

A pullet rearing system popular in Europe has been adapted to suit the UK market. Could it be the start of a new way of doing things? *Jake Davies* finds out

**W**hen the concept of multi-tier pullet rearing is explained in full, one can't help but think it makes sense.

In conventional systems, birds are offered two levels to move between – the floor and a raised area. There they spend about 15 weeks getting used to living in a relatively flat world.

That all changes when they approach lay and are taken to a multi-tier shed. Suddenly presented with a leap to get to food, water, nestboxes and perching areas, it is little surprise stockmen will spend a while putting birds up to roost at night by hand.

#### NEW CONCEPT

The Big Dutchman Natura Filia system seeks to change that. Based on a concept already established in Europe, where vast numbers of hens are kept in multi-tier barns, the firm has worked hard to adapt the design to fit the UK market.

It aims to get pullets moving between tiers from around two weeks old, but also trains them to return to tiers to roost. They also learn that food and water is not available on the floor.

Proponents claim this makes for more active and productive birds, ready to begin laying in their nestboxes soon after placement.

Such a system undoubtedly commands a premium over the traditional way of doing things, but it is an investment Heal Farm's manager Gordon Alexander (pictured above) feels is worthwhile.

"We're taking a bit of a chance," he says of the million-pound project, recently showcased by Newquip, the UK distributor for Big Dutchman.

But the Shropshire-based farm was one of the first to bring multi-tier free-range egg production to



## Multi-tier rearing system promises better pullets

Britain and Mr Alexander has faith in the two 32,000-place pullet sheds that have been built on what was a "very tired" site.

Pullets will almost exclusively supply Heal Farm's own laying operation of 200,000 free-range birds, with every egg going to LJ Fairburn's on contract.

"For the contract rearer, it would be very difficult to justify the price," says Mr Alexander. "But, for me, having them all in-house, I think we're going to produce a much better bird. More mobile and, when moving it between rearing and laying sheds, the bird will already know the system it's going to be spending the rest of its life in. We simply had to get better quality pullets."

#### CHICK PLACEMENT

The first chicks were placed in the middle of December, and there will be some tweaking initially to get methods nailed, but the principle is backed by proven success in Europe.

He is hoping to transfer pullets to laying sheds at 14 weeks and five days, reflecting faster development.

"We can't go much quicker than that because of the vaccine regime," explains Mr Alexander. That timing will allow four cycles each year, and a number of additional measures will be made to boost development.

Birds will get a higher spec ration than standard, because they are expected to be more active. It is projected that there will be less wasted feed, lower labour costs and lower ammonia emissions, due to a belt removing manure throughout rearing.

Water was another focus for Mr Alexander during the planning stage. He worked with Big Dutchman to bring nipple drinkers closer to the water line and has installed a system which will flush once a day in the morning, before birds become active. "One of the things that I think we're learning as an industry is that water quality is paramount."

#### FORWARD LOOKING

If the free-range market is looking good next year, then a third shed, already planned, will be put up alongside the first two, giving a total capacity of 96,000 places. That

will leave a surplus of 16,000 birds, which Mr Alexander will expect to sell at a premium, though he says this is yet to be determined.

With the third shed in situ, the LPG heaters currently in place will become backups, and the plan will be to put one large biomass boiler in to serve each shed.

#### ACCREDITATION IN PROGRESS

The RSPCA and its Freedom Food scheme covers the majority of free-range hens in the UK. But while Big Dutchman and Newquip have worked hard to meet their standards to the letter in modifying its system, the charity has not given its full blessing yet.

Senior RSPCA scientific officer Mia Fernyhough says it will be treated as a "novel device" in the first few cycles, and that the charity will monitor the welfare and performance of pullets closely.

Mr Alexander adds the modifications "tick the boxes". "We're going to work very closely with the RSPCA, and we're hoping ultimately that we can get an outcome that is sustainable."

## BIG DUTCHMAN NATURA FILIA: HOW IT WORKS

"The concept is that we rear the birds in a system appropriate to the one they are going in to," says Adam Dye, of Newquip. The big advantages, he says, come from starting the birds in a small, controlled environment and gradually affording them more access as they grow. "With traditional rearing only around a third of the floor is platform and only a certain proportion of the birds bother to use it at night."

"With this system, when they are moved to a multi-tier system they are already used to it," he adds.

Chicks are placed on paper within the units, which are kept closed for around 14 days. Within their individual partitions, there is a single tier that they will begin to use as a precursor to accessing the full system when they have grown larger. This arrangement makes spray vaccination more controlled, and keeping check on the birds that have already had treatment becomes simple.

The drinkers are a new design, which allows water lines to be flushed every morning, a measure that is becoming increasingly important as producers seek to improve bird health in the first weeks of life. As birds grow, the line can be lifted to meet their size and will also encourage them to use higher tiers within the system.



PHOTOGRAPHY: JIM WARNEY



An opaque screen runs along the base of the units, keeping birds from forming bad habits in their formative weeks. It is designed to prevent chicks seeing the feed and water on the first tier, or other chicks on the other side of the units and thereby removing the urge to go underneath later in life.



When the chicks are large enough to move between the floor and their first tier, the system will be opened up, allowing the pullets access to the floor which, according to Mr Dye, becomes a "playground" rather than a place in which food and water can be found.

It is around this point the second tier will be opened up above the first, doubling the amount of available space to birds. The second tier is

equipped with the same amount of feeding lines and drinkers, and perches are extended and ramps fitted at this point to ease access.

LED lights run along the length of the top centre of the tiers, and serve to attract birds up to roost when the main lights are dimmed in the evening. This helps train pullets to rest close to where their nest box will eventually be, rather than on the floor.



Efficient manure removal is an integral part of the system. In Germany, tight ammonia controls make it difficult for a producer to rear pullets without constant manure removal in place. But it is also to the benefit of bird health, the better environment cuts incidence of burns and blindness in pullets.