# Cockerels back on the menu

The cockerel chicks of laying hens are killed after less than one day. Efforts are being made to stop that wastage by persuading people to start eating cockerel meat again. With success, but it remains a niche market for now. Perhaps it would be better to prevent these chicks from hatching in the first place.

TEXT RENÉ DIDDE PHOTO HH / MARCEL VAN DEN BERGH

n the Netherlands, 45 million day-old cockerel chicks – the male hatchlings produced by laying hens – are killed every year. While the female chicks go on to lay eggs, the males are worthless. After an ultrashort life of less than 24 hours, the birds are gassed – that qualifies as painless – and sold as feed for zoo animals and stork colonies. Falconers, snake owners and even cat lovers feed the day-old chicks to their hobby animals and pets.

The gassing is causing controversy through-

out Europe. There is considerable criticism of this method in Germany in particular, but the issue of whether you can terminate a creature's life after only one day is regularly raised in the Dutch parliament too. This is also an issue with such valueless male offspring as bull calves and billy-goat kids. The male chicks' early demise is something that has developed in recent decades. Up until the 1950s, cockerel chicks survived for at least seven weeks because only then did the sexual characteristics become visible and





the poultry farmer know whether he had a future laying hen or a cockerel chick. The young cockerels, which had been getting feed and care for all that time, were reared a little longer and then eaten.

### **LENGTH OF WING FEATHERS**

Sexing day-old chicks – determining their sex – was introduced for laying hens in the mid-twentieth century. 'That is now so advanced that workers on the big poultry farms can determine the sex at a glance within one day, for example from the difference between male and female chicks in the length of the wing feathers or the colour of the down. These properties have been bred in for such important laying breeds as the White Leghorn and the Rhode Island Red,' says Ferry Leenstra of Wageningen Livestock Research.

That did not immediately lead to the early death of laying hens' cockerel chicks. The male hatchlings were still being reared and exported to Mediterranean countries, Italy in particular, up until the 1980s. 'Consumers in southern European countries, especially Italy, were prepared to buy a pricier chicken that tastes better,' says Leenstra, who has been doing research on hens for 40 years now. 'Cockerel chicks were bought for oldfashioned stews and coq au vin because of their flavour and firm bite. These traditional dishes had fallen out of favour in the Netherlands long before then.' But eventually Italy followed other European countries in switching to chicken cuts that

### **DRUMSTICKS**

can be prepared quickly.

Breeding farms are increasingly producing hens that are specialized either in laying lots of eggs or in fattening for meat, for sale as chicken breasts, legs and drumsticks. 'For the past 20 years, consumers have preferred



Day-old male chicks are taken off to be gassed or sold for zoo animal feed.

chicken breasts, which can be cooked quickly, or cubes for stir-fry dishes. We've forgotten how to pick at a bone,' says Leenstra. It should be said that there is no sex discrimination in the table chicken breeds: both male and female chicks are reared for meat. So the chicken breast on your plate could easily come from a cockerel. 'When they are slaughtered, there is no perceptible difference between males and females in flavour and bite,' says Leenstra. 'That only develops in older chickens.'

However, for more than 20 years, becoming zoo animal feed has been the fate of the cockerel chicks of laying breeds; they cannot compete with the large table chickens when it comes to meat production. But now there is a glimmer of hope. In part thanks to Leenstra's efforts, cockerels occasionally feature on restaurant menus and are starting to appear in some poulterers and organic product shops. Rearing laying cockerel hatchlings for meat fits with the rise in top

restaurants in the Netherlands and the trend towards culinary curiosities, forgotten recipes and authentic products.

## **MEDIA CAMPAIGN**

Leenstra researched the economic options and technical aspects of rearing laying cockerel chicks and brought supply chain partners together in workshops. 'We found abattoirs and poulterers that were interested and we helped poultry farmers market the cockerel chick as a new product.' There is now a media campaign underway, including with recipes.

At present, it is still a niche market. Poultry farm De Lankerenhof in Voorthuizen, for instance, supplies the nationwide chain of organic wholesalers and retailers Estafette-Odin with organic cockerel chicks under the brand name Haantje de Coq. Parttime poultry farmer Ruud Zanders from Venray sells about 1000 male chicks every week that would once have been worthless. Now he rears them for 14 weeks. He says the cockerel chicks seem popular with retailers and the restaurant trade. 'They are sold under the brand name Leghaantje to Sligro and various upmarket restaurants,' says Zanders, who is also a lecturer in healthy poultry farming at Aeres University of Applied Sciences (formerly Vilentum University AS).

### **SEX TEST**

'We are pleased to see the cockerel chick making a comeback,' says Niels Dorland, spokesman for Dutch animal protection society Dierenbescherming. 'However, we don't think the entire laying hen sector will now start rearing male chicks.' That is why Dierenbescherming is supporting a statement of intent from 2014 to stop the killing of day-old cockerel hatchlings by examining the eggs to see whether they contain a male chick. 'We expect more from this sex test.'

# 'Currently, male chicks of laying hens end up as zoo feed'



Rearing cockerel chicks for sale as meat is not the only solution to the problem of the 45 million gassed chicks. The farmer can also take action when they are still in the embryo phase. Leenstra herself was involved some years ago in the early stages of a new method in which a gene that causes algae to fluoresce is inserted into the male sex chromosome of laying breeds. Researchers at Wageningen University learnt about the technique from the Roslin Institute in Scotland. 'If you shine blue light on the egg immediately after it has been laid, you know whether the embryo is male or female.' The method is technically possible but has never been tested in practice. Leenstra: 'Despite the positive recommendation from the Dutch commission on biotechnology in animals, there was a great deal of opposition in parliament to eggs that light up because genetic modification is involved, so the plan has been shelved for now.' One alternative is the sex test for eggs that has been developed in Germany. 'They can determine whether the egg is a future male chick after 11 days, which is about halfway through the brooding period. Hatchery workers can remove those eggs, which can then be ground into animal feed, for example,' explains Leenstra.

She says the method still needs improvement before it can be used in practice. 'A lot of questions still have to be resolved around automation, hygiene and safety. For instance, you have to drill a hole in the egg to take a sample but that creates a risk of bacterial contamination.' In the Netherlands, the Leiden technology company In Ovo is working on the development of this method for 'peeping inside the egg'.

# MORE TIME FOR COOKING

The poultry sector also has high expectations of the sex test. At AVINED in Zeist, the

successor to the Poultry and Eggs Board, Alex Spieker says the test 'has potential'. 'This method looks the best option to poultry farmers.' However, he agrees that rearing male chicks for meat is an interesting niche. 'People have more time for cooking in the weekend, so they might well try a cockerel chick. But it would be a challenge to sell the three chicks per head of the population per year that we need to solve the problem.'

### **LOGISTICAL PROBLEMS**

Spieker also points to the logistical problems modern poultry farms would face having to separate the hens, which go on to lay eggs, from the cockerels after 17 weeks. 'The more bird movements, the more expensive it is and the greater the risk of infectious diseases.' He reckons that abattoirs would also have to make changes in order to be able to process the large cockerel chicks. Spieker expects to see a gradual shift in the market. AVINED thinks that rearing cockerel chicks for meat could potentially account for up to 20 percent of the total number of day-old male chicks. 'Roughly the market for organic chicken, which is currently 20 percent. That will absorb the table cockerel chicks. The remaining 80 percent will have the sex test.'

A key question is therefore whether consumers can be persuaded to start savouring cockerel chicken on the bone to further strengthen that niche market. 'It's incredibly tasty meat,' says Zanders, recalling what he used to eat at home. Leenstra also looks back fondly to the olden days. 'You would get cockerel chick meat on your birthday.' She says that spending a long time cooking elaborate dishes has come back in fashion, especially in the weekend with friends as guests. 'For example, I cook cockerel chick meat by braising it in hay soaked in beer. Delicious.'

# **DUAL-PURPOSE CHICKEN**

In addition to the possibilities for rearing the male chicks of laying breeds, Ferry Leenstra also investigated the potential for a 'dualpurpose chicken' that can both lay eggs well and produce a lot of meat. That would mean an end to the destruction of day-old male chicks as they could be used for meat production. Now, fast-growing table breeds are primarily used for this purpose, often denoted in Dutch as plofkippen, literally 'exploding chickens'. Her research shows that the dualpurpose chicken would leave poultry farmers with higher costs compared with separately rearing the male chicks of laying breeds. Dualpurpose chickens have to perform well on two fronts and that costs too much energy. These chickens are heavier than normal laying hens so they consume more feed while at the same time probably laying slightly fewer eggs. Moreover, Leenstra's calculations show that the meat produced by the male chicks does not compensate for this inefficiency.



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