# **Control strategies** to keep your hatchery free from pests

# by David Cross, head of technical training, Rentokil Pest Control, UK.

arm, sheltered and full of food and water, a hatchery provides the perfect place for pests to multiply. Attracted to the environment, pests bring specific health risks to poultry. Rats, mice, flies and wild birds are all well known for their ability to spread diseases. In commercial premises, where a large number of birds are in close proximity, contagion can occur at incredible speed, threatening the hygiene and biosecurity of the hatchery. Placing preventative measures at the centre of any pest control strategy is therefore critical to its success.

# **Rodents and wild birds**

Rats, mice and wild birds threaten the health and security of poultry units in a number of ways. They are carriers of infections, including salmonella, fowl cholera and erysipelas and can contaminate food with droppings and urine. They can also gnaw through hatchery walls, damage utility infrastructure and will eat eggs and attack birds on occasion.

Besides infection, rodents and wild birds can bring parasites, such as Northern Fowl Mite into the poultry unit. These can cause substantial harm to birds, leading to distress and severe anaemia. Eggs produced from infected hens cannot be sold for human consumption, making the business impact of this type of infestation considerable.

The presence of these pests may further damage a hatchery business by compromising the quality standards required by auditors, particularly



since being pest free is a pre-requisite of any biosecurity system.

The best way to control the presence of rodents and wild birds in hatcheries and other livestock premises is to go back to basics.

The following provides a simple but effective guide to proofing your hatchery against these pests:

#### Early detection

Early detection can significantly reduce the impact of an infestation. Products such as Rentokil's non-toxic monitoring blocks can be used to detect early stage rodent infestation without introducing toxic substances into the hatchery.

Only when infestation is detected are toxic rodent baits or physical control methods such as lethal traps employed.

It is worth noting that the rules around the use of anti-coagulant rodenticides

are changing and advice on the latest restriction on use should be sought from a professional pest control organisation.

#### Safeguard stores

Properly sealing poultry food is essential in safeguarding against infestation.

Food containers should be metal or industrial plastic, and stored away from the main hatchery.

All stores should be cleaned regularly and feed spillage and other waste removed quickly to deny pests a readily available food source.

#### Cleanliness is key

Mice are attracted to areas with easily accessible food and harbourage (shelter), so clutter should be kept to a minimum.

Moving tools and bins away from walls prevents rubbish being forgotten behind them, and keeping drains clearly visible helps ensure they are regularly cleaned.

Keeping vegetation cut short also denies pests secure cover, discouraging them from approaching the building.

# Secure the building

Rat, mice and wild bird access can be reduced by ensuring all doors fit property and no gaps larger than 5mm exist below these when closed.

Pests can also be prevented from gaining access to wall cavities and ceiling voids by sealing holes in walls and around pipes and *Continued on page 27*  *Continued from page 25* electrical cables with sand and cement or silicone sealant.

# **Flies**

As we enter into spring, flies become an increasing problem in hatcheries particularly in free-range poultry laying systems, where manure can remain in the animal house for an extended period of time. Common and lesser housefly species are both problematic, as they lay their larvae in poultry faeces before dispersing through the buildings. The physical presence of these flies may lead to contamination issues resulting in poor quality eggs. Egg producers with persistent fly infestations may find their accreditation to food quality schemes suspended, or that customers such as supermarkets decide to terminate their commercial agreements.

To control the population of flies in your hatchery, you can take the following actions:

# Restrict larvae feeding

As flies often lay eggs in manure, cleaning the hatchery floor is an obvious but essential step to preventing infestation.

Additionally, adequate drainage will prevent standing water, which provides several different species of fly with a breeding environment.



Bait box inspection is an essential part of pest control management.

## Mechanical devices

The efficiency and durability of electrocution devices has improved over recent years, making them incredibly useful in the defence of the poultry house environment. Pheromone (muscamone) attractants are also popular where other insect control methods are undesirable. It is advisable though that these are placed both inside and outside of the facility to be effective.

## Chemical control

For poultry units where fly infestation is a severe problem, chemical control may be required. Chemicals can be applied as larvicides into manure heaps, via a spray, or as a bait formulation painted on walls where flies congregate. Care should be taken with all biocide applications to ensure the well being of the birds and people working in the unit. In some circumstances, it will be safer to use professional help with chemical applications. When managing a hatchery environment, the importance of continuous pest monitoring cannot be underestimated.

Catching the problem early is crucial, as the longer pests have to thrive, the more likely it is that a sizable infestation will occur. This in turn increases the risk of a significant breach in the biosecurity of unhatched eggs and the young flock.

The results of inspections and monitoring programmes should always be recorded and any trends in pest activity noted and discussed at management level. This will help ensure the efficiency of pest control programmes is monitored and that, if necessary, they are adapted to meet the critical needs of the hatchery. Whether you are dealing with a pest problem or are simply looking to prevent one, it is important that you know who to contact.

For any external contractor, part of their role is to be fully up-to-speed on the latest legislation changes in their area of expertise.

Pest controllers are no different, so if you are in any doubt as to what substances to use, then it is always best to check with the experts.