SRDP Farm Advisory Service

The Farm Management Handbook

Poultry

The UK reference for farm business management

SAC CONSULTING

Part of Scotland's Rural College (SRUC)

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This document is an updated section of the Farm Management Handbook. It was updated on 28th of June 2024. You can find the complete handbook, as well as other updated sections, on the [FMH section of the FAS website](#).

Introduction

Up until recent months, the British poultry sector had been facing one of the most challenging periods in many years, with Avian Influenza (AI), spiralling production costs and squeezed prices threatening livelihoods of many producers. Thankfully, while AI continues to pose a threat, cases are much reduced, inflation shows signs of reduction, and producers have seen a 31% increase in prices (free-range) between December 2022 and December 2023. This is welcome news for the sector, which has seen a slowdown of businesses exiting production, and positivity about increasing output to meet strong consumer demand.

Changes to accreditation schemes and production standards are a main area of current debate in the sector, namely RSPCA laying hen standards and Lion accreditation. Industry bodies are pushing that changes to schemes are based on research evidence and consulted on with industry to ensure feasibility and sufficient time for adaptation. Following the announcement of enhanced RSPCA accreditation standards in November 2023, initial requirements for verandas have been put on hold pending further research, and other measures relaxed or phased in more slowly to reflect the scale of investment required. A recent survey by BFREPA highlighted issues with packers holding Lion accreditation, restricting producers' ability to switch contracts without losing certification. The same survey indicated that 89% of producers are part of Lion and 86% RSPCA Assured (see The Ranger for more information). This is one of various issues being explored in ongoing consultations by Defra into fairness in egg supply chains.

Despite voluntary commitments to cage-free egg production by 2025, specific details remain unclear. Alongside this pledge, Defra have announced consultation on a new tiered system of welfare labelling for the egg, broiler and pig sectors, which includes tiers equivalent to current cage production. The aims of this are to increase transparency of production standards to consumers, and better reward producers through markets. Further details are expected in coming months, and it would remain to be seen whether Scotland’s labelling systems follow suit.

Chicken Egg Production

In 2023 the UK produced 936 million dozen eggs, bouncing back 7.6% from 2022 which saw the lowest production since 2016 (Defra, 2024). Free-range egg production rose 4.8% in 2023 from 2022 output, representing 59.8% of total production by the end of the year. This reflects progress towards the industry cage free target by 2025, with enriched and barn eggs now comprising 36.3% of total shell egg production. Organic production increased by 11.7%, now accounting for 3.8% of the total market. The table below shows egg production by system as a % of total egg production by year.

	1965	1980	2010	2023
Cage*	53%	95%	50%	23.4%
Barn	37%	4%	5%	12.9%
Free range	10%	1%	42%	59.8%
Organic	-	-	3%	3.8%

* enriched cages became a legal requirement for cage systems for laying hens in 2012.

Producers have also seen an increase to farmgate egg prices through 2023, from a free-range price of 114.6p/d in Q4 2022 to 150.7p/d in Q4 2023, representing a welcome 31% increase. This follows a period of rising input costs exceeding price rises from packers.

Independent egg producers can sell their eggs via the large egg producers/packers, or through local businesses (e.g. hotels, farmer's markets). Flock size and thus scale of egg output will probably govern which route an egg producer favours. See Livestock section for information on poultry keeping regulations.

Egg grading

Egg grading percentages are dependent on a large number of variables, e.g., lighting programmes and feed specifications and can be altered by changing the feeding and lighting during rearing and the feed specifications during lay. Most major breed management manuals provide suitable information. The following table shows the egg grading ratios as a percentage with weight for each grade.

	Ratio	Grade A weight
Very large	2.0%	>73g
Large	43.0%	63-72.99g
Medium	45.0%	53-62.99g
Small	3.0%	<53g
Seconds	6.0%	-

Egg price indicators

	Pence per 6 pack			
	Very large	***Large***	***Medium***	***Mixed weight***
Cage	-	119	-	82
Barn	-	-	-	-
Free range	256	203	145	140
Organic	375	305	267	252

Source: Leading supermarkets average price for standard 6 packs (June 2024).

Quality assurance
The predominant and most recognised hen egg assurance scheme is the British Lion Quality Code of Practice, which covers 90% of UK egg production.

For updates on changes to the Code of Practice for Lion Quality eggs visit the British Egg Industry Council website.

Other assurance schemes, such as Freedom Foods free range egg production, or Soil Association organic egg production, are available.

Broiler Meat Production

The UK produced 1.79 million tonnes of broiler chicken meat in 2023, an increase of 0.4% from 2022. With an increase in broiler placings of just 0.2%, the statistics suggest that broiler production has stabilised in the 3 years. This is in contrast to layer production, which saw contraction in 2021-22, but is beginning to expand again.

Most broiler chickens are reared conventionally, with free range and organic production accounting for about 5% of the market. Conventional rearing typically means in light-controlled houses but providing natural daylight through windows (along with other types of environmental enrichment, such as perches and bales of wood shavings/straw) is becoming increasingly popular. Both male and female broiler chicks grow rapidly, so either or both sexes can be reared, depending on what target slaughter weight is desirable. With conventional rearing, the average liveweight at the point of slaughter (at around 36-40 days of age) is 2.2 kg (Defra 2020b).

Legislation governing the keeping of conventionally reared broiler chickens (Council Directive 2007/43/EC) stipulates the maximum stocking densities allowed but note that the UK does not permit the highest stocking density of >39-42 kg/m^2 (Defra 2011). For more information on housing space requirements see the Land and Buildings section.

Many broiler producers sell their produce under the Assured Chicken Production scheme, which is part of the Red Tractor farm assurance scheme, to ensure food safety and traceability.

Useful Poultry References

- British Poultry Council (BPC)
- BFREPA (British Free Range Egg Producers' Association) – www.theranger.co.uk
- USDA 2019, Livestock and Poultry: World Markets and Trade.
- Council Directive 1999/74/EC Laying down minimum standards for the protection of laying hens, pp1-5.
- Council Directive 2007/43/EC Laying down minimum rules for the protection of chickens kept for meat production, pp1-10.
- Defra 2011 Interim guidance for keepers of conventionally reared meat chickens
- Defra 2022. United Kingdom Egg Statistics
- Defra 2022b. United Kingdom Poultry and Poultry Meat Statistics
- Scot Gov Eggs

Laying Hens - Free Range

PHYSICAL DATA

Source:	Hyline Brown Management Guide 2019
Egg stock	Brown
Body weight at 17 weeks (kg)	1.40-1.48
Body weight at 70 weeks (kg)	1.91-2.03
Age at 50% production (age, weeks)	20
Peak production (%)	95-96
Laying period:	
Pullets housed (weeks)	17
Pullets point of lay (weeks)	18
Weeks in lay per annum adjusted for downtime	48.5
Bird laying cycle (week 18 to 72) (eggs)	319-330
Adjusted egg production (bird/annum) *	272
Mortality:	
Livability during lay (%) - refer to breed management guides	0.97
Stocking density (birds/ha)	2,500
Feed:	
Feed use (16 to 18 weeks) (kg/hd)	1.10
Feed use (19 to 72 weeks) (kg/hd)	41.664

* Adjusted for 365d, mortality, downtime (pullet to lay, washing)

Note:

Other bird expenses include veterinary treatments, disinfectants, litter, dead bird disposal and range maintenance.

Laying Hens - Free Range

GROSS MARGIN DATA

	£/1000 bird/annum Wholesale	£/doz Wholesale
OUTPUT	£	£
Eggs sales @ £1.523/doz	34,536	1.52
Old hen value less catching cost	181	0.01
Less:		
Pullet purchase @ £5.43 per bird	5,430	0.24
	29,287	1.29
VARIABLE COSTS		
Concentrate feed purchased @ £320/t	12,061	0.53
Other bird expenses	8,152	0.38
Total Variable Costs	20,213	0.91
GROSS MARGIN	9,074	0.38

Sensitivity ±	**Change in Gross Margin/1000 birds/annum (£)**
£0.10/doz eggs sold	2,268
£10/t feed	377
1% increase in mortality at point of lay (£/1000 birds)	91

Basis of data:

1. Egg price based on BFREPA UK average packer to producer free range price, as at June 2024.
2. High numbers of second grade eggs may be penalised and devalue the average price received.
3. Pullet price based on estimated BFREPA price (16 week fully vaccinated 3,000 bird order), June 2024.
4. Producers selling direct to market will incur additional packaging, grading and marketing costs as well as increased transport, labour and administration costs.

Grading, packaging and marketing costs vary significantly from business to business depending on the degree of automation, the size of the packing operation and the requirements of the customer being supplied.