



ALEX WATTS & JAMES WILSON

HOW MONITORING BIRD BEHAVIOUR IS KEY TO REDUCING FLOOR AND SYSTEM EGGS

Margins for free-range egg producers are tight and being squeezed from both ends! Egg prices are falling but the cost of inputs remain high, so producers must achieve the best price for every egg they produce.

Birds must lay as many eggs as possible in their nest boxes so that they can be sold for Grade A prices, but it is not easy training birds that have free access to the whole of the house to lay their eggs in the right place.

Floor and system eggs

Chickens evolved from jungle fowl and are creatures of habit. Their instinct is to lay eggs in a safe, dark place. Once they find one, the habit forms and other birds follow their lead. If



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that space is a nest box, then all is well and the eggs can be sold as Grade A, but if the birds get into the habit of laying elsewhere, then it will become a problem unless quickly addressed.

Floor eggs laid on the ground, and system eggs laid on the slats of a tiered system, are considered soiled and must be washed before being sold. Washing destroys a membrane protecting the egg, reducing shelf life from up to four weeks to two or three. As a result, they must be classed Grade B and end up in the human food chain as liquid egg.

The cost of floor and system eggs

The difference in price between Grades A and B currently can be up to 80p per dozen, representing a loss in value of around 80% (ironically, all eggs produced in the USA are washed before sale and would be classed Grade B in the EU).

In addition, Grade B eggs are collected by hand, washed and stored separately, requiring more handling than Grade A, increasing the producer's staff input. A 10% floor eggs rate can represent the equivalent cost to the producer of paying for an additional full-time employee.

Not only is there a direct economic impact but the packer wants as many first-class eggs as possible and a high proportion of soiled eggs can jeopardize the producer-packer relationship.

However, the solution can be simple, good practice and knowing what is going on in the houses.

A case study – Norton Farm

With brother Chris and father David, Alex Watts, 26, runs Norton Farm near Worcester. The 75-acre farm has three 16,000-bird house, and 60 acres of range area. The houses are new three-tiered Big Dutchman 264 systems, with nest boxes on each tier.

Walking the sheds

Up to 10% of eggs laid by a new flock will be floor/system eggs but typically Alex reduces that figure to around 0.5% by peak production. He believes the keys to his success are simple: a good relationship with his pullet supplier and a regular presence in each house, especially as birds come in to lay.

When the current flock arrived in January 2019 Alex and his staff each patrolled a shed every 30 minutes, checking floors and system surfaces for birds and hand collecting eggs in baskets.

"We do not let birds sleep on the scratch area," said Alex. "For the first week or so we will be in the house before the lights go off making sure no hens go to sleep on the scratch area. This ensures the birds wake up on the system, near food and water, and near a nest box."

Once they come into lay, the key time for us to patrol is from around 8 to 10am. It takes 20 minutes per walk early on, but this drops to about 10 minutes, four to five times a day as the birds get used to it.

It sounds a lot, but the time you put in at the beginning pays off down the line - a few late nights and early mornings early on can save three hours a day later on."

Feeding times

Feeding times are important. Alex feeds his birds 15 minutes after they wake, to keep them near their nest boxes, but he is also careful not to distract them: "If the feeder is on during the peak laying period the noise can drag birds out of their nest box."

Light

Birds look for warm, dark areas of the house to lay in, so Alex ensures the lighting system in each shed removes any darker areas and incorporates rope lights to eliminate shadows.



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Conversely, nest boxes are kept reassuringly dark behind plastic curtain flaps and as draught free as possible. The nests are closed when the birds are housed and then progressively opened as they approach sexual maturity. The action of opening and closing the nest boxes encourages the pullets to investigate the nests.

When the flock is in full lay Alex also ensures the nest boxes are open well before the lights come on in the morning. "Chickens seem to tell when it's light outside," he said. "If they wake up and it's still dark in the shed, they will lay on the system wherever they perch."

Help from pullet supplier

The birds come from Humphrey Feeds and Pullets, and the company's regional poultry specialist James Wilson is a regular visitor to Norton Farm.

Alex added: "James has been with us from the start. It's all about attention to detail and he sees a lot more farms than we do. He has the data so we can see what works elsewhere and he's well placed to advise us if we have a problem."

James added: "We work at the problem from different ends, but we work together to reduce it. On our rearing farm we grew the pullets to 16 weeks on a similar system, with feed and water on different levels so they became used to moving up and down prior to arriving on the laying farm.

We know that when they first come into lay they don't know what to do so they drop eggs here, there and everywhere but if we've done a good job rearing them, then the floor egg problem isn't as tedious as it could be."

Conclusion

Coordination between pullet supplier and producer will encourage your birds to get off to a good start but the key to preventing a floor or system egg problem is good bird husbandry; walking the sheds and keeping your eyes open for the wrong sort of behaviour.

"There's no right or wrong way, it's whatever works for the farmer and depends on the age of the flock," said Alex. "But after 30 weeks the worst is over and the hens should carry on laying in the correct place. You have to crack it before 25 weeks of age or you're not going to do it at all."