

## Neue Hühner braucht das Land

published in Frankfurter Allgemeine Sonntagszeitung, August 31, 2008

### The country needs new chicken

(there's a famous German song from the 80ies called „The country needs new men“ - „Neue Männer braucht das Land“)

*Eggs from the conveyor belt and monster-broilers – that's what modern poultry industry looks like. Organic farmers are searching for alternatives. But a chicken that meets their needs has yet to be bred.*

By JULIA GROSS

Wiesbaden. "Just try and touch it", recommends Markus Paul. He goes down to his knees, angling with a sweeping gesture towards the legs of a cock and picks up the stunned clucking animal. A single grip into the soft white feathers clarifies the dilemma for even the most die-hard inner city-dweller: The rooster has huge muscles on the chest and legs, very much in contrast to the rooster who lives behind the next hen house door. Although at least for the layman he looks no different than the first chicken, another grip into the feathers reveals - nothing. A lot of fleece, a lot of air, and somewhere behind them a thin frail bird's body.

That's exactly how it's supposed to be in the modern poultry industry: The slim rooster is a potential father of layers, the beefcake of a chicken destined for meat production.

"Umsatztyp and Ansatztyp" says agricultural engineer Mark Paul, Head of poultry on the organic farm "Domaene Mechtildshausen" in Wiesbaden. Should read: One puts all his energy into reproduction, the other gets fat.

That's how today's chicken are - highly specialized. Almost without exception, farmers worldwide use so-called agriculture hybrid lines from the range of a few large agricultural corporations. These are crosses between highly selected lines, who achieve very high performance, but do not pass their traits on to the next generation. Thus, the farmer needs to buy replacements all the time. But he receives animals that reliably either lay about 300 eggs per year, or are ready for slaughter within six weeks. The consequence: Almost no other animal product can nowadays be produced as cheaply as eggs and chicken meat.

It's the animals who pay the price. Optimized to enriched food and a cage-life in dark hen houses with a stable temperature of 18 degrees celsius, the do not cope very well with free-range -life on organic farms. "They tolerate neither heat nor cold, they have problems with our less nutritious food, and we also don't want any chicken that have lost all their feathers after one year either," lists Markus Paul. When they are stressed, the neurotic animals tend to pick their relative's feathers, sometimes in a bout of aggression they also eat their relatives.

And then there's the matter with the male chicks. Because the two breeding lines are so specialized, no one needs male chicks from the egg-laying line. The brothers of layers never put on much weight. So after hatching, as soon as their sex is determined, the male chicks are either gassed or thrown into a kind of chopper, the "homogenizer". In Germany, 40

million chicks per year die this way, EU-wide, it's 300 million.

This practice is inconsistent with the idea of organic farming. So quite different chicken breeds are needed. They should be more robust and at best have a double talent. A so-called two-purpose-chicken that lays lots of eggs and puts on some weight at the same time would render the killing of the chicks superfluous. But although demand for organic products is steadily growing, little has happened. Without viable alternatives organic farmers still use the conventional lines. "Hybrid breeding is so monopolized that organic farmers saw little chance to do something" says Anita Idel, freelance project manager for animal health and agricultural biodiversity.

In fact, half a dozen major corporations divide the global poultry business largely between themselves. To introduce special lines for organic farming or even breed a two-purpose-chicken is not in their interest. The demand is too small. They also won't give the so-called grandparent-animals, which could be used to breed, to organic farmers at all, or they ask for unrealistic prices. Only a few organic farmers have taken the initiative. A breeding project means risk, it costs time and money. Moreover, the farmers have by no means agreed among themselves about what kind of chicken they really want. "There is a saying: ten farmers, eleven opinions", Markus Paul alludes to the proverbial stubbornness of farmers, as he puts his rooster back on the straw and closes the door of the hen house. "Coordination does not even work at state level." For over ten years, Domaene Mechtildshausen therefore has its own way. And it's clearly following the direction to a two-purpose-chicken. "They could never be as good as conventional, specialized, chicken," says Paul.

For meat production, the Hesse rely on two "Bresse" lines from France. And they commissioned Siegmund Goetze from the University of Halle to search for a robust and stable feathered Layer. Goetze was responsible for the breeding of chicken lines in the GDR. "So in the early nineties I drove to small animal owners in the eastern part of Germany and bought all sorts of chicken breeds from old species from the fifties and sixties", says Goetze. "But none of them laid enough eggs." Finally, he crossed „New Hampshire“ chicken from the former East Germany with "Marans" of French origin. The combination of the heavy, large egg-laying poultry from the East and the flavor-rich French could theoretically have resulted in a great Two-purpose-chicken.

"But they didn't like being in flocks of a hundred animals, as we have them on our farm", says Markus Paul. Before long, the stressed chicken were running around with large bare patches in their plumage.

Now Goetze and the farmers from Wiesbaden use a cross between „New Hampshire“ and the commercial high-performance line "White Rock". Domaene Mechtildshausen in cooperation with breeding and pullet rearing farms now wants to start selling this breed to other organic farmers - more than ten years after the start of the breeding efforts. Markus Paul won't tell how much has already been invested. But he is satisfied with the outcome: "We have found a relatively optimal mix."

Anita Idel thinks different: "Two-Purpose-Chickens are a must. And it is feasible." A single

„eco-chicken“ however, will not do for all, and probably it will never be profitable for every business. "But it's nothing to be afraid of", says Werner Vogt-Kaute, consultant of the "Naturland" Association (which certifies organic food). He has calculated that the additional costs for eggs and meat of two-purpose-chicken feared by the farmers are limited. "Of course it is more expensive. But one egg won't cost one euro, as is sometimes suggested. That is nonsense. "

Vogt-Kaute's calculations arrive at a maximum of five and a half extra cents per egg. "The crucial point is the male animal," he says. Even if the meat was only moderately more expensive, customers are likely to deter the smaller pieces of meat instead of the giant chicken breasts they are accustomed to. "It's not for the supermarket but it may work in direct marketing if the vendor provides appropriate information."

Especially for small farms with a thriving farm shop two-purpose-chicken would be attractive. But they can't afford a long-lasting breeding effort with a decent documentation. "There is a lack of government support," Anita Idel complains. So for the time being, only private or donation-funded small projects are looking for a solution. Success is mixed: The project "Sister Chicks" that tested the males of common layer breeds for their ability to put on weight found no match in the first round. Results are better for Kolbecksmoor chicken, a cross between the old "Vorwerk" - race and a high-performance line. Siegmund Goetze has crossed the Bresse chicken of Domaene Mechtildshausen with New Hampshire layers for the first time this year. "The trials are still ongoing, but I'm surprised: It seems like a pretty good egg producer and the animals are heavier than pure layers" says Goetze. A larger, two-year comparative study is needed to substantiate the results. Whether he will find funding for that, however, he does not know yet.

The whole development in poultry despite the huge demand for organic food seems paradox. After all eggs are among the most popular organic products. Apparently the pressure from consumers and trade needs to be much larger in order to make a difference. The EU-wide ban on battery cages for laying hens will maybe contribute to a change from 2012. That this rule "changed the selection criteria" has at least already been noticed by the large breeding corporations.