Commercial farmers who also have a small number of poultry
- 6 Key informants (veterinarians)

² Rhea are large birds native to South America. Although they are smaller, they resemble and are related to the ostrich and emu. They have become popular as pets in recent years.

Table One: Types of Respondents

Participant Type	Aberdeenshire	Fife
Participants with poultry but no other livestock	6	9
Participants with poultry as part of a small holding	7	2
People who show birds	5	10
Urban/village poultry keepers	1	9
Commercial farmers who also have a small number of poultry	2	6
Veterinarians	3	2

Although the participants were selected to represent a wide range of experiences, rather than to be representative of poultry keepers in the study regions, some differences between the two regions were apparent. Urban or village poultry-keeping appears more common in Fife. This may have a basis in social history of the two areas—mining was a major industry in Fife and poultry, pigeon and rabbit keeping was historically popular amongst the miners.

Well when I was a boy most young boys had pigeons or canaries or...budgies or small livestock, [poultry] you know. And it was a lot easier to keep then as well; there weren't the restrictions there are today; plus, you know, I suppose people sorta had hobbies that were more localised than they were, you know, we had quite a few shows within the sort of region. I would say a five/six mile radius all the different shows at that time – you know, different villages and that. (R1)

As the respondent notes, proximity to local poultry shows also impacts on the prevalence of small-scale poultry keeping. In general, the most common approach to poultry was to keep a small number of poultry but no other livestock.

Research Findings

Holding Characteristics

In general, the number and variety of poultry reflected the location of the flock – urban flocks tended to be smaller in number, and limited to a single species (typically chickens). Rural properties tended to have larger and more varied flocks. Size of holdings ranged considerably from a couple of hutches housing bantams in a back yard to over 10 acres where poultry ranged freely. Commercial farmers who also had poultry have considerably larger acreages, but restricted their birds to coops or smaller fenced off areas. The standard of poultry housing among keepers varied considerably from fairly rough 'Heath Robinson' style shelters to beautifully built personalised chicken houses complete with curtains.



Poultry palace: Source, Anon.

Why keep poultry?

Participants identified a variety of reasons for keeping poultry. Some had always wanted birds but could not really say why; others had them as children and / or had parents who were interested. Some wanted a low maintenance pet that would supply eggs for the home ('pets with purpose')



Show bird: Source, Carol Kyle

while others felt they were doing a good deed by rescuing ex battery hens. Opportunity to show birds also had appeal. Everyone said they 'just enjoyed having the birds around'.

We've always wanted chickens to be honest, and we've never really had a place to keep them, and we thought 'Well, we've got the place... space now, so why not?' And [their son] was desperate to get them for his eggs, 'cause he likes to sell them to the neighbours and make a little pocket money (R7)

We also interviewed a number of people that were interested in exhibiting poultry (termed 'Fanciers') who spend many years and considerable amounts of money developing breed traits in particular bloodlines.

Poultry Movements: Sources and Shows

Poultry movements occur primarily when birds are original sourced or shown, but also after death. There are also variable numbers of movements between flocks of the flock keepers and their families, and it is not unusual for poultry to range freely in the yard, where they may come in contact with wild birds or vehicles which can transfer faeces.

Poultry are acquired from a number of sources. Many people particularly enjoy keeping pure bred, rare or traditional breeds. These can be purchased live direct from poultry sales or from specialist breeders, or "fanciers", who are happy to sell their less than perfect birds.



Among those keepers interested in keeping a small number of birds (2-10), hybrid layers are popular. There are many varieties available in a range of colours which can often be purchased as a total package including a hen-house, run, equipment and food. Most of these sellers offer an excellent backup service to their clients.

Ex battery hens that have reached the end of their commercial life are typically collected by charities which then re-home them throughout the country to non-commercial keepers. Many rescuers take great care of their 'ex batts', for example, ensuring they are warm enough as they adapt to their new life in the open air.

Ex-battery hen in hand knitted coat: Source Anon.

Participants also reported purchasing hatching eggs from other breeders and /or from internet sites such as e-bay, or via specialist magazines in order to expand bloodlines and to introduce disease free birds to their flocks.

There is a lot of movement around the UK in the small scale poultry sector. Many participants travel to shows regularly throughout the year often sharing transport to save costs and travel with large numbers of birds. Fanciers regularly exhibit 20 or so birds at a time, particularly if they are travelling long distances to an event. There are 3 annual sales in Aberdeenshire (two in the spring and one in the autumn) and others throughout Scotland where hundreds of birds change hands over the course of a day. There are also a number of showing events at local agricultural shows. These include Turriff, Keith and New Deer Shows in Aberdeenshire, and West Fife and Central Fife Shows in Fife. Other Scottish shows include Caithness, Ayr, Royal Highland, Stirling, Sutherland, Border Union (Kelso) and the Black Isle. Local shows, agricultural shows and national shows held across the UK are

all well supported, often by the same participants. In addition participants buy and sell live birds throughout the year either travelling to pick them up or have them delivered by specialist carriers.

In the event of an outbreak

All participants said that they would limit the movement of poultry in and out of their flock and minimise access to visitors. The fanciers indicated their belief that shows and sales would be cancelled if there was an outbreak nearby, and said that they would not sell or buy birds during that time.

Disposal of dead birds

In rural areas the most common response to carcass management was to leave the carcass in the woods / field for the wildlife to clear up. Participants in towns were more inclined to put the bird in a bag or sack and dispose of it in the dustbin or bury it in the garden e.g. *"I bury them under my apple trees"* (R6). One respondent reporting letting the carcasses rot, in order to produce maggots for the other birds to eat.

Information and Welfare

The participants in the study were typically active information seekers. There are a number of magazines and books that provide information as well as poultry clubs and active Facebook communities that share expertise and give support and friendship to keepers of all levels. There was also awareness that this information is not necessarily accurate, and several participants described the circulation of erroneous information, particularly on Facebook. Study participants identified a lack of information targeted towards non-commercial poultry keepers. Regulations and guidelines available on government web-sites, for example, are clearly aimed at commercial flock managers.

Most interviewees indicated that they had developed skills in detecting disease amongst their flocks. They believe they would recognise a sick bird but there was consensus that poultry can look surprisingly healthy right up to the point of death. Chickens in particular were believed to 'hide' their illnesses, an instinctive response prevent predation. Interventions were thus often too late.

Veterinary expertise

Direct engagement with veterinarians was not common amongst study participants. This reflected both the high cost of veterinarian services (in relation to the monetary value of individual birds), and the perception that veterinarians knew little about individual bird health. Veterinary intervention into commercial flocks occurs at flock rather than individual bird level. Two of the three veterinarians we interviewed agreed with this perspective (the third was an avian specialist):

But, we've got a real problem, which is that vets know nothing about chickens. They know about sheds full of chickens: they can tell you that the air is supposed to move at about one metre per second ... And they can tell you about daylight and they can tell you about seventy-two days from birth to death of broilers and they could... you know, stuff like that... 'Cause you have to learn it to get through animal husbandry. But if you give them a chicken, they freak out (V1)

However, there were several participants who regularly engaged with their local vet and were willing to pay expend time and money to treat the birds and facilitate recovery.



[The vet] said she was pretty sure [the leg] was broken in two places and she didn't give her much hope, but I said 'Well if there is a chance, you know, if you wouldn't mind trying to fix her'. So she very kindly took her off and put a half plaster cast on her leg... And...it was the first time she'd ever dealt with the broken leg of a chicken and...Yeah, her legs were through two holes and the kind of old pillowcase that we had her suspended in. And she was absolutely amazing – she was a great patient. Yeah we set her up in front of the video from time to time if we were going out and she was gonna be on her own; so she would just sit and watch a video' (R5)

Hen with broken leg; Source, Ann Taylor

Many people would not dream of taking a bird to the vet- in the event of serious illness, they indicated they would dispatch the bird to prevent disease transmission. Perhaps surprisingly that included some of the exhibition breeders and pet owners who felt that the cost of the treatment outweighed the value of the bird.

'I've kept them all my days, you know; I'll have come in contact with a lot of diseases and things and I've never administered any medicines to any of my birds; I worm them once a year, that's all... And I treat I treat for coccidiosis, and any other sign of illness I just kill, you know'(R1)

Others said they could not bear to dispatch their birds themselves and either used the vet or a knowledgeable friend to do it for them.

Some participants said that although they liked the idea of breeding their own poultry they either didn't breed or restricted breeding because they couldn't bear the idea of having to kill surplus cockerels for which there is a very limited market.

No [we don't kill them] and we don't want anybody else to kill them and that's another reason why we tend to hold onto them ... And that's another reason why it limits us to the amount of breeding that we actually like produce...(R2)

Hearing about outbreaks:

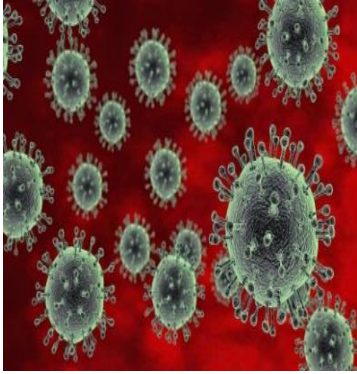
Few participants were registered for the APHA (Animal and Plant Health Agency) text alerts. Most indicated that they would be most likely to hear about an outbreak via the national news, via Facebook groups or by word of mouth. When asked about the best way to reach small-scale poultry keepers in the event of an outbreak, participants identified Facebook, local news and veterinary web-sites. Most participants thought that using Facebook was a good way to share information but agreed that it should not be the only way, and all available methods should be used on more multiple occasions.

Disease, Biosecurity and Welfare

Disease Risk

In order to gain an insight into participant's attitudes to disease, biosecurity and welfare we asked them about their knowledge of poultry diseases and their management practices, particularly Avian Influenza (AI).

In general, poultry keepers in Fife were much more aware of AI than those in Aberdeen, most likely because of the outbreak on a commercial farm in Fife in January 2016. Owing to the emotional connection respondents have to their birds, many of them indicated that they would be 'devastated' if their flock had to be culled.



AI Virus: Source Anon.

However, although participants were aware of the risks from airborne vectors and migrating birds, most participants thought that disease incursion was out with their control due to the number of birds they had, their lack of indoor facilities, financial limitations or because they felt it would be cruel to keep them confined for a long periods. There was a variety of perceptions of what constituted 'reasonable' precautions against disease. Some thought they could reduce intrusion of small garden birds by netting their runs and by not feeding garden birds while others thought it would not be feasible to cover all eventualities.

I would hate to think that our flock was wiped out...Because obviously if it was something that came about then the entire flock would need to be...So yeah it does worry me big time ...If I had the money, I would roof it all – to be honest ... If it was to happen, I'd be devastated, devastated, because, as I say, the chickens are our pets. And...we can control it to a point... So we can only do the best we can do, in terms of making sure that we limit how much food they're [garden birds]getting, if any...and take it from there. I mean the birds are in the garden! So... And it'd be the same like on the farm or anywhere else where they were free-ranging: you cannot stop wild birds coming in! So, there's always going to be that uncertainty looming over (R2)

Yeah well they live outside – you know, they're always going to... So yeah it is potentially a problem even if we're not moving birds around. But there's nothing you can do about it, you know – it's one of these things that's gonna happen or it's not. But you can just do what you can...to prevent it (R3)



Free range hens: Source, Anne Taylor.

A few participants spoke of introducing disinfectant footbaths and wearing specific clothing when dealing with their birds, but this was unusual.

Biosecurity practices

Although all participants indicated that they regularly cleaned their poultry houses of dirty bedding and faecal waste, very few stated that they disinfected their facilities. With regard to welfare most people said they wormed their poultry at least twice a year and treated as required for red mite and lice. Few participants said that they routinely isolated new birds before introducing them to their flock. Those that did were mainly the fanciers or participants obtaining breeding stock. Most felt that if they were buying from known sources isolating new birds was unnecessary. Participant buys from unknown sources (e.g. at public sales), stated that they assumed that if a bird looked well it would be alright.

Feeding

Almost everyone admitted to feeding vegetable table scraps in some form to their birds though all were quick to say that meat scraps were not offered. Some participants bought vegetables specifically while others cooked potato peelings and offered leftovers;

'Oh treats can be anything. For the chickens they love pasta, veggies, corn, raisins, berries – oh you name it they'll eat it! The only thing we really don't feed them treat-wise is meat' (R3)

In general participants went to great lengths to supply a varied diet including one person who cooked and pureed vegetables to make them easier to eat.



Hens enjoying a tasty treat: Source, Anne Taylor

Notes from Facebook (FB) groups

Facebook poultry groups provide useful insight into the thoughts and actions of their members. Although not an initial part of this study, following the most recent (December 2016) outbreak of AI in the UK it seemed relevant to highlight some of the conversations and issues raised following the outbreak via these groups. The authors followed two specific Facebook groups; 'Poultry in Aberdeenshire' and 'Fife Poultry' which provided an interesting insight into the general mood of members of those groups.



Poultry in Aberdeenshire Facebook page

As Aberdeenshire and Fife were our two study areas these were the groups that were highlighted. It is interesting to note that there were very few threads regarding the outbreak on the Fife page. Apart from the initial announcement and some initial discussion similar to that on the Aberdeenshire page the Fife group has been very quiet.

Dissemination of information

When the restrictions were initially announced the group administrators were very quick to post the announcements along with the relevant links to the government sites and responded promptly to highlight updates.

Many people heard the news first via Facebook. Those with registered flocks were surprised not to have received immediate notification from DEFRA/ Scottish Government or their local authority;

[FB] is not a reasonable way to give out orders, if it was advice that would be ok. I am registered and have had no communication. If you are issuing orders and threats you don't need a haphazard approach. (FB)

Had I not had fb I wouldn't of known. I have the radio on all day never heard a mention; I don't buy papers and rarely see the news. The day it happened I watched the news 3 times and no mention. I'm registered and never had an email and I've got birds registered at 2 different vets and nothing from them either! So I do understand how some folk wouldn't know (FB)

Requirement for legislation

Initially there seemed to be lot of confusion and some indication of panic as people struggled to come to terms with the 'lockdown'. As time wore on however the mood appeared to change to one of concern for their bird's welfare and frustration at the duration of the 'lockdown' and at people who had obviously made no effort to contain their birds.

Initially people questioned the need for the restriction, its length, and the consistency of the requirements: why 30 days, why geese were excluded, why 'now' as birds had been migrating for weeks and why were there no restrictions in Northern Ireland or on movements and gatherings.

I was trying to work out the logic behind the policy of keeping poultry indoors for 30 days. I'm aware it's because of a specific strain of bird flu, but what is the ban attempting to do? The flu is being spread by wild birds migrating, so if a flu carrier comes here then it could spread to our wild birds, those catching it will probably die. Now for someone with around 1 to 50 birds this will if caught, mean their birds will die off, or need put down. Why is this a huge concern to Defra & Scottish Government? If your birds do get this flu then the likelihood of them spreading it further are minimal unless you sell them. Are they worried that this flu has the potential to migrate to humans? If so then the biggest threat is from migratory participants. The only method I see fit is a restriction on moving poultry. Can anyone enlighten me? (FB)



Bird in 'lockdown': Source, Anon.

...everyone is starting their 30 day thing at different times, and what happens after that? Logistically the whole thing is not a viable proposition, as everyone is doing different things at different times, so none of it ties in as a complete operational effort. And what happens after each individual 30 days is up and you let your birds out and then a one off migratory bird happens to come your way? (FB)

There was discussion of the legislation, in particular regarding the welfare of birds as not everyone had suitable facilities to house them indoors or to build or alter runs to the required welfare specifications. Air quality and cleanliness was a concern;

I feel it is cruelty mine are in their shed no run. Must be bored after free ranging all day. I worry about them every day. (FB)

I'm just glad the weather has been fairly good; their run is in such a mess (FB)



Poultry coping with confined conditions: Source, Alexander Main

Compliance with legislation

Some people went to great lengths to adhere to the restrictions, in many cases spending considerable amounts of money on timber and netting while others struggled to make the best of their facilities;

So far I've spent about £140 tarpaulins, debris netting, cable ties, staples. (FB)

I was £40 for netting, which is up and looking fine and dandy and complying with directive, however, let's hope it doesn't snow as there is no way it will carry the weight of snow, let's hope we don't have gale force 9 winds as my netting will end up catching fish in the North Sea. So at the moment, weather permitting, I'm ticking all the boxes. (FB)

I've 'locked down' mine three times and they are still getting out... how do you put a roof on a forest! Wings clipped to see if that will do the trick fingers crossed. (FB)

People also commented on the additional costs of feed and bedding;

Mines have went through a massive amount of feed! not to mention half my mums garden of kale and broccoli and ive bought out the shop of reduced veg daily! (FB)

Bedding is going to sky rocket too with them all in and I'll end up needing more woodchips before long too oh and I'd say mines have eaten a weeks' worth of layers in 2 days nearly! (FB)

There are however a number of people who have made very little or no attempt to abide by the legislation. Although they have not openly admitted it, some contacted the author via 'private message' to explain their actions.

I haven't locked up any of my chickens or ducks. As far as I'm concerned 30 days locked up in a shed with no daylight or much ventilation would be more detrimental to their health than the extremely unlikely chance of them catching avian flu.(FB)

So far i haven't enclosed mine and I'm loath to do so... I don't have the means or space to do it. I'm lucky that I'm miles from a main road.(FB)

Our run still not completely wild bird proof as when my husband had just recovered from the winter vomiting bug, he went to put the netting up on the heras fencing roof, he fell through, falling about 8 foot. Hurting his back and neck and then to make matters worse, the hammer fell on his head!!(FB)

[There was] a lack of warning. It suddenly appeared on FB. No timescale was given for us to achieve the steps necessary to adhere to the requirements. Were we meant to take a day off work immediately to do the work and make arrangements?? A timescale would stop the panic knowing that we had a certain amount of time implement the changes ... my major problem and concern is cost. Two weeks before Christmas is never going to be a great time but if you've got a large pen like mine then covering the roof wouldn't be cheap. (FB)

This lack of compliance has caused consternation, frustration and in some cases anger. People were concerned about losing their birds should a neighbour that has not taken precautions become infected. There was some bitterness regarding the time and money spent complying with regulations while others are 'getting away with it';

The only harm done could only be to their own hens, which will be culled if they catch it. Wild birds are going to get it from other wild birds, if it's in the area, not from hens.(FB)

-Not if their hens get it, I'm pretty sure a radius around that property would also be culled

Humans can catch this strain of flu. It would be almost certainly lethal to my son with health issues.(FB)

On my travels yesterday i noticed some chickens still out in large uncovered [run] Who is policing this lock down?(FB)

...as the govt like us to be registered to enable them to track us, should we not be able to claim compensation for additional costs incurred like extra feed having them locked in and extra housing for those who built additional homes for their birds etc?(FB)

As time has passed there are far fewer discussion threads regarding AI. Coming into February the emphasis is on breeding and selling surplus birds. There is also a noticeable increase in the number of advertisements for poultry housing, coops and pens.

Final comments on the threads indicated that some small-flock keepers have learned from the experience of the outbreak, and will be better prepared in future.

At least now tho we do all know this can happen and although not organised this time and having to make do for next time we will all be prepared and it won't be such an issue. I had planned on having fully enclosed roofed runs for all of mine purely so i can have a day or night away and not worry if someone else is putting them to bed but hadn't got round to doing them all. We will however make a bigger effort than planned in the spring to do a little bit more than we had planned and make sure if this happens again it's no fuss.(FB)

Some have talked about reducing the number of poultry they keep or giving up altogether while others have seen the restriction as an opportunity to improve their facilities and spend more 'quality time' with their birds.

Acknowledgements

We are very grateful to the poultry keepers and key informants for the time they spent with us to contribute to this research. We would also like to extend our thanks to those who helped to arrange interviews by generously sharing their personal networks.

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The views and recommendations expressed in this report are drawn from the participants interviewed and are not necessarily representative of wider poultry keepers or other professional opinion. Furthermore, this report does not represent Scottish Government policy.



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