

# The bird's agenda

By Ron Meijerhof

Technical performance of broiler breeders is largely influenced by their behaviour. If birds don't want to go into the laying nest, or they do not want to mate or they are not able to eat all at the same time, technical results will go down, no matter how well the genetic potential of birds is. This means that if we manage breeders, we have to understand some basics about their behaviour, and one of these basics is incorporated in the daily schedule of a chicken.

## An exciting day

Broiler breeders don't perform their activities in a sort of random schedule over the day, but they use a time schedule, which we must respect in our bird management. The most important and fixed activities in the house are egg laying and mating.

### - Egg laying

When the light goes on in the morning, the first birds start laying about 1 hour later. The majority of the eggs is produced in about 6 hours. This means that in about 6 hours, all birds must be able to access the nests. A broiler breeder takes quite long to produce an egg. She occupies the nest often for about 45 minutes to lay her egg, about 20-25 minutes to prepare herself for laying, and another 20-25 minutes to enjoy the result. In warm conditions, birds seem to occupy the nest even longer. If we include the fact that not all birds are laying every day, but also not all nests are occupied 100% of the time, we have to calculate at least 1 hour of nest occupancy for every egg laid, in a laying period of about 6 hours. This means that at peak production, we need 1 individual nest for 5 or maximum 6 birds. In a community nest, every bird takes up about 15 cm of width of the nest. If 15 cm of width is occupied by each bird, we can place 6 birds next to each other in a nest. If each place is occupied for 1 hour and we have 6 hours of time, we can place 35-40 birds per meter of nest length. If we place more birds, some birds might face difficulties to find a free nest space.

### - Mating

Mating is another important event, which happens mainly in the last 4 hours of the day. Birds have a good reason to do it at the end of the day. If mating would happen in the morning, the laying of eggs would obstruct that behaviour, but also the outgoing egg would push out the incoming semen.

Males are most active in the last part of the day, and in that period we must attract the females as much as possible to the scratch area. Also in this period we must observe the mating behaviour, to see if the males are not becoming too aggressive or stay too docile.

### Feeding and drinking

As the first 6-7 hours and the last 4 hours of a 16 hour light are occupied, we have to plan eating and drinking around it. If we let the birds eat during egg laying or during mating, we ask the birds to make a choice, stay hungry but use a nest or get mated, or get feed but produce a floor egg or avoid mating. And some birds will choose for the eating.

Depending on the flock and the feeding system, birds need about 2 hours to eat and 4 hours to drink. This would mean that we should start giving feed and water about 7-8 hours after the light goes on. If we do it many hours later, but also when the birds take too much time for eating and especially drinking, it will interfere with the mating.

Another advantage of feeding after egg laying is that the calcium in the feed becomes available for the bird at the moment the shell is formed, which is mainly during the night. However, if we feed 7-8 hours after lights on, the digestion of the feed is done during the warmest hours of the day. This is not a problem in moderate climates, but the heat production that is associated with the digestion can cause problems for the birds in hot climates. For that reason, it can be beneficial to feed first thing in the morning, but then we still have to make sure that the feeding doesn't interfere with the egg laying, so we have to feed then as early as possible.

Chickens have a limited interest, but a very straight forward approach to what they want and expect from us. By looking at their behaviour and respecting their expectations, we can avoid that our birds make choices against our interest.