The advice sheet is produced to compliment the National Farmers Union leaflet: ‘Bird Deterrents and Bird Scarers’. The advice relates to the protection of crops by auditory-gas-gun-bird-scarers (bird-scarers), otherwise known as propane gasguns; ‘bangers’ or ‘gasguns’.
Advice on Limiting the Impact on Your Neighbours when using Auditory Gas Guns

Bird Scarers

The advice sheet is produced to compliment the National Farmers Union leaflet: ‘Bird Deterrents and Bird Scarers’ (Extracts from the NFU Guidance are in red text)

The advice refers to the protection of crops by auditory-gas-gun-bird-scarers (bird-scarers), otherwise known as propane gas-guns, ‘bangers’ or ‘gas-guns’. The complementary advice has been produced to address problems found by the Public Protection Section of Rutland County Council who have investigated the complaints about bird-scarers and from the results of a questionnaire, completed by local residents.

We believe that by following the guidance contained in the NFU guidance more closely, it is hoped with your cooperation that we can reduce the disturbance to local residents from bird-scarers whilst ensuring crops and your livelihood are better protected.

Rutland County Council’s Role: Investigating Complaints of Potential Statutory Nuisance

Rutland County Council has a legal duty to investigate complaints of noise nuisance, including noise from bird-scarers, under the statutory nuisance provisions of the Environmental Protection Act 1990. If the noise from the bird-scarer is found to cause substantial interference with the use or enjoyment of a resident’s property the Council would serve an abatement notice on the farmer. Failure to comply with the abatement notice could result in a fine of up to £20,000 or 6 months in prison.

When an Environmental Health Officer gathers evidence of whether a nuisance is being caused they must consider the following:

- The loudness of the shots fired
- The nature of the noise (does it have elements likely to annoy people)
- The character of the area, so noise that would be acceptable on an industrial estate would not in a quiet country area
- The frequency of occurrence
- The duration of the noise (how long it goes on for)
- Does it occur in the early morning etc

How these considerations apply to bird-scarers

= Bird-scarers are extremely loud
= The impulsive noise is likely to disturb people
= Bird-scarers are used in very quiet rural locations and become the dominant noise source
= How many times they fire an hour
= Can be weeks or even months
= Can start from dawn to dusk

All of these factors are weighed up to assess whether substantial interference is being caused to residents. In relation to the use of bird-scarers there is a high risk that the inappropriate use could lead to a statutory nuisance occurring.
Your Guide to Using Bird-scarers: A Summary

Is this crop in 3 miles of residential property, school or hospital?  
No → No Need to Consider Further  
Yes → Does a auditory bird-scarer have to be used?  
No → No Need to Consider Further  
Yes → Can the use of the bird-scarer by justified: will it drive off and deter Wood Pigeons from feeding on your crops?  
No → Use alternative method or undertake shoots to link shots with danger. If not you have no defence and will be liable for any statutory nuisance caused.  
Yes → Have you undertaken mitigation to limit the impact on nearby residents?  

- Position bird-scarers and direct canon away from property. Ensure shots are not loud enough to cause nuisance at residential properties.  
- Actively reduce your Wood Pigeon population through the whole year.  
- Use effective solid barriers to shield properties (Hedges don’t work)  
- Ensure residents are only subject to a maximum of 4 events of shots in any hour from all the bird-scarers in the area liable to affect them. Have you liaised with adjoining farmers to reduce cumulative impact?  
- Do adjust dawn and dusk timings to ensure sleep to residents is not being disturbed.  
- Move bird-scarers around and use alternative techniques to give some respite.  
- Place bird-scarers as far apart as possible so their combined effect does not cause a nuisance taking into account the lie of the land.  
- Use variety of bird-scaring techniques both auditory and non-auditory to scare the birds.  

If you have not considered ALL these options the bird-scarer may give rise to complaint. If a statutory nuisance is determined and you have NOT complied with good practice, you will be unable to prove to a court that you have a defence of best practical means and you would be liable to a fine not exceeding £20,000.
Can the Use of a Bird-scarer be Justified?

Avoid causing a nuisance. When they are in use, the disturbance of scarers on nearby hospitals, homes or schools should be minimised. For example, place the scarers as far away as practicable, align them to point away from neighbours, and use baffles.

The guidance is clear about trying to avoid any disturbance to local residents and other sensitive neighbours. There must be a reason and clear justification for their use.

Use auditory scarers only when their use can be justified.

Bird-scarers must only be used to protect crops and be used only where there is a reasonable expectation of being effective. Although the use of bird-scarers has been standard practice, there is no legal right to use them and if the devices are failing to protect crops then their continued use cannot be justified.

During investigations of complaints in Rutland, officers did observe flocks of Wood Pigeons feeding close to bird-scarers. The birds were oblivious to the very close and very loud shots. Clearly the bird-scarer was ineffective and its use could not be justified.

Monitoring of the bird-scarers effectiveness must be undertaken and as the NFU guidance states: As soon as an auditory scarer loses effectiveness, replace it with another of a different type; otherwise it could signal a good feeding area.

In cases where the bird-scarer do not disturb feeding Wood Pigeons, it will be considered the reason for their use is unjustified and therefore, there is no defence of Best Practicable Means available to the farmer if a statutory nuisance is found. The farmer will then be liable for the statutory nuisance.

Where a statutory nuisance (from noise) has been established the Environmental Protection Act 1990 does provide businesses with a defence of best practicable means. In such cases, you as the farmer must demonstrate to a court that you have followed ALL practical steps, such as those contained in the National Farmers Union leaflet: 'Bird Deterrents and Bird Scarers' to establish a defence of best practical means. Therefore the business is not held liable for the nuisance because it has taken ‘best practical means’ to prevent it from it occurring.

Therefore, if you wish to continue protecting your crop by auditory bird-scarers, you need to carefully manage their use. If you do cause a statutory nuisance the use of the bird-scarer must be justified and you must be able to demonstrate you are complying with best practice at all times.
Why not co-ordinate the shoots in your area with a ‘Pigeon Day’ where adjoining landowners target the birds and do this on a regular basis. This would seriously disturb the large flocks of Woodpigeons found in Rutland in winter and increase protection over a wider area.

As a farmer you will have to routinely reinforce the link between danger and the sounds of shotguns by shooting Wood Pigeons. It is normal practice to use screens and hides with decoy Wood Pigeons to attract the flock and shoot birds that have settled. For the birds this concealment is particularly disturbing because no threat can be seen and the danger is associated with the sound of the shotgun only. This makes the birds extremely wary and sensitive to the noise of shotguns and ensures the effectiveness of bird-scarers.

Remember Wood Pigeons are a pest species that cause great economic damage and you can shoot them at anytime of the year and destroy their nests, eggs and young. Wood Pigeons are resident birds so actively reducing their population will protect your crops and livelihoods.

As with all pest species and vermin, active steps to reduce the population must be undertaken. In the UK, the Wood Pigeon population has doubled over the last 40 years due to feeding on winter crops such as oil-seed rape. More action to control their population is required.

There is much advice on Wood Pigeon shooting and techniques on the Internet such as BASC website or from local sites such this decoy plan from Warwickshire Pigeon www.warwickshirepigeon.co.uk

Pigeon shooting can hone your skills and can provide sport.

Increasing effectiveness

- **Reinforce the effects of the scarer by shooting, so that the noise is associated with real danger.**

Reinforce the link between the shots and danger

If the link between the sounds of a shotgun and mortal danger is broken any bird-scarer will be rendered ineffective. Wood Pigeons soon realise if there is no real danger associated with the shots from the bird scarer and will carry on feeding regardless of the loudness; the number of bird scarers, or the number of shots being fired! In such cases, bird-scarer will not protect the crops but you could cause a statutory nuisance and would be liable for it.

Therefore, monitoring the effectiveness of the bird scarers and taking ACTIVE steps to maintain this is essential if you still want to use this tool to protect your crops.

How to increase the effectiveness of your bird-scarer

As a farmer you will have to routinely reinforce the link between danger and the sounds of shotguns by shooting Wood Pigeons. It is normal practice to use screens and hides with decoy Wood Pigeons to attract the flock and shoot birds that have settled. For the birds this concealment is particularly disturbing because no threat can be seen and the danger is associated with the sound of the shotgun only. This makes the birds extremely wary and sensitive to the noise of shotguns and ensures the effectiveness of bird-scarers.

Remember Wood Pigeons are a pest species that cause great economic damage and you can shoot them at anytime of the year and destroy their nests, eggs and young. Wood Pigeons are resident birds so actively reducing their population will protect your crops and livelihoods.

As with all pest species and vermin, active steps to reduce the population must be undertaken. In the UK, the Wood Pigeon population has doubled over the last 40 years due to feeding on winter crops such as oil-seed rape. More action to control their population is required.

There is much advice on Wood Pigeon shooting and techniques on the Internet such as BASC website or from local sites such this decoy plan from Warwickshire Pigeon www.warwickshirepigeon.co.uk

Pigeon shooting can hone your skills and can provide sport.
How Loud are Bird-scarers Compared to Other Noise Sources:
Typical Noise Levels for Different Noise Sources

<table>
<thead>
<tr>
<th>Noise Source</th>
<th>Decibel Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standing 25m away from jet fighter at take off.</td>
<td>155 dB</td>
</tr>
<tr>
<td>Bird-scarer</td>
<td>Extremely loud</td>
</tr>
<tr>
<td>Heavy metal rock concert</td>
<td>110 dB</td>
</tr>
<tr>
<td>Pneumatic Drill at 3m</td>
<td>100 dB</td>
</tr>
<tr>
<td>Heavy motorway traffic</td>
<td>90 dB</td>
</tr>
<tr>
<td>Busy and noisy restaurant</td>
<td>80 dB</td>
</tr>
<tr>
<td>Watching TV with the family</td>
<td>70 dB</td>
</tr>
<tr>
<td>A library</td>
<td>50 dB</td>
</tr>
<tr>
<td>Normal noise levels for rural Rutland.</td>
<td>40 dB</td>
</tr>
</tbody>
</table>

Key:
Typical range sound pressure levels associated with each activity in decibels.

Damage to hearing occurs above this level.
**Bird-scarers are an extremely loud noise source and can be 100dB above the background level. So great care is needed about their use.**

Using a louder bird-scarer significantly increases the distance at which you seriously affect people and therefore liable to cause a nuisance.

In this example you can see how a powerful bird-scarer is likely to cause a noise nuisance to a resident 1 mile away. Sound levels reduce by approximately* 6dB for every doubling of distance as you move away from the noise source. The chart above shows the noise readings at different distances from the noise source of a loud bird-scarer (155dB at 5m) with no shielding and in contrast a quieter bird-scarer with shielding (100dB at 5m).

The loud bird-scarer (155dB at 5m) with no baffles would produce a noise level of 104dB outside at a house a mile away. This is a very loud noise level and almost certainly cause a nuisance.

If a quieter bird-scarer was used that gave a noise level of 110dB at 5m (instead of 155dB). If bales of straw were used that would reduce the noise by a further 10dB resulting in a noise level of 50dB outside the house. Therefore choosing a quieter setting or model and the using shielding, will significantly reduce the impact on your neighbours and reduce the likelihood of a statutory nuisance being caused.

* in free field conditions. In reality the situation is more complex and decay of sound is affected by reflection, absorption and wind for example.
When considering statutory nuisance, disruption to sleep is a very significant factor. Waking people is likely to show a statutory nuisance exists. Our survey showed the time the bird-scarers started in the morning was very annoying to local residents, especially when it woke them up. So set the timer appropriately, when people are getting up and not with the lark. Bird-scarers should never be used at night.

Remember if you are disturbing people’s normal sleep patterns then it is very likely a statutory nuisance is being caused.

Resetting the timer will help avoid complaints as dawn gets earlier. The day-length graph (pictured right) shows daylight hours through the year. We recommend 7:30am as being reasonable.

Try not to use auditory scarers on Sundays

Try and be sensitive to how local residents use their property. Use alternative techniques especially at weekends when people want to relax.

Length of Use of Bird-scarers Across the Year

Use scarers as infrequently as possible. Determine when the crop is most vulnerable and only use scarers then. Prolong the effectiveness of a scarer by varying the type and positioning of scarers.

When considering a statutory nuisance the length the bird-scarer is used for is critical. Do not use any longer than absolutely necessary.

The majority of people who complained experienced the noise for greater than 2 months. Some farmers used them from September to April, which over 7 months, more than half the year. Duration of the noise is an important factor when considering statutory nuisance and noise that affects people for any length of time and is repeated yearly would likely constitute a statutory nuisance.

It was clear from the complaints that many bird-scarers had been placed by crops and were used continuously for months at a time. By doing so the Wood Pigeons have become use to the bird-scarers. By moving and stopping using them, their effectiveness would increase and it would irritate neighbours less.
Use reflective or absorbent baffles (of say corrugated iron or straw bales) to concentrate the sound on to your field and away from neighbours wherever nuisance could be caused. These can be very effective in reducing noise levels in the required direction.

DAMP STRAW BALES ARE BEST THAT ARE PACKED TIGHTLY TOGETHER. None of the bird-scarers causing a complaint used straw-bale to reduce the impact.

HEDGES OR OPEN PALLETs PROVIDE NO SOUND BARRIER.

A badly located bird-scarer on the sides of a valley the sound carries across to residents over a mile away. The valley topography can focus the sound on nearby residents.

To overcome the problem a quieter bird scarer is placed in the valley and pointing away from houses. It is shielded with straw bales. So is directed away from houses, reducing potential nuisance and increasing crop protection.
Do not fire them more than four times in any hour (remember to consider situations where several guns protect a single field). Birds can take much more than 15 minutes to regroup. If the intervals are too short, the birds will quickly get used to the scarer. All the reports from a multiple discharge gun should count as one report if heard in 30 seconds.

Think about cumulative impact on the residents from all the bird-scarers in the area on local residents.

It is tempting as the effectiveness decreases to buy more bird-scarers but in fact this increase in shots without the danger to Wood Pigeons may actually accelerate the birds acclimatisation to the noise!

There is some confusion concerning the 4 shots per hour guidance given by the NFU. Some farmers believe this applies to each bird-scarer and ignore the cumulative impact of other bird-scarers in the area. One farmer actually bought more bird-scarers and put them in the same field so that the 4 times an hour could be overcome. Clearly in this case the bird-scarers had already become ineffective but it did cause a nuisance. As bird-scarers can affect residents up to many miles away, it important to appreciate the wide area of impact the noise from bird-scarers can have.

Liaise with neighbouring farmers to ensure that, between you, you do not cause a nuisance.

If you are unsure, visit the closest residential property(ies) and check the number of shots the resident(s) is(are) subject to and make sure its no more than 4 times per hour. If its more because of a neighbouring farmer(s), you must liaise with them and come to an agreement to reduce the overall number of shots.

Nature of the Noise

Impulsive noise such as loud shots are by their nature disturbing and likely to cause annoyance. Therefore, the trend to use extreme noisy events like explosions is likely to give rise to a statutory nuisance. This also applies to pyro-technics. The marketing of extreme noisy bird-scarers is probably to overcome the lack of fear Wood Pigeons have developed. This can only be overcome by shooting the birds. Extremely loud noises that could damage hearing or startle people and animals would also make you liable for civil damages.

Character of Area

When assessing statutory nuisance the character of the area must be assessed. Generally heavy industrial noise would be acceptable on an industrial estate but not in a residential area. Rutland has a very quiet rural environment and any very loud noise source such as a bird-scarer could become a dominant and very intrusive noise sources especially if the aforementioned factors are not carefully controlled by the farmer to reduce their impact. Therefore, although some shooting would be expected, the sound of bird-scarers cannot dominate the environment of Rutland to such an extent that residents enjoyment of their property is substantially interfered with.
Further Information and Contact Details

Get a copy of the NFU ‘Bird deterrents and bird scarers’.

By considering all the advice contained within the leaflet, in conjunction with advice in this leaflet you should be better able to protect your crops and avoid causing complaints to your neighbours.

Speak with other farmers and work together to reduce the impact Wood Pigeons are having.

*Ensure that your neighbours have the name of a responsible person to contact if the control on a scarer fails. Also display the name and telephone number at the nearest point of public access or inform the local Public Protection Section where the scarer is located and give them contact details of the person responsible*

National Farmers Union leaflet: ‘Bird Deterrents and Bird Scarers’

The Public Protection Section at Rutland County Council is staffed by Craig Howat and Andrew Woodhouse who combined have worked over 20 years in Rutland. Both officers have post-graduate qualifications in acoustics and are happy to provide advice and assist you in complying with good practice.

Our contact details are below:

**Andrew Woodhouse | Environmental Protection Officer**
Rutland County Council,
Catmose, Oakham, Rutland. LE15 6HP
mobile: 07900 138224
email: awoodhouse@rutland.gov.uk

**Mr C Howat BSc (Hons) MIAO | Senior Environmental Health Officer**
Rutland County Council,
Catmose, Oakham, Rutland LE15 6HP
Mobile: 07917-175406
Email: chowat@rutland.gov.uk