

ON HENRI BABIN, FATHER AND SON'S BREEDER FARM

Lowest floor egg rate, **with the robot!**

Henri Babin, a great-great-parent poultry farmer in Mayenne since 1999, got an assistant during his last batch: the Spoutnic robot sold by Tibot Technologies. It has proven its worth as the floor egg rate hasn't been this low since 1999 when the business started. 1.5% in comparison to 3% to 7% over the last few years.



Henri Babin just released a batch of great-grandparents with the lowest floor egg rate since 1999

“Only 1.5% on the female lines!”...Henri Babin just released a batch of great-grandparents with the lowest floor egg rate since 1999, the year he moved to Saint-Jean-sur-Mayenne (53) onto his parents Henri and Marie-Annick's farm. It was at this time that the family decided to further expand their business and invested in poultry farming with two 1500 m² buildings dedicated to raising great-grandparents or grandparents (17,000 chickens) according to the demands of their partners, the selection company Hubbard.

Henri Babin-son indisputably attributes this exceptionally low level of floor eggs to the

Spoutnic robot's (Tibot Technologies) “helping hand” with the last batch. Because, “in my father's building which is identical in every way and also received the same strain of chickens during the same period, with similar management, the rate remained similar to what was obtained in the last few years”, he explains. The only difference: the Spoutnic robot wasn't in there!

FLOOR EGGS, “A REAL STRUGGLE” SOMETIMES!

It's actually the two “Henris” who run the poultry farming outfit, each one running his

own building, while Marie-Annick and her other two sons, Sébastien and Nicolas, look after the dairy cows (150 head) and beef cattle. Although they have managed to maintain a laying rate of 3% to 7% of late after solving the problems with the atmosphere, optimising the movement of the animals, nest accessibility and litter management, they have had some difficult times over the last 19 years. *"It's the male lines that are the most difficult to manage. We can end up having 4 types of cross-breeding in a 1500 m² building because each building is separated into two rooms, and each room into two compartments"*, he explains.

It could also happen that the conditions in the brooding area haven't been optimal, which will have repercussions in terms of the behaviour of the batch during the reproduction phase.

During the first few years, their floor egg rate rarely fell below 10%. With his worst batch, Henri Babin remembers having had to pass through the building 16 times a day to pick up eggs off the floor (up to 18% at the peak of the egg-laying season). *"It was exhausting, a real struggle!"* He isn't the only one to have had this kind of experience, and for some farmers around him who have chosen not to continue their activity, floor eggs influenced their decision, though it wasn't the only reason. But in Saint-Jean-sur-Mayenne, they have passed this critical stage and the floor egg rate has been brought down to a tolerable level, requiring the farmers to walk through a maximum of 5 to 6 times a day (20 minutes per walk through). *"Each building, each farmer, each strain, each batch is different; you need to find the right adjustments"*, says Henri Babin.

AT WORK FROM 5 - 6 AM UNTIL 3:30 PM, NON-STOP!

The female lines come to the farm at 21 - 22 weeks old, start laying at 24 - 25 weeks old and are retired around 59 - 60 weeks totalling 9 months of production. For optimal efficiency, the robot must be introduced well before laying peaks (30 - 31 weeks). *"We run it from 5 am during the period of 27 to 31 weeks and from 6 am otherwise. It runs continuously until 3:30 pm"*, explains Henri Babin. It has a 10 hour battery life. Every day, Spoutnic is placed in a different compartment. It can spend 2 days in a row in the same compartment when the animals display peculiar behaviour. *"It can be*

adapted based on the batches, there's no set formula", he adds. But the first few weeks, it is important to run the robot in all of the compartments so that the chickens do not develop any bad habits.

The rotation also prevents the animals from getting used to its presence and failing to react. *"Its forward speed (6 speeds possible based on the age of the animals, the strain or batch) and the light and sound stimuli (different colours and sounds) will also prevent the birds from becoming too familiar with the robot"*, explains Marine Moua (Tibot Technologies).

At the start, worried about panic driven movements and suffocation, Henri stayed around to observe the way the birds reacted to Spoutnic, *"but there was no problem. I was quickly reassured"*, he says.



Positive results

"THE ROBOT STIRS UP THE HENHOUSE"

Marine Moua (Tibot Technologies) highlights the Spoutnic robot's facilitator role: *"It encourages the animals to move. The cockerels are led to meet the hens more easily which promotes mating and has positive consequences on the number of fertile eggs. In addition to this, when they move, the birds scratch at the ground promoting better litter conditions and a better atmosphere, which helps to reduce their health problems. The robot reduces the amount of time that the farmer has to dedicate to stirring up his henhouse and, as a result, to the collection of floor eggs and the use of devices to reduce feather pecking."*

IT GETS BETTER WITH TIME...

Nevertheless, small adjustments have been made to the robot along the way in response to the farmer's observations. *"We have flat chains, which obstructed the movement of the robot. The bumper edges (also called whiskers) have been elongated and the shape has been slightly rounded in order to fill the space with the wheels, thus alleviating the problem"*, he indicates.

Likewise, when doing U-turns, the robot had the tendency to skid and consequently got stuck in the litter (wood chips), this was also fixed after Henri reported it. *"We continually improve our robot by taking into account the feedback from farmers. An R&D team of 4 people are responsible for this"*, Marina Moua informed us.

On his side also, Henri continues to think about how the use of the robot would improve as well as the flexibility that Spoutnic would offer in the long term through the possibility of remotely controlling/programming when the robot starts and stops.

"In my opinion, it would be wise not to run the robot continuously but to plan a break around midday in order to better align with the animals' pace of life", says Henri Babin.

A SECOND ROBOT IS JOINING THE FAMILY

Apart from the reduction in the rate of floor eggs, Henri sees other advantages to the use of the Spoutnic robot: *"by encouraging the*

animals to move, it promotes mating and has positive effects at the same time on the number of fertile eggs (+1 point) and litter management, although I do not have any problems with this last point". After 50 weeks, the robot was given a rest as there was too much litter for it to move.

Although, strictly speaking, Spoutnic has not revolutionised Henri Babin's timetable - he still does 5 walk throughs a day in his building (6 am, 12 pm, 1pm, 3 pm, evening) with two rounds picking up eggs (two people passing from 7 am to 9 am and one person from 11 am to midday) - nevertheless, the robot is considered a "precious help". And for good reason. The robot reduces the time he dedicates to picking up eggs, a tedious task, and the time that has been saved can be dedicated to monitoring and sorting the animals, as well as to other work on the farm (380 ha with 180 ha of crops).

A second robot is supposed to join the farm in mid-July to relieve his father also, in order to start the next batch off on a good footing. For maximum peace of mind, Henri Babin has signed up for the maintenance contract that Tibot Technologies offers which includes an annual review. *"The design of the robot guarantees that it is completely impermeable to water, dust and ammonia"*, says Marine Moua. On his side, it is the farmer's responsibility to ensure that Spoutnic is always *"smart with clear vision"* so it always make an impression on the chickens.



Thanks to the Spoutnic robot, the forward speed (6 speeds possible), the light and sound stimuli (different colours and sounds) will stop the birds from getting used to the robot too quickly.