



Trevor Bray talks to Ranger readers...

A Post-Peak dip in Egg Production?

For each flock of new pullets it is exciting to see the production increasing week by week as they approach a peak to production. Disappointment can follow however, when having reached peak production, they then “loose the plot” and there is a drop in egg numbers, followed by what can sometimes be a slow climb back towards the target. (See the graph below).

Why is it that some flocks do this whilst others perform impeccably? To answer this we need to consider a number of interacting factors:

- The physiology of the pullets (Target liveweights).
- Nutrient intake and feed palatability.
- Daylength.
- Stressors.
- Parasitic worms.

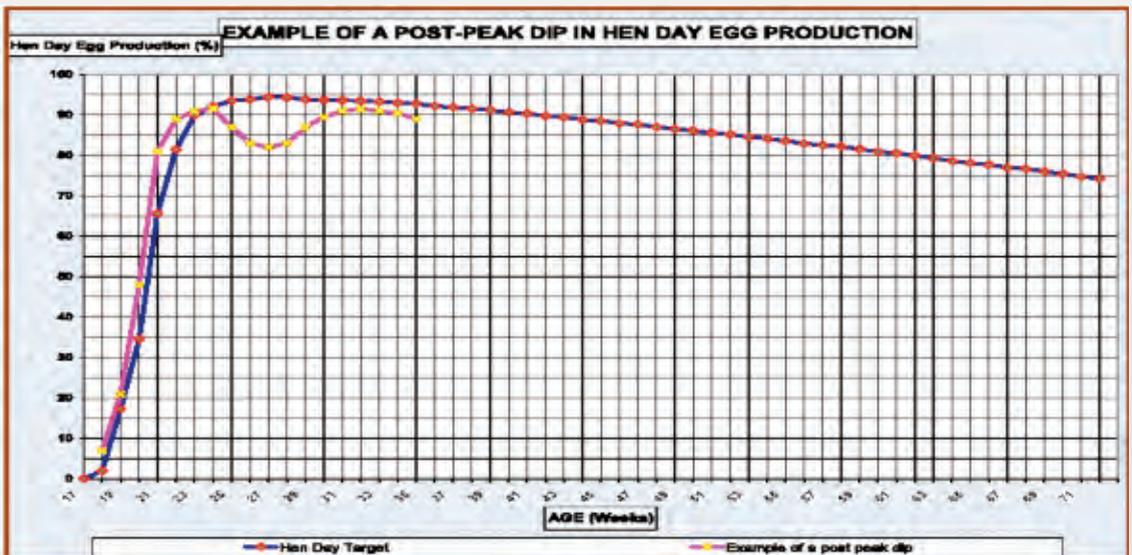
LIVEWEIGHT

The Breeding Companies have targets for the liveweights of their pullets. Did you check with your pullet rearer whether your pullets' liveweights were on target throughout the rearing period? This is especially important between about 5 and 9 weeks old. For Free Range egg production a good frame size is necessary for two reasons.

Firstly, it is difficult for point of lay pullets to struggle to get their feed intake high enough whilst also needing to gain in liveweight and secondly, you do not usu-



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ally want the smaller egg weight that under-weight pullets will lay for the whole of the laying period. Inevitably for summer flocks, there will usually be a rush into lay because of a sudden jump in daylength from say 10 hours in the rearing period to a much longer day in a natu-

rally ventilated laying house. For pullets to be able to cope with this, a good liveweight / frame size is virtually essential.

NUTRITION

For the first three weeks on the laying

farm on the laying farm for pullets that are of a correct liveweight to six weeks for underweight pullets, do you request from your supplier a feed that has a very high nutrient specification? It should also be as palatable as possible; therefore a mash with a coarse grist is desirable. Of



Parasites are waiting out on the range area

particular importance are the essential amino acids (good quality protein). They should be higher than for the feed that would be fed to caged hens.

The pullets have to cope with stressors and the onset of egg production, whilst still gaining in liveweight. In addition, linoleic acid (an important unsaturated fat) should also be high. This helps with the early cash flow, as increasing the egg weight pushes the size of the eggs quickly from the small to the medium grades.

The use of a good (and more expensive) feed for the first few weeks after delivery is likely to be highly cost effective in the long run but beware, don't keep them on it for too long a period. Egg weight can quickly become too large for the long-term welfare of the hens, because if egg size is not well controlled, an increase in mortality with a higher risk of feather pecking is almost inevitable.

STRESSORS

When you have had a row with your wife / husband; your bank manager has phoned you; you have been up early seeing to the hens and then "burnt the

midnight oil" – what happens? You catch a cold! Why? You are stressed. Hens get stressed too. When they first come to your farm they have to learn where to eat and drink; decide where they want to lay (and that may be too soon for them); get used to you and your management, with strange noises and maybe colder temperatures than they had in the rearing house; establish the peck order. These are just a few of stressors that may be associated with a dip in egg production. Stressed hens are more likely to succumb to diseases than non-stressed hens. Egg weight and production can suffer.

WORMS

Even when pullets have been wormed during the rearing period (were yours?), on many Free Range farms the eggs of these parasites are waiting out on the range area or in poorly disinfected houses for the hens to ingest them. The life cycle of the worms is short enough for them to have damaged the pullets' intestines by the time that peak production has been reached. Routine worming of pullets soon after delivery and then frequently thereafter has become necessary on many Free Range farms.

In short, the risks of a disappointing post-peak dip in egg production can be reduced if:

- i) Pullet quality is optimal.
- ii) Nutrient intake is high.
- iii) Stressors are minimised.
- iv) Worms and parasites (e.g. red mites) are eliminated, as far as is possible.

Post-peak dips are virtually certain if the above factors are ignored.

Tight management, good luck and liaison with your pullet rearers reduce the risks of a dip in production. Just when you thought that all was going well, you don't necessarily have to be disappointed by a post-peak dip. Good luck with your next flock.