

Doing the job properly

The challenge of farming organic poultry





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A quest for “proper” organic poultry

Amongst all the production sectors in UK organic farming, poultry has become one of the most contentious. The term “organic poultry” now describes a range of farming operations from what can be termed “quasi-intensive” and near conventional, to truly extensive and integrated flocks on organic smallholdings.

But the debate is not simply about small equalling “good” and big being “bad”.

Across the production spectrum from “quasi-intensive” to small and extensive there are common issues of controversy - the “organicness” and availability of feed, the origin of chicks and young birds, the use of vaccination and even methods of slaughter.

As quite clearly stated in the Soil Association’s Organic Standards, poultry must be produced as an integral part of the whole organic farm system or integrated with other local organic farms in terms of manure, rotation and feed. But many “organic” poultry units in the UK currently lack this admirable, holistic approach.

This publication sets out to address aspects of the question – how to do the job properly?

How to ensure that the often substantial premia that consumers are being asked to pay for their organic table birds and eggs are justified by a real organic ethos underpinning their production?

How to ensure organic birds are reared to the highest welfare standards with truly “happy hens”?

How to have UK organic poultry that the whole organic movement can be proud of?

This drive for “real” organic poultry is very much work in progress. At the Organic Research Centre – Elm Farm, and through our project Organic Inform, we hope that the following pages will stimulate further debate. They contain a record of a one-day conference on the subject and re-prints of recent articles on poultry matters published by The Organic Research Centre. Without full debate and without a change of policy and operational direction the UK organic poultry sector is not sustainable as a marketing, let alone production entity.

Lawrence Woodward O.B.E

The Organic Research Centre – Elm Farm

July 2007



Organic poultry production - Doing the job properly?

A one-day conference at Abbey Home Farm, Cirencester 23rd May 2007

To facilitate full discussion on the issues which generate and impact upon organic poultry variation, the Organic Research Centre – Elm Farm and Organic Inform convened a one-day conference. It was chaired by Lawrence Woodward, director of the Organic Research Centre. More than 60 farmers, advisers, certifiers, processors and retailers attended to share experience and views. Their mission, quite simply - to address the question of how to do the job properly?

Barriers to doing the job properly – keeping organic poultry “organic”

Richard Sanders

The Organic Research Centre, Newbury

To create some context for the day's discussion, Richard Sanders of the Organic Research Centre presented a view on the range of operational and philosophical barriers to producing what might be termed “organic” poultry. His presentation was based on the current organic poultry standards for table birds of the Soil Association (SA) – widely regarded as the “toughest” certifier within this sector.

A key barrier is the allowance – until 2011 at least – of conventional feedstuffs in “organic” poultry rations. Currently, SA standards allow 15% conventional feed inclusion. This allowance will fall to 5% by 2011, by which time half of the content of organic poultry rations must come from the producer's own or a linked farm.

Richard Sanders also touched on the use of “in conversion” grain in organic rations, where, in extremis, up to 60% of in conversion grain could be currently used from a producer's own holding. This gives the theoretical possibility of an “organic” poultry ration, certified by the SA, of just 40% truly organic ingredients.

Work done by the Organic Research Centre in 2005 at a trials site on Sheepdrove Organic Farm set out to determine the production and economic effects in comparing a full (100%) organic ration to, what was then, a typical industry standard of an 80% ration.

The economic impacts were quite variable, with extra costs for some batches of birds on 100% organic feed and cost savings on others.

In the summer months – due to greater ranging and access to herbage and protein in the field – the differential costs between 80% and 100% organic feeds were minimal.

Turning to the origin of pullets/chicks – the SA standards declare that “*you must use organic chicks from organically managed parent flocks when they are available*”.

Richard Sanders pointed to on-going problems of interpreting this rather circular demand (which came first – the chicken or the egg?) against a backdrop of routine use

of conventional chicks on many organic poultry units whilst others opt for birds from truly organic parent flocks.

A realistic costing is 24 pence per bird for conventional; 50 pence per bird for organic. This price difference is a clear barrier to doing the job properly, allowing the avoidance of higher costs by those producers who choose to source non – organic chicks.

Flock size continues to be a contentious issue of debate – does size matter when it comes to the operation of organic poultry flocks?

The published SA standard maximum table bird flock size is 500. However, routinely the SA grants permission for 1000 bird flocks based on what it terms “outcome” based assessments of animal welfare and other factors (2000 bird flocks are allowed for layers).

The bigger the flock size the less management time is required; less checking, cleaning, and bird movement. In other words bigger flocks bring commercial economies of scale.

The effect of these economies is hard to quantify financially – but is assessed to be substantial.

Flock size and its effects on bird welfare, economic performance and indeed on consumer demand for organic poultry has been little studied and deserves further research.

Other barriers to doing the job properly, listed in this presentation, included –

- The use of artificial light (up to a maximum of 16 hours of light in total, ending at natural dusk)
- Variation among systems in access to pasture and range
- The management of that range, crop rotations and poultry's position in a mixed organic enterprise
- The use of vaccination as opposed to the building of “natural” poultry health
- Mutilations such as de-beaking/beak tipping
- The issue of market place confusion with consumers unable from present retail labels to distinguish between “proper” organic poultry and the “quasi-intensive”.

Comments and questions:

Richard Jacobs (OF&G)

Questioned why only Soil Association standards had been highlighted in the presentation.

Richard Sanders responded that they had been used for simplicity and were illustrative of the standards.

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Comments and questions:

Mike Gooding (FAI Farms) Commented that the price of organic chicks was not twice the price of conventional, as stated in Richard's presentation. Further, the issue was not simply of price - the quality of chicks was also important.

Producer case studies

John Newman Abbey Home Farm, Cirencester

"Abbey Home Farm is a diverse organic business, comprising ten enterprises, including processing. Amongst these enterprises is a new poultry initiative. We currently have layers but we are also about to embark on farming table birds, with on-farm processing. We do try to adopt best practice, but this is based on individual opinion rather than hard and fast rules.

"We have 500 layers. The main issues we face for this market are considerations of breed, feed and requirements in the shop. We are lucky to have direct contact with consumers who visit the shop, but they do assume that organic means small – perhaps they have a "rose-tinted" perspective on the organic market.

"We will have 900-1000 table birds – 5 houses with 180 birds per house. The objective is to combine agro-forestry and cropping with raising the birds.

"Whether all this will be profitable is a big question. The answer is probably not, initially at least. But we are lucky in that the farm can subsidise "doing the job properly" with visitors, campers, etc. We want to explain to the public how much it costs to produce in this way and justify the retail price that they pay. Equally, though, we want to make the produce available to all at an affordable, fair price."

Comments and questions:

Guy Watson Do 150/180 bird flocks match consumer expectations?

John Newman The customer doesn't really know what 150 birds looks like, compared to 500. The question is does it look organic? A bigger, crucial image question is how much the birds are out, foraging in the field compared to sheltering in the shed.

Ritchie Riggs You should be proud of those numbers. Don't put yourself down...

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Comments and questions:

Delegate Bird flu demonstrated to many consumers the reality of conventional poultry production in the UK today: factory farming. The important thing is that if you look like a factory farm, you will be perceived not to be organic.

Delegate How do you inform your customers about what you are doing and why?

John Newman – Open days, in-store publicity.

Patrick Bournes Barrington Estate, Burford

In 1988, Barrington Estate became a SA egg-producing farm. At that time, there were five x800 bird sheds. This has now grown to an operation of two x2000 bird sheds, two x900 bird sheds and two x500 bird sheds. The estate supplies Stonegate, stores in London and Abbey Home Farm.

In 2006 the estate established its own breeding unit, producing fully organic chicks for its own flocks and for other nearby Stonegate producers.

Initially, the stocking rate was nine birds per square metre, that figure is now six. The reason for this was the regular occurrence of dirty eggs. Finding that such eggs didn't sell very well and that regulations prohibit the washing of eggs, the solution was a lower stocking density.

Laying birds are moved around different units at Barrington. In the first, they are not let out until eight weeks old, but when they are moved to the second unit, which has the same layout, they are able to go outside. The birds are out all the time on the range, apart from at night. Patrick feels that the number of birds per square metre is of low importance, apart from at night, when they all huddle together anyway.

Richard Kempsey Farm Director, Stonegate, Lacock

Richard is a poultry farmer himself but also co-ordinates egg producer farm operations for Stonegate. The central issue for the company, he says, is respect for the well-being of the birds – the highest standards of welfare. The Stonegate supply chain is certified by the Soil Association. However, the "commercial squeeze" is that SA certified eggs, with their higher production standards and costs subsequently retail at a higher price in Waitrose (the only major retail chain to sell SA certified eggs) than those certified by bodies such as Organic Farmers and Growers (OF&G).

Stonegate suppliers have unit sizes from 50 bird houses to 2000 bird houses. However, new suppliers to Stonegate are now being advised not to construct houses larger than for 1000 birds, due to uncertainties about where market demand and regulations are heading.



The philosophy is that the size of the unit should be based on welfare - what is best for the bird.

Figure 1 : The Stonegate system analysed by unit size, research backing and welfare/sustainability measures.

Large		
2,000 bird hen houses 1,000 new units advised	Research backed: Bristol PhD student Oxford & SAC LINK	RSPCA Freedom Food BEIC Lion code SA Certification
Dedicated parent flock breeding programme	Full-time farm welfare liaison	Veterinary vaccination programme based on farm health plan & blood tests
Mobile units	CBT producers share best practice	Ongoing carbon footprint reduction
Small		
50 bird hen houses	SA welfare outcome measurements	Fits organic 'image'

Comments and questions:	
Pammy Riggs	What percentage of your farms have zero vaccination? <i>Richard Kempsey – none.</i>
Lawrence Woodward	Are you happy with the 2000 bird level? Are there any welfare issues? <i>Richard Kempsey – We weren't happy initially, but reducing this is the best thing that we have done. Feather pecking has reduced and only one flock now shows evidence of this.</i>
Rosie Yells	Is there any link between size of flock and carbon footprint, e.g. through feed transport? <i>Richard Kempsey – We are working with the University of Surrey to look at this issue. Forty percent of our carbon footprint is due to laying and rearing. Our transport is relatively efficient, due to back haulage, etc, and totals just 5% of our carbon footprint. This figure does not include transport of the raw product, just in its condition as feed.</i>

Ian Salmon Sheepdrove Organic Farm - Lambourn

Ian Salmon – farm manager of Sheepdrove Organic Farm outlined the systems used there to rear organic table birds. The farm has an output of some 2100 birds a week plus 1900 turkeys at Christmas with the motto - Welfare first, organic second.

The underpinning ethic of Sheepdrove organic production was summarised to be -

- The production of meat animals of a high and holistic quality
- Enhancement of the landscape and surrounding ecosystems
- Achievement of maximum nutrient recycling
- Development of innovative farming systems
- Research and development as a host site for extension services
- A complementary mix of farming enterprises
- Co-ordination through production supply chain
- Achievement of optimum productivity and profitability
- Welfare first, organic second

For the poultry operations this is achieved through –

- Environment enhancements in sheds and on the field
- Poultry area is rotated around a 45 hectare site to maximise nutrient utilisation and prevent disease build up
- Mobile field sheds are moved between each batch
- Labour force of 4 full time people
- 12 week growing period (3 weeks in brooders, 9 weeks on field)
- Stocking densities at 1050 birds per shed gradually changing to a new system of 450/500 birds per shed.

Future developments include work alongside FAI farms in Oxford to find an ideal organic poultry breed.

Comments and questions:	
Delegate	What is the Sheepdrove policy on vaccination? <i>Ian Salmon – We do vaccinate and this is monitored by our vets, the ultimate aim is not to vaccinate, but disease pressures do challenge this.</i>
Anna Bassett	A recent report on BBC 2 Newsnight suggested that you aim to go to 500 bird houses. Is this still the case? <i>Ian Salmon – yes, we will be bringing in a new design of housing which takes 500 birds.</i>

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Comments and questions:

Ritchie Riggs

How are the Sheepdrove birds slaughtered?

Ian Salmon – Not really my territory, I deal with them when they are alive, but they are electrically stunned and then decapitated.

Ritchie Riggs – Not very welfare friendly.

Pammy and Ritchie Riggs Providence Farm, Holsworthy

Pammy and Ritchie Riggs are at the forefront of efforts to ensure that UK organic poultry production is done “properly”. They described their farm as “very small” (18 acre) but highlighted the importance of good organic systems. Their small model has been successfully scaled up to larger farms. In addition to poultry, which they keep in 150-180 bird houses, they also rear pigs and beef and market directly to the public from a farm shop.

From April 2003, the Riggs started taking organic chicks from a farm with parent birds kept outside and which had not been vaccinated. They have continued to avoid vaccination in all their poultry, believing that routine vaccination has become a “prop” for a failing organic system.

In 2005, they moved to 100% organic feed and coached their birds to find and forage for nutrients. They were amazed to find that over an 18 month period, they achieved a zero percent mortality rate. They believe this is a result of their use of organic chicks, zero vaccination and 100% organic feed.

In 2006, they found that they could no longer source organic chicks and had to return to conventionally reared parent stock. Since then, they have found that the mortality rate has increased to an industry “norm” of between 3 and 5%.

They believe that there is a growing danger of shattering consumer confidence in the organic industry poultry sector unless “proper” organic systems are followed. They are adamant that derogations on such issues as flock size, feed quality and vaccination must be stopped.

Ritchie Riggs additionally raised the issue of the methods by which organic birds are “dispatched”, i.e. slaughtered, which he feels is too often inhumane and identical to the route taken by conventional poultry. He firmly believes that progress in improving the UK organic poultry sector cannot be made whilst certifiers are more interested in retaining market share than they are in the true welfare of livestock.

Pat Taylor Rutland Organic Poultry, Stamford

The farm has been organic since 1999, but the overall philosophy of production is “to produce great tasting food”. Using organic, traditional feeds and hanging the meat, Pat and Henry Taylor believe that they deliver just that. Their produce is sold directly from the farm and via farm shops.

Three years ago, they started in-house breeding of turkeys and invested in their own parent birds and hatchery. Contrasting their own system with that of conventional turkey production, Pat outlined the way in which commercial turkeys are artificially inseminated, because natural mating is unachievable due to the distended breasts of conventionally farmed male turkeys.

The birds are hatched from May-June, ready for Christmas. Processing occurs on the farm, which includes slaughter, involving individual electric stunning of the birds. After slaughter, the birds are hung for at least a month - depending on their weight.

Last year’s sales were mostly to non-organic producers, but the target market for this year is organic. However, there are a couple of barriers to this. First, there is little price difference between organic and free range production – consumers do not understand the difference between the two. Second, although the regulation says that organic pullets should be used where available, upon contacting the Soil Association, Pat Taylor found that she could easily receive a derogation to use non-organic chicks, despite her obvious ability to provide them.

Her biggest concern is that small producers are in danger of being “tarred with the same brush” as those that receive bad publicity for their questionable “organicness”.

John Burns Middle Whitecleave, Umerleigh

A producer of geese, along with beef and sheep on fifty acres of land in Devon, John Burns converted to organic production eight years ago. His birds are primarily sold to serve the Christmas market.

Although he “drifted into the ideas of hatching organic goslings”, he had believed that there would be a strong market, given impending new regulation requiring producers to use organic chicks, if available. However, finding a market for the goslings was difficult. Although Soil Association lists exist, most goose producers appear to source on price alone. When John questioned the Soil Association on what plans they have to enforce the published regulation/standard on using organic chicks, he was told that it would not force producers to use organic chicks.

Upon contacting another certifier - OF&G - he found that although they would also not enforce this rule, they would helpfully distribute his details to their registered farmers. This has resulted in a growing relationship with an OF&G farmer who has returned for a second year, with a larger order following healthy retail customer demand.

John has embarked on a successful breeding programme where all the breeding geese parents and goslings are tagged, resulting in knowledge of each bird’s parentage and performance.

John Burns’ key concerns revolve around abattoirs and feed. He is unhappy that some abattoirs require crating of birds for slaughter and was upset to find some 10% of his sendings came back from an organic abattoir with broken



wings. Sourcing 100% organic feed is also an issue, and he wonders whether fishmeal, sourced from wild fish could be considered organic?

The Retailer Perspective

Guy Watson

Riverford Organic Vegetables, Buckfastleigh

Guy Watson distributes eggs through Riverford's Organic Vegetable box scheme and would like to sell more. However, he is unhappy with the quality of the eggs he sells to his customers and reiterated earlier statements that he would not eat them himself. He would rather eat the eggs that his sister produces on a neighbouring farm which are free range rather than organic.

Guy considers that the most important issues in food quality are eating quality (taste, texture) and animal welfare. In addition, he would like to be able to support smaller producers, which he knows is an interest shared with his individual retail customers.

In the past, Riverford has offered consumers a choice of organic eggs – those from OF&G and those from the Soil Association. Those from the Soil Association were more expensive and as a result took just 20% of sales compared to OF&G's 80%. However, from 2006, Riverford has chosen to only supply SA eggs to its customers in order to simplify operations and reduce confusion over "organicness".

Riverford does not wish to pursue egg production itself – it has unsuccessfully tested the market before. It would rather work in partnership with another organisation. Guy Watson has investigated the Lloyd Maunder model of production, (for table birds) offering a production blueprint for how layers eggs should be managed. However, having looked into this, Guy feels that it is early days for such a blueprint, and now probably not a route he will pursue.

Quentin Clark

Waitrose, Bracknell

Quentin Clark pointed out that amongst major retailers, Waitrose was the only one present at the conference. He also reminded delegates that Waitrose does not see itself as a supermarket, rather it is a specialist national retailer.

Sales of organic eggs are very important to Waitrose, constituting 20% of its egg sales. For this reason, along with the fact that Waitrose is the only national chain to stock SA certified eggs, Quentin says they are vulnerable to market shifts, in particular to predatory pricing of organic goods. Despite this, Waitrose customers are different to other supermarket customers – they value the trust they can place in their store and seek to understand the provenance of their food. Equally, like consumers across the country, they lack detailed knowledge relating to food production.

Whilst Waitrose is concerned about many of the issues facing farmers and relating to poultry production – including feed and welfare – Quentin questioned the basis of standards. His customers do not distinguish between different standards and he is concerned that attempts to

clarify the distinction will only turn people away from organic production. He underlined the fact that base standards are set at EU level – and that is what delivers the legal regulation of organic producers. The certifiers argue about who has higher standards and try to outdo each other... but the legal requirement is set in Brussels.

Informed customer choice is important, but there is a limit to the amount of choice consumers want or can manage.

Some Waitrose table bird data –

20% of sales are organic

30% are free range

50% are "Select Farm"

Waitrose organic chicken is reared in low density – 21kg per square metre

It is free range and reared to a minimum of 70 days.

The Certifier's Perspective

Richard Jacobs

Organic Farmers and Growers (OF&G), Shrewsbury

OF&G is the largest certifier of organic poultry in the UK and Richard Jacobs began by stating that he is proud of its standards and the way in which they are supervised and operated. Assuming that organic is the way forward, and that the objective for the majority in attendance was to make organic food available to everyone, the question becomes how to deliver that aim?

Smallholdings for all is a nice idea, but impractical. Small, local producers are also a great idea, but do not provide access to organic poultry for those who do not live near a farm. Ultimately, he sees a return to a larger model, operating with economies of scale and dedicated staff to oversee animal welfare and production.

But how big is too big? Actually, the answer to this question is simple – the level is set for us by the European Commission. Some will argue that this legal limit is too high. But evidence from a recent study carried out by Bristol University and ADAS suggests that the number of birds per flock is not the issue - rather the issue is good husbandry. We could ask consumers what they think is too big, or we could suggest that having a "business-like" or "corporate" image is the problem.

The reality is, "most people in this country get their food from a supermarket, whether you like that fact or not". Supermarkets require a steady demand and acceptable prices, but even they cannot dictate the number of birds in a house and neither can OF&G. Good husbandry is key, and that "goes hand-in-hand with good business sense – it's the pre-requisite to a profitable enterprise". And if farms cannot profit, they will not continue to grow the organic market.

Improvements can be made and OF&G "will always support tightening of the system where it can be applied in a practical, sensible and fair way that won't disadvantage the UK farmer".



Comments and questions:

Lawrence Woodward

How do you define good husbandry, if not by size?

Richard Jacobs – A range of factors, including welfare, the condition of the pasture and housing available, the quality of ration and the quality of stockmanship can be used to define good husbandry. There is also a new measure – BWAP – Bristol Welfare Assurance Programme which can be used to assess welfare quantitatively.

Anna Bassett

The Soil Association (SA) View, Bristol

The Soil Association has high standards on poultry production. As a result of this, many farmers have chosen not to certify with SA, instead choosing other certifiers with less rigorous standards. These standards vary in a number of areas, including stocking rate, flock size, time allowed for ranging and resting time, for pasture/range between production periods.

A report commissioned by the SA in 2003 into organic poultry production suggested that producers needed to focus on finding organic chicks and that permitted flock sizes were too big. Since then, increasing numbers of producers do use organic chicks. In addition, all large producers have to undergo BWAP inspection and, as a point of clarification, Anna pointed out that producers with flock sizes of more than 500 birds are considered to be following a “restricted practice”, not a derogation. The important issue is for producers to demonstrate their competency to keep large numbers of birds whilst maintaining the highest levels of animal welfare.

As a personal observation, Anna believes that once you reach a certain level of flock size (not sure what that is...), the birds have to compete to get outside each day, and many do not make it out.

Comments and questions:

Richard Jacobs

Do you carry out BWAP purely on farms with large flocks?

Anna Bassett – No, it is carried out on all large farms and some small farms.

Richard Jacobs

What are the results of BWAP?

Anna Bassett – That’s difficult to say at the moment as we found in the first round of interviews that we did not ask the right questions. It will be a good resource in the future.

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Comments and questions:

Delegate

If you have a producer with 2000 bird units, can you consider 2500 if they are consistently good?

Anna Bassett – There is no scientific evidence that size affects flock behaviour, so we might consider it in small increments but we would limit it.

Richard Sanders

Mutilation of poultry is expressly forbidden by SA standards...Why are there still cases of beak tipping being reported in SA certified flocks? Why are such flocks not de-certified?

Anna Bassett – In extremis we will allow beak tipping if a flock breakdown generates high levels of feather pecking and bullying and where welfare is being compromised by not pursuing such a mutilation. The last data from the SA showed six farms had used beak tipping to tackle severe feather pecking.

Closing Discussion

Market development:

Peter Hemmings

How are we going to encourage more arable farmers to produce organic cereals/grain?

John Newman (speaking in part as Organic Arable Marketing Group -OAMG - representative)

We have to look for continuity to work with farmers and build a relationship on trust not constantly fluctuating levels of profit. The question is, do we actually have enough supply across Europe to meet demand?

Lawrence Woodward

Conventional growers haven’t had the confidence to convert. As long as there are strong prices and no derogations, we should be able to encourage greater conversion.

John Burns

Do you mean derogations on everything, including on chicks?

Lawrence Woodward

Yes, derogations and the Soil Association’s “restricted practices”. It is pure incompetence to set a date for derogations to end and then not meet them. We will only make progress and drive the market forward by stopping these derogations.

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Market development:	
Lois Philipps	Aren't we facing the same problem with chicks that we did with (organic) seeds ten years ago? A database might help for helping producers in sourcing organic chicks and organic feed.
Delegate	It is not the amount of feed but the quality of the feed that is important.
Lawrence Woodward	Any moves now on ending derogations are five years too late. There is no clarity on why derogations are given.
Mike Gooding	There are clear organic standards created at EU level. So the issue becomes whether certification is a marketing tool or a means to gain competitive advantage, rather than a process to enforce standards. We need to consider how to take these issues forward and consider that people are investing in infrastructure, e.g. for organic hatcheries which may not have a market. However, it would be unwise business practice to set up on this basis – I set up a hatchery believing that the quality was better, therefore creating an economic incentive.
Lawrence Woodward	A number of people have stated clearly today that organic leads to better quality young birds.
Mike Gooding	In order to create high quality, good stockmanship is important. A large farm could be good and a small one poor – size is a useful quantitative measure but it's not clear if someone is good (or bad) just from this.
Quentin Clark	Without some flexibility in standards, chunks of business will die and reduce the market as people won't take the risk of investing in organic. In order to grow the market, we need to be flexible and encourage people into this market.
John Burns	What is organic? Consumers do assume that organic birds come from organic chicks.
Rosie Yells	Consumers can access the standards if they want to – if they're really interested. Isn't it possible, in this age of computers, that we have a database of derogations given to farmers? This would be accessible and transparent and lead to an increase in consumer confidence.

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Market development:	
Richard Jacobs	Derogations have been necessary in developing the industry. Badly managed derogations are a cop out. Regarding transparency – all certifiers have to report to Defra on all derogations that they give. This information should be in the public domain, although it is listed without producer details.
Lawrence Woodward	But it is not actually transparent. It seems that we do need derogations, but how is this done? Those that don't get them probably have a more vested interest in the whole process of derogation.
Richard Jacobs	Certifiers and Defra need to meet and track availability of chicks. Perhaps this is a task for The Organic Research Centre / Organic Inform to take on? Running a database of available chicks – OF&G would certainly support such an initiative.
Rosie Yells	We need to talk to consumers about what they want – actively promoting and campaigning about the way in which poultry is produced.

Consumer issues:	
Lawrence Woodward	The complexity faced by consumers is enormous. Even if they have information about who certified the produce, that certifier may be responsible for the smallest and the largest of farms, or in this case, flocks.
Frances Westerman	Consumers assume that organic means that welfare standards have been met, as well as good taste, etc. Few consumers actually know who certifies their food and where their pullets come from.
Lawrence Woodward	The industry is built on misinformation
Patrick Bournes	Actually there is too much information for customers. If they visit the farm, they want to see that it's clean and tidy. Little more beyond that. They might comment on how nice the box is, but that's as far as most customer's interest goes.
Richard Sanders	Can we stick with information for now? I think it's non-information, not mis-information.

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Consumer issues:		Vaccination:	
Mike Gooding	Marketing drives the organic movement and many other industries. We shouldn't try to standardise it. If people want small, they should be able to buy small. People are driven by different things – branding, etc. The problem in the UK is that there are multiple certifiers.	Patrick Bournes	Vaccination is important. I took blood samples from pheasants on the estate and found that they had multiple diseases. I vaccinate to prevent disease in the same way that I would vaccinate my daughter – it's a safeguard. Disease spreads amongst the birds – we don't operate in isolation from the wider environment.
Richard Sanders	What, for example, am I getting for my money if I buy organic in Waitrose rather than free-range?	Richard Jacobs	Many organic flocks are vaccinated against salmonella.
Quentin Clark	The extra money that you spend on organic, rather than conventionally produced goods, in Waitrose reflects the higher costs of production, SA standards, stocking density, etc.	Ritchie Riggs	We don't vaccinate and we don't need to do it.
Sally Peachey	Consumers don't distinguish between certifiers.	Richard Jacobs	I don't think that consumers would agree – they don't want salmonella.
Pammy Riggs	Organic is also about investing in the future of the planet, we need to talk about the future.	Anna Bassett	Different vets have different opinions on vaccination against different diseases in organic poultry production.
Lawrence Woodward	There is actually also a problem with the assumption that organic is healthier or of better quality. A recent survey suggests that 50 samples of organic poultry had so much fat in them that it can't be described as healthy. The survey suggested that 29% had antibiotic residues. Professor Michael Crawford has been measuring fat/protein content of both organic and conventionally produced chicken compared to 20-30 years ago and found that it is now far less healthy for you.	Alison Colville-Hyde	There are different protocols for meat and laying birds, but it's also a welfare issue.
Delegate	What's wrong with fat content?	Lawrence Woodward	How can you explain that some farmers can go for years without vaccination? Should we alter the organic attitude to vaccination?
Lawrence Woodward	The COMA report told us to eat more white meat, believing this to be healthier than red meats. However, white meat, including organic white meat, now contains so much fat that it cannot be described as healthy.	Richard Kempsey	The sensitivity of the new test for salmonella coming in next year is higher. I believe that salmonella will then become a bigger issue. Also important is rodent control.
Ritchie Riggs	Conventional birds, and even many organic ones, don't have the opportunity to range, so they would be fatter.	Lawrence Woodward	So do we need a regular forum for poultry producers to come together?
Richard Kempsey	We need to identify what is best practice and work together – certifiers, Defra, farmers, retailers, etc. People invest in production methods but derogations destroy all confidence in developing sound practices.	Alison Colville-Hyde	Definitely, it would help to get together and thrash out some of these issues and work on improvements.
Richard Jacobs	Actually, the differences between different certifiers are minimal. [discussed numbers, costs, derogations]	Delegate	Surveys have found that lack of information amongst organic poultry producers is a big problem, for example on mortality statistics.
		Delegate	That's your job – Organic Inform, Elm Farm.



Vaccination Nation – a call for civilised strategies to protect outdoor poultry from Avian Flu H5N1 (June 2006)

Since the end of 2005 The Organic Research Centre – Elm Farm has been urging Government and others to increase the UK's level of preparedness in tackling the poultry (and human) disease threat from the avian influenza virus H5N1. Without access to preventative vaccination, the arrival of H5N1 within these shores – especially if it became endemic in wild birds – might spell the end of free range and organic poultry. That is simply unacceptable.

Alongside the efforts of others we have now (June 2007) prodded Defra into producing a vaccination contingency plan as part of its avian flu planning. Our efforts have also borne fruit internationally where bodies such as the Food and Agriculture Organisation (FAO) of the UN and the world veterinary organisation (OIE) have also now endorsed vaccination. We represented the UK organic sector at an important international conference on vaccination strategy in Verona, Italy in March 2007.

“Vaccines are crucial to the development of sustainable disease control methods for livestock farming.” - Annual Report (2005) BBSRC Institute for Animal Health

H5N1 is a disease we will all have to learn to live with. It has swept westwards from S E Asia through Turkey and across the EU to surface in Fife (2006) and Suffolk (2007). By whatever mechanisms it is transported (wild birds, poultry products, human travel), it will be back.

An endemic disease

The UK Government's chief scientific adviser, Professor Sir David King says we must plan for H5N1 to be in this country for five years or more.

“We are talking about the possibility of this disease becoming endemic here in the UK as it did in China. It is a long-term factor,” Sir David told the BBC in February 2006.

This long-term threat though is not being matched by long-term solutions. The UK Government, and Defra in particular, appears permanently wedded to outdated, barbaric policies of culling and destruction without proper investigation of alternative, vaccination options.

All poultry will have to be kept indoors for the duration (five years or more...) is Dr. King's analysis; regardless of the fact that people increasingly want outdoor poultry products; regardless of the fact that indoor, industrialised systems seem to be closely implicated in the genesis and spread of this virus; regardless of the evidence that the transmission of the virus from wild birds to extensive, outdoor poultry systems is much less likely than was initially feared; and regardless of the fact that preventive vaccination provides a sure and scientifically robust way of protecting outdoor poultry from the virus.

The end of organic and free-range poultry

Without the use of vaccination and with all UK poultry locked up inside, the Government and Dr King are consigning organic and free-range poultry to oblivion. There has to be a better way...and preventive vaccination is it.

In 2001 The Organic Research Centre – Elm Farm spearheaded efforts to persuade the UK Government to adopt vaccination as part of its control programme against the catastrophic foot and mouth outbreak. We failed.

Official ruminations (and loud arguments against vaccination from the intensive livestock sector) kept vaccination in 2001 out of the UK's chosen armoury of controls against OIE (World Organisation for Animal Health) List A of highly contagious, trans-boundary diseases. That list contains foot and mouth disease (FMD), classical swine fever (CSF) and avian influenza (AI).

Without a planned vaccination strategy in place, the 2001 FMD outbreak directly cost the lives of 6.47 million UK farm animals (Defra figures) along with many others in the European Union. The European Food Safety Authority (EFSA) says the stark financial cost of the 2001 outbreak ran to some 12 billion Euros (£8.6 billion) across the European Union. Such huge costs in livestock lives and national exchequer expenditure could have been minimized by the modern application of vaccination alongside such techniques as DIVA (Differentiate Infected from Vaccinated Animals) techniques in turn allied to rapid in-field diagnostics.

Lessons learned?

Fast forward to 2006 and the threat of avian influenza. After a multitude of “Lessons Learned” enquiries and the passing of five years of scientific and research endeavour do we now have detailed vaccination plans/strategies in place in the UK to help control FMD, avian influenza and other OIE List A diseases? The simple answer is no.

Whole armies of scientists are employed across the world to develop vaccines and the systems with which to deliver and monitor them. The UK's Institute for Animal Health at Pirbright and Compton - which is at the forefront of this work - says the pinnacle of its research effort is the production of vaccines. But what use is scientific advance and high tech vaccine without the political and trade structures within which to use it?



Millions of doses of vaccines are stocked at great expense on chilled shelves waiting for a political decision to use them. The goal of all those involved in the animal health sector has to be a move away from barbaric slaughter and isolationism to the new realities of world trade and global travel, utilising new technological approaches to trans-boundary diseases.

It is alarming, that once again (following the debacle of FMD in 2001) the “stakeholder” voices being selected in the formulation of UK policy have not been truly representative. By accident or design, large-scale, indoor, industrial, intensive poultry representatives and the animal health sector have dominated the stakeholder base. That must change.

Defra must commit itself to draw up, at the very least, a draft AI preventive vaccination campaign ready for Autumn 2006. Alongside such a plan it must ensure that the UK has access to sufficient stocks of suitable AI vaccines.

When representatives from the small, organic and free range producers finally made it through Defra’s doors to a stakeholder meeting on June 2nd 2006 they forced preventive vaccine on to the agenda.

Avian Influenza: The urgent establishment of a policy for preventive vaccination for hobby birds and free-range birds

Defra to act now to:

- i/ agree a preventive vaccination plan for free-range and organic poultry, hobby birds and pure breeds;
- ii/ submit the plan to Brussels for approval in time for autumn 2006; there should not be months of delay in putting a policy in place
- iii/ ensure there is sufficient vaccine available to stock a preventive vaccination campaign

What bird keepers want is a policy. This is not vaccination now. These keepers have so far been poorly represented at meetings with Defra, and not in significant force when faced with the demands of the industrial poultry sector.

Stakeholders who have agreed a non-vaccination policy with Defra are from the “industrial” poultry industry: they prefer to use biosecurity. Keepers of cage and aviary birds are also happy to follow this policy. What they each have in common is that their birds are normally kept indoors.

Organic, free range and many hobby birds are kept outdoors. The birds are not normally housed except in overnight accommodation. In some cases, the birds live outside 24 hours a day. Welfare is severely compromised if the birds are to be ‘brought indoors’ for 30 days. In the case of an incidence of H5N1 there is no guarantee that 30 days is sufficient confinement. As of now in Germany, confinement continues to extend beyond three months and is planned to continue over the whole summer season.

During this key meeting Defra officials listened carefully. Amongst the stakeholders present in the room and around

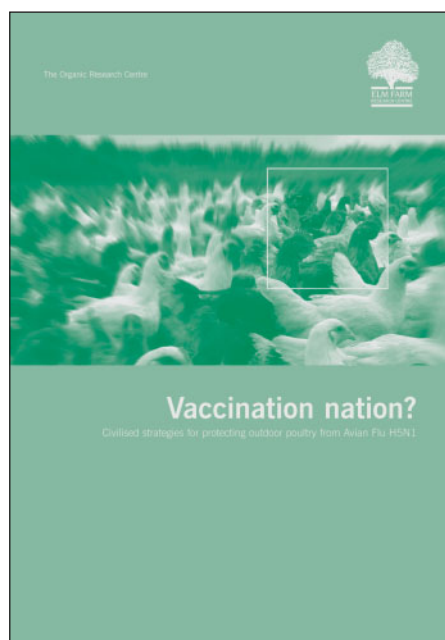
the country linked by phone conference, not a single voice was raised against the principle of assembling a policy on preventive vaccination. The danger is that in Civil Service eyes such stakeholder meetings in themselves constitute “job done”; “box ticked”. There is also the political reality that without an immediate crisis such as the H7N3 AI outbreak in Norfolk in May 2006 Ministerial attention and engagement is hard to capture. No crisis, no ministerial input, and when a crisis does develop Ministers become engaged in political firefighting. Never, it seems, is there time for proper discussion of novel approaches to disease control.

The continuing antipathy of Defra and the UK Government to well planned preventative vaccination as a precaution against the spread of H5N1 AI is outdated and misguided. Like many (but not all) Governments across the EU, the UK claims to be confident that slaughter and ring vaccination around any focus of infection will stamp out the disease.

Such a policy is flawed in at least two ways. It relies on rapid and accurate identification of infected holdings. This in turn relies on extensive, active surveillance using on-site diagnostics and epidemiological predictions of the onward spread of the virus – not an easy job when wild bird and extensive poultry and product movements are involved.

Once unprotected flocks are infected, huge amounts of virus are shed by infected birds, putting people as well as other poultry and livestock at risk. In the face of this, vaccination – where two doses of vaccine are needed over a four week period before birds are fully protected – used in a ring fence strategy will have an impact but is less effective than if it was used ahead of the emergency in a preventative way.

True preventive vaccination, targeted in intensive poultry areas and in organic and outdoor flocks is the only logical defence against H5N1. Vaccinated birds display far greater resistance to infection and if they are infected they produce and shed significantly reduced levels of virus.



Vaccination Nation - launched as a key policy document at The House of Commons, London, July 19th 2006.



High welfare minimises hock and breast burn in organic table birds

(First published October 2005).

The summer of 2005 saw debate in the UK national press about the production welfare contained in various systems of poultry production. The Organic Research Centre undertook a study at Sheepdrove Organic Farm to assess the impact of its welfare practices on bird welfare and finished bird presentation.

There has been coverage in the national press relating to the welfare of both broiler and organic chickens. In particular the Daily Telegraph (26/07/2005) published an article on the suffering of chickens on farms due to burns. This article stated that 'eight out of 10 supermarket chickens have suffered potentially painful chemical burns, either on their bodies or legs'.

This is certainly not the case at Sheepdrove Organic Farm where our research showed less than three out of 100 birds with any sign of such burns due to the extremely high welfare standards in place.

Large lesions, deep ulcers

The study in the Telegraph article quoted data on 'burns and marks'; scientifically referred to as contact dermatitis. Contact dermatitis can be superficial, like the 'marks' suggested in the study, but can also lead to large lesions with deep ulcers. Severe contact dermatitis can cause welfare problems, but small marks are not noted as a welfare issue.

'Marks' on the hocks of chickens are superficial and appear as small, light or dark brown patches on the rear of the hock. Burns are much larger and can cover the entire rear of the hock - perhaps as large as a two pence piece. These marks have a scabby and black appearance.

The data from the article stated that 80 per cent of the British Farm Standard broiler chickens inspected from supermarket shelves had marks and 82 per cent had burns. Of these animals 42 per cent suffered from medium or large burns. The article went on to relate data on organic birds as well; stating 42 per cent of the organic chickens observed had burns.

Study at Sheepdrove

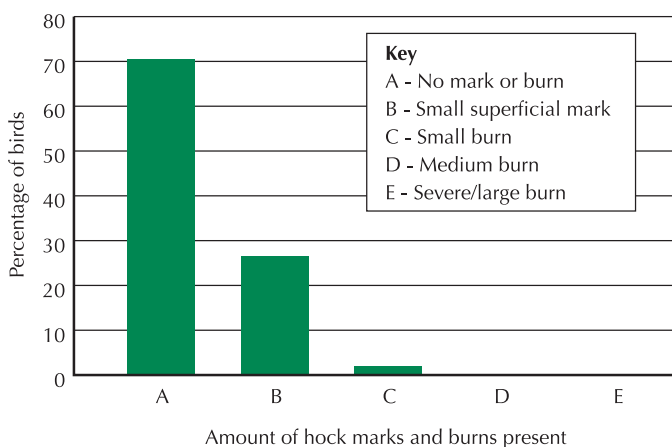
The Organic Research Centre - Elm Farm has carried out extensive poultry research at Sheepdrove Organic Farm which has involved the recording of marks and burns on the bodies and hocks of organic table birds. In our study of over 800 birds, ninety seven per cent had no burns and only 27 per cent had superficial marks on the hocks. Less than three per cent of all the birds sampled exhibited small or medium burns. None of the birds in the sample displayed any evidence of marks or burns on the breast - a severe form of contact dermatitis.

The results, published in the article, give a combined figure for the percentage of burns and marks encompassing data on leg and breast burn. As the Sheepdrove birds suffered no breast burns the overall figure is the same as that for hock burn, with just twenty seven per cent of the Sheepdrove birds marked and less than 3 per cent exhibiting burns.

Table 1. Prevalence of hock marks and burn in Sheepdrove sample birds

Burn type	Percentage of burns
No mark or burn	70.5
Small superficial mark	26.8
Small burn	2.3
Medium burn	0.4
Severe/large burn	0.0

Figure 1. Prevalence of hock marks and burn in Sheepdrove sample birds



The results in this study suggest good hock welfare for the Sheepdrove flock as there are very low levels of hock burn. This reflects the conditions on the farm which help promote positive welfare amongst the free range birds with plenty of raised perches and enhanced space.



100% Organic ration works for organic table birds

Poultry researcher Josie O'Brien and director Lawrence Woodward present some results from a series of Organic Research Centre trials that are questioning the need for any continuance of the conventional feed derogation in UK organic poultry production. This article was first published in January 2005. In fact the derogation was not removed in August of that year. Feed derogations remain in place for poultry until at least 2011.

Currently the use of up to twenty per cent of non-organic components is allowed in the feed ration of organically certified table birds. Although this derogation is supposed to be removed in August 2005, there is mounting pressure to allow it to continue in some form. The derogation was introduced due to concerns that, the bird's nutritional needs could not be met by certified organic sources alone and therefore their health, welfare and growth would be compromised.

The primary concern relates to amino acid levels and in particular methionine. There was, and still remains, a perception that the ingredients generally used by the sector to supply methionine do not have a suitable organic substitute; or at least one that is easily accessible at a reasonable price.

In fact none of these concerns had been adequately tested prior to the issuing of the derogation and even as we approach August 2005, the assumptions on which they are based have not been thoroughly scientifically examined. To address this, the Organic Research Centre has established a series of trials using a commercial organic table bird enterprise.

The trial reported here compared a one hundred percent organic ration with a commercially available ration using eighty percent organic ingredients and the twenty percent conventional allowance.

Two strains of birds were used - ISA 257 and Colourpac - in a commercial operation supplying supermarkets. 2000 birds were used in the trial and we studied a range of agronomic and economic factors including bird weight, dressed weight, carcase downgrading conditions, feed consumption and costing, and the impact on the bird's health, welfare and behaviour. Data was collected on two batches of birds over the periods March to May and April to June 2004.

The birds were housed in two identical brooder houses in batches of 500. The birds' live weights can be seen in Table 1.

A hierarchical model was used to test for significant differences in final live weights. There was no significant difference between the two genotypes. There was, however, a statistically significant difference between the two ration types ($p < 0.05$) with a significantly lower average weight for the birds on one hundred percent ration; there was an average difference of 114 grams.

However, in production terms, this difference is very small. The similarities in the population distributions and ranges of weights for the two genotypes and two ration types are more striking.

Turning to dressed carcase weights; there was a statistically significant difference between the two genotypes ($p < 0.05$) with a significantly higher average weight for Colourpac birds, (an average difference of 37 grams). There was also a statistically significant difference between the two ration types ($p < 0.05$) with a significantly lower average weight for the birds on one hundred percent ration (an average difference 65 grams).

Table 1: Weekly average weight (g)

Age	80% ration		100% ration	
	ISA 257	Colourpac	ISA 257	Colourpac
Day Old	45.82	44.79	45.91	44.80
Wk 1	117.89	122.84	103.90	109.87
Wk 2	264.99	271.75	215.87	240.34
Wk 3	438.99	443.20	356.81	392.67
Wk 4	630.08	645.29	512.77	583.33
Wk 5	907.72	960.63	780.14	861.73
Wk 6	1240.31	1276.25	1064.22	1140.24
Wk 7	1431.49	1552.05	1314.42	1423.85
Wk 8	1872.39	1910.03	1758.76	1817.69
Wk 9	2186.24	2225.54	2048.13	2104.10
Wk 10	2483.66	2460.98	2339.91	2375.45
Weekly average weights (g) of ISA 257 and Colourpac birds on 80 per cent and 100 per cent organic rations.				

As with live weight, these differences are small and in the context of considering the validity of any derogation, the similarity of the performance of the ration types is more notable than the differences.

However, there was a difference in feed consumption, between the two rations with a clear trend for a lower consumption on the one hundred percent organic ration

Table 2 shows the cost (£/kg) of the trial rations and the estimated cost that would have been incurred if the feed had been bought in 'bulk' production amounts.

Taking all these factors into account it is clear that in terms of £/kg of dressed carcase weight the birds on the one hundred percent ration were actually cheaper to produce, primarily due to the lower feed consumption.

This trial revealed no overall health, growth or welfare issues when comparing the two rations, contrary to suggestions that there might be due to the assumed nutritional inadequacy of the one hundred per cent organic ration.

Table 2: Estimated cost £/kg dressed carcase weight

		Trial Costing	Bulk Costing
Trial 1a	80% Ration	0.90	0.84
	100% Ration	0.87	0.81
Trial 1b	80% Ration	1.04	0.97
	100% Ration	1.03	0.96



Multi-age flocks – are they a viable solution to end weight variability?

(First published December 2006.)

A common problem when keeping organic table birds is variability in final bird weights within a batch of chickens. Most organic producers will find that their birds are subject to high levels of environmental variation during their growing life, leading to a real impact on and variation in final live weight. What then is the feasibility of running organic table bird flocks containing multi-age birds? An on-going Organic Research Centre trial is endeavouring to find out.

When compared to conventional birds the population distribution of finished organic table birds tends to be more of the classical bell shape, containing a wide distribution of birds from small to large. This results in a variable income for the farmer from batch to batch. A suggestion for combating this problem is that beyond the minimum age limit, birds are only selected for slaughter if they are above a critical live weight.

Multi-age flock behavioural benefits

One possible way to grow birds to weight is to grow them in a multi-age flock. This was a possible solution investigated at Sheepdrove Organic Farm. Does this make sense in terms of chicken behaviour?

Modern domestic chickens are all descended from the red jungle fowl (*Gallus gallus*) which still occurs in wild flocks. These birds tend to live in small family groups of a cock and a few hens. It has been shown that feral domestic fowl show a high level of similarity in their behaviour to that of wild red jungle fowl (Dawkins, 1989). So it is feasible to suggest that modern chickens would cope in a multi-age flock. It may even be beneficial to younger birds within the flock, as on entering a flock they would have some older cohorts from which they could learn, through observation and imitation learning techniques.

A question of welfare

An “artificial” multi-age growing flock will differ greatly from an established feral flock of chickens or a natural flock of red jungle fowl. The nature of growing birds for the table means they have short life spans, not ever reaching full maturity and therefore any multi-age flock would not have truly mature adult birds within it. In addition there could be a risk of the smaller/younger birds suffering from bullying by older/larger individuals. This could manifest as feather pecking, which is problematic due to its cumulative nature; once red skin on the bird is exposed this heightens pecking rates. Another bullying concern is ability to obtain resource access or ‘gate keeping’ by larger/more dominant birds. This could be for perch space, for pop-hole access or even more importantly for access to feed and water.

A pilot trial

Due to the perceived problems and welfare concerns with having a multi-age flock, it was suggested that a small,

closely monitored pilot trial be undertaken as a starting point to assess any potential for reducing performance variability. A pilot would also help establish the relative impact of these variables, and test the feasibility of this production style.

The project’s pilot shed has the capacity to hold 100 birds. Added to this shed each week are 10 birds at 21 days of age. Chickens were then added to the shed each week until the first batch reached normal slaughter age (77 days). In total, eight batches of birds were added to the shed. Each bird was leg ringed so they could be individually identified. Throughout the pilot, a variety of data was collected including weekly weight data, gait score and cleanliness prior to slaughter, and health and general welfare. The birds were also observed for short periods each week to ensure negative behavioural interaction was not taking place. The chickens were slaughtered once a week. Each week on the day prior to slaughter any chickens beyond the age of 77 days old were weighed. If these chickens were above the threshold weight of 2.7 kg they were selected for slaughter the following day.

Initial findings and limitations

The initial findings have been good. Very little negative interaction was identified and it has been noticed that younger/smaller birds defer to older/larger birds with regards to access to feed and perches etc. These younger birds occasionally got pecked as a warning but no physical damage resulted. In addition, all the birds grew well with most batches taking 3 weeks for all the birds within a batch to reach 2.7kgs live weight limit.

The pilot illustrated none of the possible welfare concerns and was able to achieve consistency in final live weight but it did demonstrate some practical limitations. One of the main limitations of the system was the time input required. The need to weigh the birds prior to slaughter each week made the process very labour and time intensive. Also the birds had to be leg-ringed so their batch and therefore age was easy to determine. This too was very time consuming, and added an extra step when catching the birds as they need to be removed. A large logistical problem with the trial was that in order not to have to starve all the birds each week the birds due to be slaughtered needed to be weighed and separated in a non-feed lairage area the night before they were slaughtered. This meant that a second lairage shed was required. Addressing such limitations will be the subject of a future trial.



Laying eggs for Waitrose – an organic supply chain

(First published July 2006).

A feature of UK supermarket shelves is the diversity of egg types they contain. Barn laid, free range, organic, woodland reared, white, brown, blue, ducks eggs, quails eggs – you name it and the supermarkets have added it as a premium egg product. How though is the organic egg supply chain managed for a major national retailer and indeed how “organic” is it? An Organic Research Centre study in 2006 set out to answer such questions.

Nowhere is the premium egg choice more pronounced than at Waitrose. Its national chain of 180 stores stock no conventional, intensive, battery eggs. Alongside premium, barn-laid eggs, its key product is free-range Columbian Blacktail (CBT) eggs. A dozen medium CBT eggs (2 x half dozen boxes) cost £1.78. Alongside sit organic CBT eggs, retailing at £3.18 per dozen, medium. Waitrose egg sales currently break down to 70 per cent free range, 20 per cent organic, 8.5 per cent barn and 1.5 per cent non-hen (duck, quail etc.)

At 26.5 pence an egg, the price and the apparent scale of the Waitrose organic operation beg the questions – what am I getting for this premium price, where are all these organic eggs coming from and what checks are in place to ensure their proper “organicness”?

The sole supplier of eggs to Waitrose is Stonegate, the nation's second largest egg producer and packer. It has an annual turnover exceeding £100 million. Policing of the supply chain is delegated by Waitrose to Stonegate and the trading relationship is so close that Stonegate is now building a dedicated packing plant for Waitrose at its Lacock headquarters in Wiltshire. Waitrose is the only national supermarket chain supplying organic eggs to Soil Association (SA) standards, widely recognised as being the toughest available set of UK rules. Two years ago, SA certified suppliers were dropped by Sainsbury's.

Stonegate describes the CBT business as follows -

“This is a good example of Stonegate working with their customers at a strategic level to add value and points of difference. Columbian Blacktail is a brand developed in a joint initiative between Stonegate and Waitrose and is now used exclusively by Waitrose as the brand on their own label eggs.

Columbian Blacktail hens are vigorous, hardy, robust and thrive outdoors. They are bred and farmed in traditional manner with increased space to live and roam, in line with the expectations of Waitrose customers. It is a unique scheme in the UK, and we believe the world, in terms of delivering continually higher standards and fair returns for all parties involved.”

The Columbian Blacktail hen is a cross between Rhode Island Red, Sussex and other “hardy breeds” and was first bred 15 years ago for this Stonegate/Waitrose enterprise.

Strong growth

The CBT operation comprises over 40 organic egg producing sites/farmers and 90 free range suppliers. The organic CBT market at Waitrose has, until recently, been growing at 25 per cent year on year. This has now slowed slightly to 17 per cent, compared to a growth in general egg sales nationally of about 2 per cent. It is an impressive performance and a measure of consumer hunger for wholesome, organic eggs. When demand outstrips supply, for the moment, shortfalls are made up by sourcing other non CBT organic eggs from farmer suppliers (clearly labelled) operating to Organic Farmers and Growers (OF&G) standards.

A typical Waitrose organic producer is Rachel Rivers who runs two 2000 bird units in Wiltshire. The sheds sit in large pasture fields, far exceeding the SA minimum requirement of 100 metres of outside range. The egg enterprise is part of a long established organic unit running to some 1200 acres. Until recently it had a 200 cow dairy unit, but with the realisation that two eggs were now worth more than 1 litre of milk, the cows have gone. The weekly income from 4000 laying hens is far greater than the recent dairy receipts; another shed of 2000 birds is planned.

Typical daily lay peaks at about 1850 eggs per 2000 bird unit, giving an average of 2000 dozen a week. Over the year of lay the CBT hens of Rachel Rivers are expected to give about 285 eggs each. Rachel is a star performer for Stonegate, her birds lay a high proportion of large eggs with few breakers and therefore generate a high return.

The birds are fed an 85 per cent organic ration with the aim of working towards 100 per cent organic rations when available and when required by certification. The feeders are run 9 times a day for 14 minutes.

All hens on the farm are currently from the Stonegate hatchery near Peterborough (a non-organic hatchery) located in the vicinity of the parent flocks. The day-old chicks are raised at a specialist rearer and then moved at 16 weeks of age to this laying farm. By Spring 2007, all of Stonegate's organic CBT layers will be sourced from dedicated organic rearing units (SA certified).

Standard light regime

As an aid to nesting and egg laying the standard light regime for the CBT organic layers is 16 hours of artificial light a day. Most CBT units are fitted with solar and wind power generators to supply electricity for the lights, feeders and egg collection machinery in a bid to be energy efficient and eco-friendly.



Stonegate operates a Guild of CBT producers which is run by a committee including 4 elected farmers. It holds technical meetings during the year. Producers are “policed” by numerous inspections including Stonegate, the SA and RSPCA Freedom Foods. Due to the integrated nature of the business with Stonegate it is simple to apply a computed profile of production to the age and condition of the supplying farmer to assess the likely predicted level of egg production at any one time.

Such data can be used to detect any perceived under or over supply which might indicate additional egg flows from outside the CBT flock or a diversion of CBT eggs to non – Stonegate marketing, which is expressly forbidden in the contract. Due to the current undersupply of CBT eggs, Waitrose is obviously anxious to access all CBT output.

Fully traceable

Scrupulous attention to detail and record keeping is also much in evidence at Stonegate’s packing headquarters at Lacock. This unit only grades and packs barn, free range and organic eggs. Different coloured egg trays indicate the type of eggs being handled on to the grading line in discrete batches.

The paper trail that accompanies the eggs from the farm includes all organic certification details, dates of lay, numbers of birds and their age along with flock number and producer number. The grader’s computer produces a detailed breakdown of how the batch is graded and analyses quality elements, whilst in the final packing stage all eggs are coded on the shell with inkjet and boxes are labelled with the same information of producer and batch, best before and display dates.

The paper chain allows full traceability back to individual farms and sheds for the purposes of quality control, food safety and organic audit.

All collected data is freely available and subject to unannounced Egg Marketing Inspectorate visits along with the whole packing plant operations. As with the individual producing farms the Soil Association also inspects the Lacock plant, as does the British Egg Industry Council Lion mark inspectorate. Waitrose runs an independent audit of its egg supply operation every 18 months.

It is interesting to note that until recently all control of egg organic standards, including record reconciliation at egg packing stations such as Lacock, has been the delegated responsibility of the organic certifying bodies – such as the SA. To date organic eggs have been specifically excluded from the UK’s Egg Marketing Regulations (EMRs).

New rules being brought in by the Government’s chief egg marketing inspector are set to change that exclusion. Because of the latest changes to the EMRs, primarily to facilitate traceability, record keeping for all marketing terms, including organic, now falls within the jurisdiction of the EMI, says chief inspector Bruce Pattern. In recent weeks he has been notifying the industry of the change to include organic eggs in future record reconciliations to apply the same rigour of audit across all egg types.

Wider industry standards

The SA organic egg standards state that the basic maximum stocking rate for laying birds is 500 in any one housing unit. “Occasionally permission to allow up to 2000 birds is permitted, but a 100 metre ranging distance must be supplied outside and the birds are not allowed to be housed at a density of more than six hens per square meter,” says the standard. To achieve such a permission from SA Certification, producers must be able to demonstrate high levels of bird welfare along with good environmental conditions inside and outside the housing and in the ranging area.

Economic pressures on Soil Association certified producers appear to have forced this 500 bird maximum to become a de facto 2000 bird maximum, with the regular (routine) granting of such permissions. It is the view, however, of EFRC that well designed and managed 2000 bird organic layer systems are welfare friendly. The most important outcome must be the good health and welfare of the hens.

The Soil Association 500 bird maximum appears to have been superseded through the development of commercial best practice and therefore needs to be clearly updated to state the “new” 2000 maximum in its published organic egg standards.

Under SA rules organic layers must be fed with a minimum of 85 per cent of their feed grown to SA organic standards. The ambition is to get to 100 per cent as soon as possible. The practice of de-beaking (beak trimming) is absolutely prohibited in the SA standards as is the routine use of antibiotics.

It is clear that committed Waitrose/Stonegate producers such as Rachel Rivers do adhere closely to the SA standards as interpreted for this large-scale operation.

Elsewhere, other UK organic certifiers allow larger organic flocks. The Defra organic branch confirms that based on UK standards, Organic Food Federation (OFF) and OF&G certified flocks contain between 6,000 and 12,000 birds – greater numbers than some “conventional” flocks and at great variance to common consumer perceptions of organic egg production. Such large flocks will continue to be allowed in the UK until at least 2010.

Batteries not included

In 2003 the Soil Association published a study of organic farming and animal welfare – Batteries not included. Its key conclusions for organic egg production were a need “to limit and phase out current derogations given for the sourcing of non-organic day-old chicks and larger flock sizes”.

Batteries not included stated that “the larger the flocks, the greater the pressure on available pasture, the greater the likelihood of a parasite build-up and the greater the likelihood of bullying. When flocks are large, some birds never venture outdoors and the more aggressive birds control the use of pop holes and chicken runs.”



When Batteries not included was written the ambition was that by January 1st 2004 organic standards would stipulate that poultry farmers must acquire their stock from organic rearers or rear the birds themselves. Two years further on and this standard has yet to be fully implemented.

Two tier organic?

Also in 2003, a technical manager for the then Stonegate rival Deans Foods Ltd, Lorna Aucott, carried out a Nuffield Farming Study on The feasibility and future of organic egg production. She calculated that at the time there were 1 million organic layers in the UK, the vast majority certified by OFF and OF&G.

She observed supermarket domination of organic sales with an 82 per cent share of organic egg sales. Thus she summarised – “the emphasis for egg companies has been to develop production units that are economically viable, meeting the organic standards but at the same time fulfilling the volume and value aspirations of the supermarkets....a two tier organic system is developing; those supplying to supermarkets with commercial constraints versus the purist supplying direct to niche outlets.”

Waitrose and Stonegate assert that their organic egg supply chain represents a unique third approach (tier), sitting between mass supermarket supply and the niche outlets of farm shops etc.

Lorna Aucott also identified a push from retailers for a much greater proportion of larger eggs to be delivered from organic flocks – “because this is what the organic consumer wants to buy”. This presents a particular challenge in meeting the higher health and welfare expectations of the organic system whilst at the same time pushing layers to produce large eggs for market. [Waitrose’s ‘whole carcass’ philosophy has enabled the introduction of a Medium 12 pack, thereby utilising the majority of the eggs laid.]

After studying organic egg production in Germany, Austria and New Zealand her report also concluded that layer systems do not fit easily with organic ideals and the notion of integrated systems. In the UK we have dedicated poultry units and a monoculture. “ In all my travels I have seen only one fully integrated organic egg unit where the laying hens are an important part of the organic rotation – and that was in New Zealand.”

Stonegate and Waitrose deserve credit for their commitment to poultry welfare and quality egg supply. Between them they do currently represent the best supply system of organic eggs for UK supermarkets. They freely admit there is continuing work required to develop and enhance the standards further and they are working with all stakeholder groups to achieve this.



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