Ensure breeder profitability by regular weighing

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The management of breeders has always been considered as one of the most difficult jobs to perform in the poultry farm because any mistake during the rearing or laying period can drastically affect the results of the flock.

Breeding companies regularly face complaints from some of their customers about the bad performance of their commercial strains. However, it has to be remembered that the birds have been sold at one day old and that the supplier cannot be taken as 100% responsible for

any event that occurs during the production period. This is especially so when the feed intake, ADG or flock status has not been well managed. In fact the only way to well manage the flocks, is to control their average body weight (BW) and uniformity.

This is because birds that are too heavy, compared to the strain's standards, are too fat, unable to lay well or infertile and those which are too light will not get so many reserves, or feed intake capacity to withstand a high level of production.

Uniformity is important because a flock has to be considered as a unit to be well managed and it cannot include small and big birds mixed together because you cannot ensure the right feed intake and the correct level of protein and energy for every bird. Big ones would become fatter and fatter and the smaller birds would die.

Once you get this situation, you need to separate birds according to their body weight. This is a difficult task to perform, especially during the laying period.

Economic and technical consequences of this situation mean you can typically reduce your production by 10-30%.

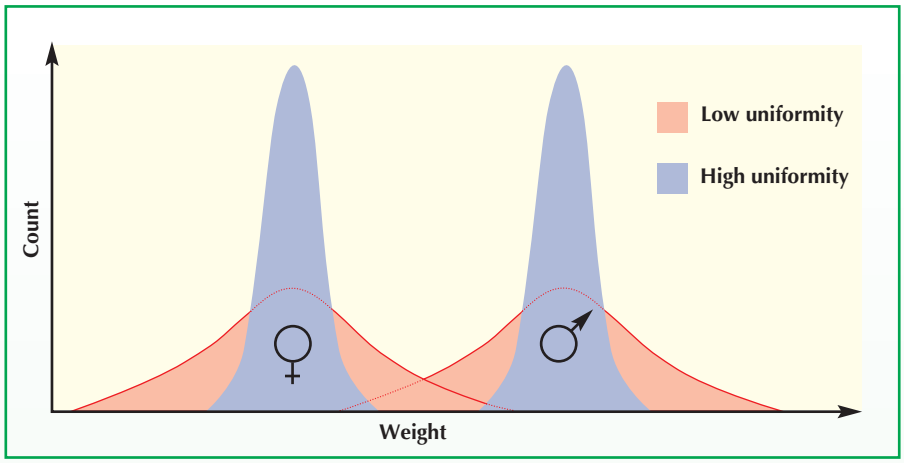

Fig. 2. Breeders with widely spread weights (low uniformity) cause problems.

This means less eggs, less chicks and, ultimately, less profits.

Previous solutions

Up until recently, there was no weighing system able to really control the body weight and uniformity of flocks.

Previously, you could use mechanical manual scales to indicate the body weight and you had to write down the values one by one and then make calculations to analyse the statistics.

This was time consuming as it took two people one hour to weigh 100 birds and was not very precise or very practical.

Then came electronic manual scales. Veit Electronics developed BAT1 equipment to provide the data instantly – bird body weight, average in the flock, standard deviation, coefficient of variation and uniformity. However, you still needed some time to operate the system – between 15 and 30 minutes for 100

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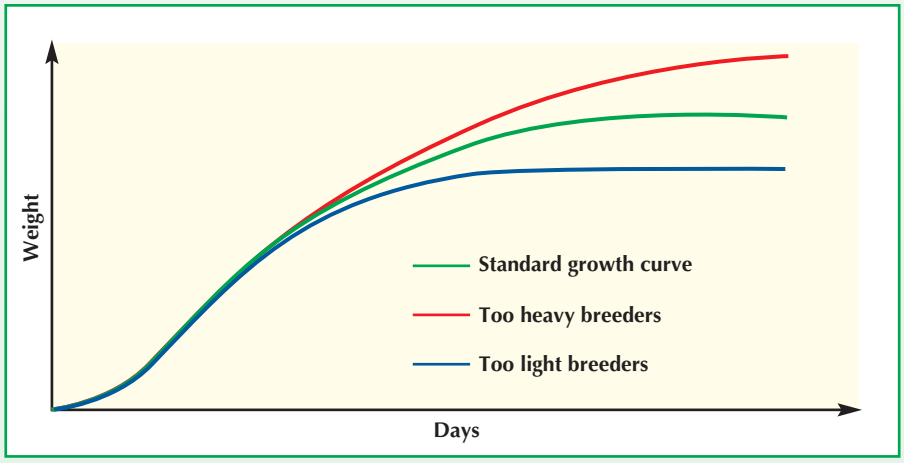
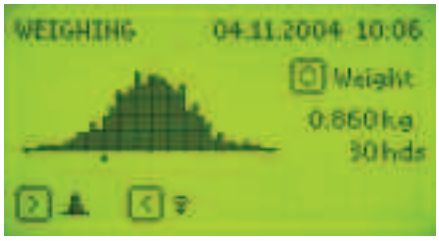
Fig. 1. Standard and incorrect growth curves for breeders.





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birds according to the type of birds you had (heavy or light ones). It could be done once a week, but no more.

You could also use a simple automatic weighing system that was installed in the building and able to weigh birds all day.

However, this system was not so precise because birds stayed on the platform and were weighed many times per day, small ones were weighed with other ones, or it was impossible to get more than one bird on it.

New equipment

To address this situation two companies – Veit Electronics and NRG France – collaborated together in order to provide farmers with the right tool to ensure the precise weighing of their flocks and, consequently, their profitability.

The automatic scale BAT2 is installed in a hall and weighing takes place completely automatically as individual birds enter the weighing platform.

These scales give precise body weight and uniformity of every flock as the software is able to analyse all the data and decide to record it, or not, for the statistical calculations.

With two types of platform (floor or hanging) it is adapted to any bird.

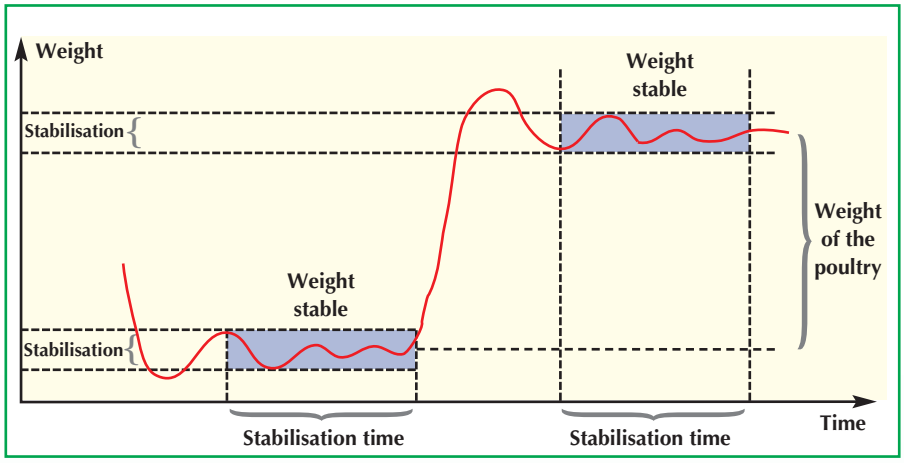

Fig. 3. Detection of one step in automatic scales.

You just need to enter the expected target weight on the first day of use and the scale does the rest. In fact the original software takes into account the difference and never the total value (Fig. 3).

Therefore, it does not weigh two birds together and it does not matter if the platform is full of birds or covered in litter – any weight is precisely measured (Fig. 4).

On average 1500 weighings per day are carried out, which is quite enough to control your flock's performance.

It can also be programmed for any growth curve, one by sex if necessary, so males and females get their own files.

Being able to record up to 1800 values per day over one year, the BAT2 can load all data to any computer through a memory module; distribution of population will be available, and analysis can be carried out more thoroughly.

BAT2 can also send the statistical values through a GSM modem, so it enables anybody to get the analysis of the flock performances daily (BW, ADG, uniformity).

Consequently, from these values, you can modify the feed intake, the energy or protein levels, sort the birds to improve uniformity or make changes if you notice a sudden reduction in the average body weight.

Finally, this made to measure management tool will allow better preparation in the laying period and more profitable production – due to accurate daily monitoring of your flock. n

Fig. 4. The automatic scales can detect more heads on the platform.