Birds: problems on livestock units

Livestock units often attract large numbers of wild birds due to the presence of feedstuffs, particularly concentrates that are available either in the form of spillage or directly from feeders and storage areas. The species involved are usually starlings, feral pigeons or collared doves.

Assessing the problem
Before taking action to resolve the problem, it is recommended that a risk assessment be undertaken that considers the damaging or other impacts on the enterprise.

Food losses
Concentrate feedstuffs are both expensive and attractive to birds such as starlings. Self-feed hoppers are a favourite target, particularly during the autumn/winter period when alternative food is short. Assessment of consumption by birds is difficult because of the direct competition between birds and livestock, but such losses could result in lower liveweight gains in stock that are being reared. Soiling of feed may also render it less palatable.

Contamination
An accumulation of droppings is inevitable whenever birds frequent buildings. The droppings contaminate equipment, such as gates and feed hoppers, and make the handling of such items an unpleasant business. In wet conditions, the presence of droppings on walkways can create slippery surfaces, posing a hazard both to livestock and farm staff. The contamination may compromise hygiene and food quality standards resulting in a failure to comply with farm assurance schemes and relevant legislation. Droppings may also act as a carrier for disease organisms. Concerns have been expressed regarding the possibility that bird presence and movement may contribute to the transmission of disease. Previous studies have shown that starlings move between animal units and if they are able to gain access to sources of infection and contamination, then the potential risks this may pose need to be considered.

Finding a solution
Population control
A natural response to such a problem is to seek to reduce bird numbers. However, experience has shown that attempts to reduce local populations are time consuming, labour intensive and often ineffective.

For example, the British starling population is boosted during the autumn/winter period by migrant birds from the Continent. The birds' mobility and incentive to locate food supplies during periods of shortage in other areas makes population control unrealistic.

Trial work on this approach revealed that starling numbers returned to the pre-treatment level within one week of taking control action. Shooting into flocks of birds not only fails to provide a solution, but also causes unnecessary suffering to birds that are injured during such operations.

All wild bird species are protected under the Wildlife and Countryside Act 1981, but the lethal control of feral pigeons and collared doves is permitted in certain circumstances through general licences issued by Natural England. These two species are listed on the general licences allowing authorised persons (eg owners or occupiers or persons authorised by the owner or occupier) to kill or take certain species for the purposes of:
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• preventing spread of disease and preventing serious damage to livestock, foodstuffs for livestock, crops, vegetables, fruit, growing timber, fisheries or inland waters (general licence WML Gen-L05); and
• preserving public health and safety (WML Gen-L07).

Starlings are only listed on the general licence allowing action to be taken for the purpose of preserving air safety (WML Gen-L06). They are a red list bird of high conservation concern and also a Biodiversity Action Plan species.

Lethal control is only permitted under a general licence if the person contemplating such action is satisfied that appropriate non-lethal methods of control are either ineffective or impracticable. Each general licence specifies a number of conditions that must be complied with. It is therefore essential that anyone considering taking action under a general licence reads the relevant licence before acting. Licences are available via Natural England’s Wildlife Management & Licensing Service website, and advice on their application is available from staff in the Wildlife Management & Licensing Service. The website address and contact details are given at the end of this leaflet.

Where a problem is caused by a species not listed on a general licence then an application may be made for an ‘individual’ licence. These licences are issued to a named individual to tackle a specific problem and are time-limited. Applications are assessed on a case by case basis. The Wildlife Management & Licensing Service can provide advice on how to apply for one of these licences.

Deterrents and scaring devices
Although such techniques have an important part to play in the protection of growing crops, their value in the context of animal units and food storage areas is limited.

Birds quickly become used to such devices and, when attracted by feedstuffs, any initial fears are soon overcome. Devices employing noise or relying on the effects of light may also have a detrimental effect on livestock and staff working on the site. Although recorded distress calls can be effective when used against starlings, most deterrents do not appear currently to offer a practical or lasting solution.

Prevention
Experience has shown that problems are most likely to be resolved by a combination of:

• good housekeeping and hygiene measures; and
• physical exclusion of birds from vulnerable buildings and feeders.

Good housekeeping considerations include avoiding the spillage of feedstuffs, keeping food trolleys and feed storage areas covered, fitting flaps and lids to feeders, or using one of the commercially available proofed feeders. These actions will all help to reduce the attractiveness of the site to birds. Outdoor units pose particular difficulties, but in addition to reducing bird access to feed, a variation in feeding times may be beneficial. Certain bird species, including the swallow and barn owl regularly breed inside farm buildings. Such species must be taken into account when deciding upon proofing measures that restrict their access to breeding sites.

With regard to physical exclusion, the prevention of bird contact with livestock and feed by the fitting of suitable proofing materials offers the best chance of finding a long-term solution.

Proofing measures
As a guide, netting and mesh materials should not exceed 19 mm for sparrows, 28 mm for starlings and 50 mm for pigeons (measurements refer to square mesh construction). Proofing may also provide additional benefits by reducing draughts and heat loss. However, where this is likely to affect ventilation and pose a possible health risk to livestock, specialist advice should be sought.

Where livestock can reach the proofing, the use of suitable wire mesh may be necessary instead of plastic or other vulnerable materials.

Material availability and application
Plastic strip curtains
Clear plastic strip curtains suspended from a top fixing can prove useful in areas where regular access by machinery and staff is required. They
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may also provide additional benefits by reducing draughts and heat loss. However, they are comparatively expensive compared with other methods and may become soiled and unpleasant to use in some situations. Curtains can be attached with small gaps between each strip, which will allow for airflow. Birds are usually reluctant to seek access even though they could pass through the gaps. Birds are also reluctant to pass through gaps caused by the curtain being blown in the wind.

Mesh framework
Where access is required then it may be feasible to construct a framework to allow entry. The framework can be attached so that it can be raised or moved as required.

When considering such an option it is important to bear in mind that the materials used should be strong, but light enough not to require heavy framing, which would make removal or raising a laborious and difficult task. One of the extruded plastic mesh materials is probably most suitable for this purpose.

Curtains or screens
There are several materials available which lend themselves to this approach. For example, relatively small mesh size wind break materials (usually having a 50% airflow reduction factor) have slots incorporated in their construction which will allow for wires or cords to be threaded through them, enabling the curtain to be raised or drawn aside. The addition of weights to the lower edge will help to keep the screen in place and reduce the effects of wind.

Although primarily designed for draught-proofing, commercially available screens may be suitable for bird exclusion, particularly where the lower halves of doorways are protected by gates and the upper sections are open allowing bird access. These systems work on the roller blind principle and can be easily raised or lowered.

Proofing of fixed openings
Factors to be born in mind when considering this option include cost, ease of application, life length and visual impact.

Apart from wire mesh, available netting falls into two main groups:

- knotted polythene nets;
- extruded polythene or polypropylene mesh.

Experience has shown that although knotted nets are extremely strong they can be difficult to attach, particularly if the area concerned is large. This is mainly due to the absence of any rigidity. However, they can be particularly useful in awkward situations, for example where uneven and offset apertures are involved.

Extruded mesh materials can be easier to install, are relatively lightweight, and have good strength and life expectancy characteristics. Being semi-rigid they can be attached to a framework with relative ease. The use of staples to fix the extruded mesh to battens and framework has been proven successful, as has the use of plastic ties to attach the mesh to stanchions, gates and girders, etc.

Heavy gauge plastic mesh materials have proved effective in proofing windows, ventilators and the open ridges of roof areas. They are rigid but retain some flexibility, which allows them to be cut slightly larger than the aperture to be proofed and then press fitted into the space. This avoids the need for battening or other fixtures, although larger areas may require additional support, which can be achieved by running a wire through the mesh.

Corrugated sheets
Corrugated materials pose particular difficulties in terms of bird exclusion. Generally the apertures concerned are large enough to allow the entry of smaller birds such as starlings. These areas can be dealt with by filling with a cement fillet or crushed wire mesh forced into the corrugations. Alternatively, a template can be made from plywood or similar that will follow the contours of the corrugations. Expanded foam may also be used to block small gaps or faults in building structures.

Long term planning
Wherever possible, consideration should be given to the incorporation of bird exclusion measures at the design stage and subsequent erection of new buildings. Inclusion at the planning phase will generally be easier and more likely to produce more effective results.
Further information
This leaflet was produced by Natural England's Wildlife Management & Licensing Service. For further advice please contact:

Wildlife Licensing Unit, Natural England, Burghill Road, Westbury-on-Trym, Bristol, BS10 6NJ
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Advisory leaflets (including *Birds and their control in non-agricultural environments* ref. TAN13), copies of the general licences, and licence application forms and guidance notes are available from the Wildlife Licensing Unit and the web site: www.naturalengland.org.uk/conservation/wildlife-management-licensing/default.htm

Natural England Technical Information Notes are available to download from the Natural England website: www.naturalengland.org.uk.

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