

Marketing prime lamb



Contents

- **3** Introduction
- 4 Who are the customers?
- 6 Lamb carcase classification
- 8 Marketing decisions
- 10 Maximising financial returns
- 14 Selecting lambs to market
- 16 Classification examples

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Introduction

English sheep farmers currently market around 8.5 million sheep a year, producing 175,000 tonnes of sheep meat for domestic consumption and export.

The way to maximise financial returns is to produce and sell the type of sheep buyers really want and are willing to pay the most money for.

It is far better to identify a potential market/s first and then produce animals to suit their specific requirements rather than producing a batch of lambs and then trying to find a customer.

The key is to sell lambs when they are ready. Do not wait for that 'special' date when, historically, the first draw was made. Improvements in breeding and grassland management have led to animals being ready earlier than in the past.

While there are many market specifications for lamb, including maximum and minimum weight bands, more than 80% of meat buyers are looking for animals that classify as R3L.

While weight is obviously important, sending animals of the right conformation and fat score is just as vital. Frequent, careful handling of the lambs is essential to ensure each animal has reached its full potential and target specification.

The key issues producers face when marketing prime lambs are covered in this manual. Those that can embrace and act on all these areas will be rewarded with good returns.



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Who are the customers?

The consumer

Market research shows that consumers want lean and tender meat which is safe to eat and from a trusted source. Above all, they are looking for a consistent product that gives them the same satisfying experience every time they buy, cook and eat it. Research shows that, while consumers perceive lamb as being tasty, they also believe it can be expensive and fatty. The industry must work hard to provide consumers with a product that meets their needs.

The retailer

Consumers buy their meat from a range of retail and foodservice outlets. Supermarkets now sell more than half the sheep meat sold in England. Each outlet knows exactly the type of meat it requires to satisfy its customers' needs, based on detailed knowledge of their previous buying behaviour.

The meat processor

The sheep farmer's direct customer is the lamb buyer, based either at a livestock market or at an abattoir, if selling deadweight.

Each buyer will have different specifications for the lambs they want in terms of weight, conformation and fat class. The prices offered by different abattoirs may vary for the same animals and will depend on the requirements of their customers further down the supply chain.

Abattoirs are looking for animals that:

- Are quick and easy to process
- Arrive at the right time, on the right day
- Are clean
- Hit the correct weight specification
- Meet the correct carcase and fat specification



Source: Kantar Worldpanel

Figure 1. English prime lamb – Retail volume share 2021 (% tonnes)



Typical specifications

Each market has different requirements and sheep farmers should target those that are looking for the type of carcase they can produce consistently and at a profit.

Do not produce a batch of finished lambs and then try to find a market for them. It is far better to identify a potential market/s or customer/s first and then produce animals to suit their specific needs.

These typical specifications are subject to seasonal and regional variations. Most deadweight markets pay up to 21 kg.

43% of prime lamb fails to meet ideal target market specifications



Figure 2. Percentage of GB lambs falling within and outside target specifications in 2020

Main moulest	Carcase weight (kg)	Classification		
Main market		Conformation	Fat	
Supermarket	16–21	E, U, R	2, 3L, possibly 3H	
Butchers	16–25	E, U, R	2, 3L, 3H	
Exports	9–21	E, U, R	2, 3L	

Warning! There is very limited demand for conformation P, fat class 4H and 5. Animals of these classifications will be traded at discount prices.

The Red Tractor logo is used to market assured lamb to consumers.

If the stock has been produced on a certified farm assured holding and passes through an assured supply chain, the product is eligible to carry the Red Tractor logo on the pack. All beef and lamb carrying the Red Tractor logo can be traced back to the farms the livestock came from. Consumers can be assured that the farmers and suppliers who produce beef and lamb for both schemes meet comprehensive standards covering hygiene,

safety, environmental protection and animal welfare at every stage, from farm to fork. Compliance with these strict standards is regularly checked by independent auditors.



Table 1. Typical target requirements for different markets

Lamb carcase classification

The current system for classifying carcases in the UK and Europe uses the EUROP grid for conformation and a numeric assessment for fatness (classes 1–5).

Combining scores for conformation and fat determines the market most suited for each type of carcase. Aim for most animals to fall within the green shaded area, where there is greatest demand and highest prices.



Market signals



Little or no demand Discount prices Poorest returns

Average prices Moderate returns

High demand Premium prices Best returns

Improving conformation Conformation is determined by a visual appraisal of shape, taking CONFORMATION CLASS

into account carcase profile and fullness of legs. No adjustment is made for the influence of fat on overall shape.



FAT CLASS

Increasing fatness

Fat is determined by visual assessment of external fat cover. There are five main classes. Classes 3 and 4 are subdivided into L (leaner) and H (fatter)

3L	ЗH	41	4H	5

Marketing decisions

Liveweight or deadweight?

Around 55% of finished lambs in Great Britain are sold through livestock markets, while the other 45% are sold on a deadweight basis to abattoirs. Some producers prefer the competitive nature of selling live animals through an auction ring. There are advantages and disadvantages to both and some prefer selling through a marketing group that can offer independent advice on the best outlets.

Exports

Export markets for English lamb have increased over the past few years, within Europe and beyond, including countries in Southeast Asia and the Far East.

In 2022, about 27% of the lamb produced in the UK was exported, including processed products. Demand varies from country to country in terms of carcase selection (conformation, fat class and weight), choice of cuts and Halal slaughter.



Source: IHS Maritime & Trade - Global Trade

Figure 3. Lamb exports (fresh/frozen) by percentage share (2021)

Extra care has to be taken when targeting export markets, as adverse currency fluctuations outside the farmer's control can quickly erode any potential financial advantages over selling into domestic markets. Sales of premium lamb from England to European foodservice are increasing fast and English product now features on the menus of some of the best restaurants in Italy, Spain, Portugal, Cyprus, Belgium, the Netherlands, Switzerland, the Czech Republic, Denmark and further afield.

Plan ahead

As prices fluctuate depending on the season, it is important to plan ahead. Target an ideal time for selling, based on expected feed, labour availability and market prices, then work backwards to decide the best time to lamb.

Regular handling and weighing, flock monitoring and good feed management will bring lambs forward to the standard that will suit buyers' needs more precisely.

Do not keep lambs any longer than is necessary, as each day they stay on the farm costs money but may not yield any greater financial return. Latest evidence suggests it costs four times as much energy to put on fat than lean meat.

Lamb deadweight price calculator

Compare the prices offered by two abattoirs with the Deadweight Price Calculator, taking into account different dressing specifications, abattoir charges and transport deductions. Answer a simple series of questions and the converter does the rest. Visit ahdb.org.uk/ lamb-deadweight-price-calculator

Present clean animals

Lambs in a dirty condition will not be accepted for slaughter due to strict food safety and hygiene regulations. A dirty fleece is worth less than a clean one and it can contaminate the carcase.

Ensure sheep are clean before marketing.

Does weight pay?

Feed lambs to reach the desired weights for the target market and no more. Driving for heavier weights is counter-productive as lambs weighing more than 21 kg will usually attract a penalty when sold liveweight or deadweight. The carcases can become overfat, which consumers do not like. Taking sheep to higher weights is also inefficient as feed costs increase per kilogram produced. They may also be eating feed that other lighter lambs may need, to reach their ideal finishing weight.

Healthy lambs produce

Underlying health issues affect lamb growth rates and influence returns, as it takes longer for animals to be marketable.

Worms are a major threat to the performance and health of lambs and controlling them is vital. Anthelmintics currently give good control in most areas, but wormer resistance is growing across England.

Use risk assessment strategies and tools such as faecal egg counts before treating and follow good drenching practice.





Acceptable (A) and unacceptable (B)

Liver fluke

Liver fluke (*Fasciola hepatica*) not only affects the live animal, it also damages the end product. At certain times of year, up to 50% of livers can be condemned in abattoirs due to liver fluke damage and these cannot be sold for human consumption. This, ultimately, has a knock-on effect to the whole supply chain.

For more information, see **Worm control** in sheep.

Maximising financial returns

Sorting lambs does pay

Better returns come from presenting even lots of lambs that are matched to specific market needs, in terms of weight, conformation and fat. Mixed lots, where not all lambs meet a buyer's requirements, will not achieve the best potential prices for all the lambs offered for sale. AHDB trials at markets showed sorting lambs into groups of equal merit can attract a significant premium per lamb. Treat lambs as individuals as they are growing, but place them into even lots to sell them.

Handle with care

Sensitive handling is vital for animal welfare and avoids damage that shows up after slaughter.

Sheep bruise easily, particularly young lambs. Bruising and abscesses lead to wasteful trimming and even partial condemnation of the carcase. This in turn reduces saleability and the amount paid to the producer.

Avoid potential losses by:

- Not handling sheep by grabbing wool which can cause bruising
- Not allowing sheep to trample over each other in races during handling or selection
- Not overcrowding sheep in vehicles and by using internal partitions to restrict movement while travelling
- Not leaving any sharp objects in races, trailers or gates, etc.
- Using clean injection needles and correct injection techniques to avoid infection
- Choosing injection site with care. Producers should inject animals in the neck and avoid the rump





Abscess removed (A) and bruising (B)

Understanding how each abattoir works

Different processing plants operate different payment systems. When comparing deadweight prices, it is important to understand the pricing basis and be aware of any potential weight or out-of-specification penalties.

	1	2	3	ЗН	4L	4H	5
Е	Base price	+15	+15	Base price	-25	-45	-80
U	Base price	+8	+8	Base price	-25	-45	-80
R	-5	Base price	Base price	-5	-25	-45	-80
0	-20	-5	-5	-15	-30	-55	-80
Р	-70/-100	-70/-100	-70/-100	-70/-100	-70/-100	-70/-100	-70/-100

Example pricing grid for an abattoir, with premiums and penalties shown in pence per kg

Beware! All abattoirs have an upper and lower weight limit. Lambs are usually only paid up to 21kg deadweight. Any falling out of the weight range will usually attract a penalty. Sometimes, this can be severe so check before sale.

Video Image Analysis (VIA)

VIA is an automated alternative to the manual classification practised in most abattoirs currently.

- Interpretation of video images by computer programme
- Systems require approval by EU
- Already used in some parts of New Zealand
- Used in Republic of Ireland on beef cattle from 2004
- Has potential to measure meat yield

Hot weight rebates

Hot weight rebates are used to establish 'cold' carcase weight, i.e. the abattoir weight. They are applied to carcases weighed 'hot' within one hour of slaughter and are the basis on which producers are paid.

Table 2. Examples of different hot weight rebates used to establish 'cold' carcase weights

Scales calibrated to 0.2 kg		Scales calibrated to 0.5 kg		
Hot weight (kg)	Rebate (kg)	Hot weight (kg)	Rebate (kg)	
25.4 and under	0.5	25.5 and under	0.5	
25.6 and over	1.0	26 and over	1.0	



Dressing specification

There are two specifications agreed by the industry:

- MLC Standard Conditions (Fleece, head, fore and hind feet, genitalia, contents of abdominal and thoracic cavities removed. Kidneys, kidney fat, diaphragm and tail left on)
- Tail removed (as above but with the tail removed which equates to an average loss of 0.2 kg)



Tail on

Tail off

Dressing practices vary between abattoirs. Any dressing specification that falls outside of the two industry agreed specifications is recorded as 'company spec' and you should seek its definition from that company. One company specification being adopted is 'Excluding Kidney Knob and Channel Fat' (KKCF). This equates to an average reduction of 0.5 kg on final carcase weight.





Inclusive KKCF

Exclusive KKCF

Trimming neck and belly flaps also affects carcase weight and can be part of a company specification.

Table 3. Dressing spec impact on weight

Company spec. 1		Company spec. 2		
Ex KKCF	0.5 kg	Ex KKCF	0.5 kg	
Ex tail	0.2 kg	Ex tail	0.2 kg	
		Ex neck flesh	0.2 kg	
		Ex breast/ flaps	0.2 kg	
Total 0.7 kg		Total 1.1 kg		

Table 3 shows the impact different dressing specifications can have on carcase weight. Company Spec 1 would result in a 0.7 kg deduction and Company Spec 2 would result in a 1.1 kg deduction from final carcase weight, which is higher than if an industry standard dressing specification was practised by either of these companies.

It is important to compare dressing specifications when deciding which outlet to target as they impact the final carcase weight and, therefore, the return to the producer

Virtual Selection Tool

For more information about lamb selection, see the AHDB Beef & Lamb Virtual Selection Tool, which shows how real and virtual animals look at different points in the classification grid.

Available at: ahdb.org.uk/ virtual-beef-and-lamb-programmes

Killing out percentage

Killing out percentage is carcase weight as a percentage of liveweight.

Factors affecting KO% include:

- Breed and genetic performance of the sire and dam
- Stomach content at live weighing. An empty stomach gives a higher KO%
- Seasonal variation. Spring lambs tend to have a higher KO% than hoggets
- Milk-fed lambs have a higher KO% than weaned lambs
- Fatter lambs have a higher KO% than lean lambs
- Sex females generally have a higher KO% than entire males
- Fleece length and type heavier fleeces result in lower KO%
- Weather dry lambs have higher KO%
- Lambs with long tails, testicles or horns have lower KO%



A full stomach can weigh twice an empty one

Meat yield

Meat yield is the total percentage of saleable meat from a carcase. Carcases with better conformation yield a greater amount of saleable meat.

Fat level has the greatest influence – the fatter the carcase, the less meat is available for the processor to sell. See Table 4.

Table 4. The percentage of saleable meat from carcases of different fat class

Fat class	Saleable meat (%)	Fat trim (%)	Bone and waste (%)
1	94.87	3.91	1.22
2	92.95	5.92	1.12
3L	91.52	7.44	1.04
ЗH	90.56	8.46	0.98
4L	89.61	9.47	0.92
4H	88.65	10.49	0.86
5	87.22	12.02	0.77

Selecting lambs to market

Weight and visual appraisal are general guides to an animal's readiness for market but, to ensure accurate selection, handling the live animal is essential.

Key handling points

These five key points give the best indication of level of finish and fat class.

To assess conformation, feel the animal at shoulder and loin.

To assess fat level, feel the animal at the dock, loin, ribs, shoulder and breast.

Assessing conformation

Shoulder





Loin







- E Spinous processes undetectable, flesh creating a very convex profile, very broad shoulder area
- U Spinous processes just detectable, flesh beginning to create aconvex profile
- R Spinous processes less prominent with flesh creating a straight profile under the hand
- O Spinous processes still prominent, less concave with some evidence of flesh beginning to fill the hand
- P Very prominent spinous processes evident. Very concave profile to the centre of the hand



For more information about lamb selection, see the AHDB Beef & Lamb Virtual Selection Tool, which shows how real and virtual animals look at different points in the classification grid.

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Assessing fatness

Dock

- 1. Individual bones very easy to detect
- 2. Individual bones easy to detect with light pressure
- 3. Moderate pressure to detect individual bones
- 4. Firm pressure to detect individual bones
- 5. Individual bones cannot be detected

Loin

- Very easy to feel between processes which are very prominent
- 2. Prominent spinous and transverse processes felt easily
- **3.** Tips of processes rounded. Individual bones felt as corrugations with light pressure
- 4. Spinous processes felt with moderate pressure. Transverse processes felt with firm pressure
- 5. Individual processes cannot be felt

Rib

- 1. Individual ribs feel very bare, prominent and easy to detect
- 2. Individual ribs show slight cover but still easy to detect
- Individual ribs have softer feel, with fat cover becoming more evident in between and over ribs, which are now less easy to detect
- 4. Individual ribs are only detectable with firm pressure
- 5. Individual ribs are undetectable, soft, rolling, spongy feel







Classification examples

O1 Classification example





Conformation

Profiles straight to concave; average muscle development.

Legs Profiles tending to be slightly concave.

Loin Lacking width and fullness.

Shoulder

Tending to be narrow, lacking fullness.

Fat

None up to very low fat cover.

External Traces of or no fat cover.

Internal

Abdominal: traces of or no fat visible on the kidneys.

Thoracic: traces of or no fat visible between the ribs

O2 Classification example



Conformation Profiles straight to concave; average muscle development.

Legs Profiles tending to be slightly concave.

Loin Lacking width and fullness.

Shoulder Tending to be narrow, lacking fullness.

Fat

Slight fat cover, flesh visible almost everywhere.

External

A slight layer of fat covers part of the carcase but may be less evident on the loin and shoulders. There may be a lack of firmness in the flank area.

Internal

Abdominal: traces of fat or a slight layer of fat envelops part of the kidneys.

Thoracic: muscle clearly visible between the ribs.

R3L Classification example



Conformation

Profiles generally straight; good muscle development.

Legs Profiles mainly straight.

Loin Full, but less width to the shoulder.

Shoulder Good development, but less full.

Fat

Flesh, with the exception of the leg and shoulder, almost entirely covered with a thin fat cover; slight deposits in the thoracic cavity.

External

A layer of fat covering most or the entire carcase; slightly thickened fat zones at the base of the tail.

Internal

Abdominal: light layer of fat envelops the kidneys.

Thoracic: muscle still visible between the ribs.

R3H Classification example



Conformation Profiles generally straight;

good muscle development.

Legs Profiles mainly straight.

Loin Full, but less width to the shoulder.

Shoulder Good development, but less full.

Fat

Flesh, with the exception of the leg and shoulder, almost entirely covered with thickening fat cover; increasing deposits in the thoracic cavity.

External

A light layer of fat covering most or the entire carcase; thickened fat zones at the base of the tail, over the chump loin and shoulder.

Internal

Abdominal: thicker layer of fat envelops part or all of the kidneys.

Thoracic: slight fat deposits may be visible between the ribs.

R4L Classification example



Conformation

Profiles generally straight; good muscle development.

Legs Profiles mainly straight.

Loin Full, but less width to the shoulder.

Shoulder Good development, but less full.

Fat

Flesh covered with fat, but still partly visible on the legs and shoulder; some distinctive fat deposits in the thoracic cavity.

External

A thick layer of fat covering most or all of the carcase, but may be thinner on limbs and thickening on shoulders.

Internal

Abdominal: kidney is enveloped in fat.

Thoracic: muscle between the ribs may be slightly infiltrated with fat; deposits may be visible on the ribs.

R5 Classification example



Conformation Profiles generally straight; good muscle development.

Legs Profiles mainly straight.

Loin Full, but less width to the shoulder.

Shoulder Good development, but less full.

Fat

Carcase thickly covered with fat; heavy fat deposits in the thoracic cavity.

External

Very thick fat cover, patches of fat sometimes visible. The flank will be very thick, firm to the touch, with very heavy flank fat deposits.

Internal

Abdominal: kidneys enveloped in thick layer of fat.

Thoracic: muscle between the ribs infiltrated with fat; deposits visible on the ribs.

U3H Classification example





Conformation

Profiles generally convex; very good muscle development.

Legs Full, profiles convex.

Loin Wide and full to the shoulder.

Shoulder Convex and full.

Fat

Flesh, with the exception of the leg and shoulder, almost entirely covered with thickening fat cover; increasing deposits in the thoracic cavity.

External

A light layer of fat covering most or the entire carcase; thickened fat zones at the base of the tail, over the chump loin and shoulder.

Internal

Abdominal: thicker layer of fat envelops part or all of the kidneys.

Thoracic: slight fat deposits may be visible between the ribs.

U4H Classification example



Conformation Profiles generally convex; very good muscle development.

Legs Full, profiles convex.

Loin Wide and full to the shoulder.

Shoulder Convex and full.

Fat

Flesh covered with fat; distinctive fat deposits in the thoracic cavity.

External

A thick layer of fat covering most or the entire carcase. The flank will be thick, firm to the touch, with heavy flank fat deposits.

Internal

Abdominal: kidneys enveloped in fat.

Thoracic: muscle between the ribs infiltrated with fat; deposits may be visible on the ribs.

Other AHDB publications

See the AHDB Beef & Lamb website **ahdb.org.uk/beef-lamb** for the full list of publications for beef and sheep producers.

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