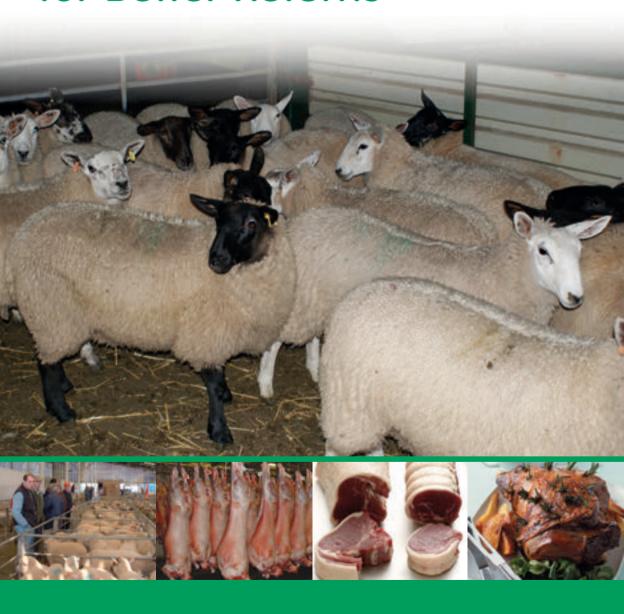
SHEEP BRP MANUAL 1



Marketing prime lamb for Better Returns



The information in this booklet was compiled by Steve Powdrill and Katie Brian,
AHDB Beef & Lamb.

AHDB Beef & Lamb Better Returns
Programme is grateful to all those who
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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.

Do not produce a batch of lambs then try and find a customer for them. It is far better to identify a potential market first (or several), then produce animals to suit their specific requirements.

The key is to sell them when they are ready. Do not wait for that 'special' date when historically the first draw was made. Improvements in breeding and rations 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 updated manual. Those that can embrace and act on all these areas will be rewarded with good returns.



Steve Powdrill National Selection Specialist AHDB Beef & Lamb



Key messages

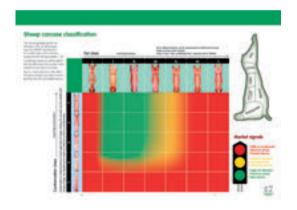
Who are the customers?

Sheep farmers have three customers

- · The person who eats their meat
- The retailer who sells it to the public
- The abattoir/processor who buys it from the farmer

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.





Sheep carcase classification

The current grading system for carcases in the UK and Europe uses the EUROP classification for conformation and a numeric assessment for fatness (classes 1-5).

Aim for most lambs to fall within the green shaded area (as shown left) where there is greatest demand and highest prices.

Sheep marketing decisions

Around 51% of finished lambs in England are sold through livestock markets whilst the other 49% are sold on a deadweight basis to abattoirs.

There are advantages and disadvantages of each.

Make informed marketing decisions by tapping into the latest prices and marketing information published by various sources including **beefandlamb.ahdb.org.uk**.



Maximising financial returns

Good husbandry and management

Tailor management so that animals hit target specification at the right time to maximise returns.

Weigh and handle animals regularly to monitor progress. Feeding regimes can then be adjusted to optimise market potential.

Better returns come from presenting even lots of lambs that are matched to specific market needs, in terms of weight, conformation and fat.

Also:

- Keep animals healthy and disease-free
- · Handle with care
- · Keep animals clean

Understanding how each abattoir works

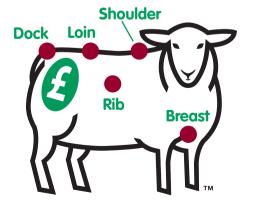
Different processing plants operate different payment grids. When comparing deadweight prices it is important to understand the pricing basis and be aware of any potential weight or out-of-specification penalties.

Also check the dressing specifications for each and how hot weight rebates are calculated.





Carcases with kidney knob and channel fat removed (left) and still in place (right)



Selecting animals 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.

Five key handling points give the best indication of

Five key handling points give the best indication of level of finish and fat class (details on page 14).

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



Who are the customers?

The consumer

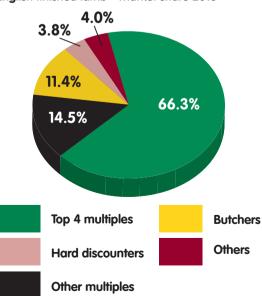
Market research shows that consumers want lean and tender meat that is safe to eat and from a trusted source.

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.



English finished lamb - Market share 2013





The retailer

Consumers buy their meat from a range of retail and food-service 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
- · Do not have excess fat to trim off

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 and find a market for them. It is far better to identify a potential market or customer first (or several) 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 21kg.



Supermarkets

- 16-21kg carcase weight
- Conformation E. U. R
- Fat class 2, 3L, possibly 3H



Local butchers

- 16-25kg carcase weight
- Conformation E, U, R, O
- Fat class 2, 3L, 3H



Exports

- 9-21kg carcase weight
- Conformation E. U. R
- Fat class 2, 3L

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

45% of finished lamb fails to meet ideal target market specifications

To maximise financial returns, farmers should identify a few key target markets, find out what the buyers in these sectors are looking for and do everything possible to meet these requirements as accurately and as consistently as possible.

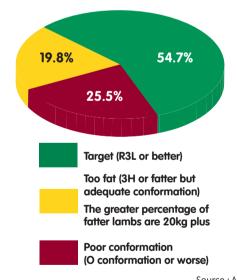
The difference in the amount of money earned selling lambs to the right or wrong outlet can be substantial.

Farm Assurance

The Red Tractor logo and AHDB Beef & Lamb Quality Standard Mark (QSM) are 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 Quality Standard Mark and Red Tractor logo can be traced back to 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.

Percentage of English finished lamb falling within and outside target specifications in 2013



Source: AHDB





Sheep carcase classification

The current grading system for carcases in the UK and Europe uses the EUROP classification 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. 31

Increasing fatness

Fat class

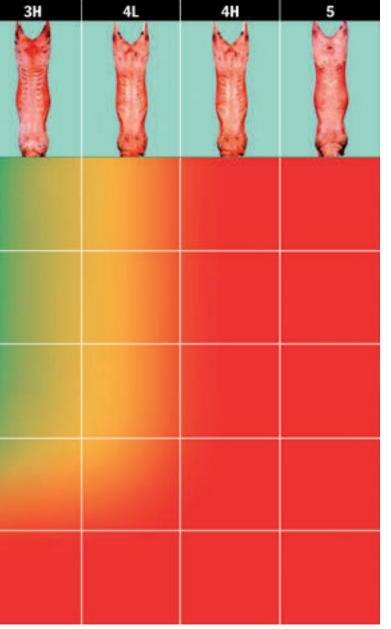
Conformation class Improving conformation

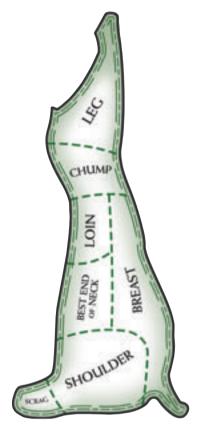
Conformation is determined by a visual appraisal of shape, taking into account carcase profile and

fullness of legs. No adjustment is made for influence of fat on overall shape.

Fat is determined by visual assessment of external fat cover. There are five main classes.

Class 3 and 4 are subdivided into L (leaner) and H (fatter).





Market signals



- Little or no demand
- Discount prices
- Poorest returns
- Medium demand
- Average prices
- Moderate returns
- High UK demand
- Premium prices
- Best returns



Finished lamb marketing decisions

Liveweight or deadweight?

Around 51% of finished lambs in England are sold through livestock markets whilst the other 49% are sold on a deadweight basis to abattoirs.



Some farmers prefer the competitive nature of selling live animals through an auction ring. There are advantages and disadvantages of each.



Liveweight

Advantages

- Competitive bidding
- ✓ Markets for all types and classes of stock
- Good geographical spread of markets around the country
- Stock can be taken home (unless dedicated slaughter market)
- Satisfaction of open bidding and watching stock sold
- ✓ Market intelligence available
- ✓ Opportunities to socialise and network

Disadvantages

- Little or no carcase information feedback, eg killing out %
- X May only be a few buyers present
- Price influenced by a buyer's personal opinion
- Can be time consuming
- X Can be more stressful on stock
- X There may be short-term trade fluctuations
- Selling costs may be higher

Deadweight

Advantages

- Carcase feedback available
- Opportunity to view carcases
- ✓ Base price should be known in advance
- Paid on carcase weight basis
- Bonuses for quality or quantity may be available
- Can be less time consuming
- Can be less stressful on the stock

Disadvantages

- Stock cannot be withdrawn once sent to plant
- Comparing pricing between plants complicated
- ✗ Market intelligence can be limited
- Producers suspicious of system
- **X** Penalties apply to stock out of specification
- X Possible hidden costs and deductions
- Obtaining competitive prices is time consuming

Some producers may be happier marketing deadweight through a marketing group that can offer independent advice on the best outlets.

Exports

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

In 2013, about 38% of the lamb produced in England 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.

Extra care has to be taken when targeting export markets, as adverse currency fluctuations outside the farmers' control can quickly erode any potential financial advantages over selling into domestic markets.

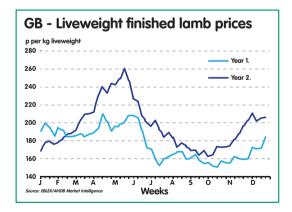


Worldwide demand for meat and fifth quarter (all countries not shaded grey)

Sales of premium lamb from England to European food service 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.

Sources of market information and prices

The lamb market is subject to seasonal fluctuation with prices highest in April and May and falling sharply in June.



Make informed marketing decisions by tapping into weekly information including:

- Latest trends in the domestic lamb market
- Up-to-date liveweight and deadweight prices
- Estimated weekly slaughter throughputs
- · Latest retail prices
- Consumer purchasing trends



Individual market prices and deadweight sqq are available free at **beefandlamb.ahdb.org.uk**

For more specific information contact the local auctioneer, abattoir or marketing agent.



Maximising financial returns

Good husbandry and management

Lambs can be finished at different ages — depending on when they lamb and how they are fed and managed. Some may be ready to market at weaning, others may finish off grass at the end of summer/ autumn. Others may be bought as store lambs to finish off forage crops such as stubble turnips, kale and sugar beet tops, with or without concentrates.

The margins for finishing store lambs can be very tight, so it is important to take a close look at the costs of production to ensure the effort will earn a profit.

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.

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.

BRP trials at markets showed sorting lambs into groups of equal merit can attract a price premium of over £3.00 per lamb.

Treat lambs as individuals as they are growing, but place them into even lots to sell them.



Sold as a mixed lot = average return



Sold in matched groups = premium return

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 21kg 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.

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.





Do not:

- ✗ Handle and move sheep by grabbing wool. This creates a bruise which will require trimming at the processing plant
- X Allow sheep to be trampled during transport
- ✗ Allow sheep to trample over each other in races during handling or selection
- Leave any sharp objects in races, trailers or gates etc

Always:

- Use clean injection needles to avoid infection in the skin
- Choose injection site with care (neck wherever possible)

Healthy lambs earn more money

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

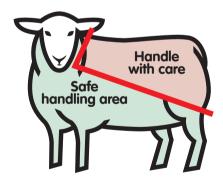
Worms are a major threat to the performance and health of lambs and controlling them is vital. Anthelmintics currently give good control in most areas, but wormer resistance is growing across England.

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

For more information see Sheep BRP Manual 8 Worm control in Sheep for Better Returns.

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.



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 can contaminate the carcase.

Ensure sheep are clean before marketing.

Always allow them access to water.



Acceptable



Not acceptable

Maximising financial returns

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.

A Farmer's Guide to Selling Finished Beef and Lamb

Practical details when selling livestock including, working with buyers, booking animals in for slaughter, documentation, price deductions and gathering feedback.

Available to download from beefandlamb.ahdb.org.uk.



Table 1: An example pricing grid for an abattoir, with premiums and penalties shown in p/kg

	1	2	3L	3H	4L	4H	5
E	В	+15	+15	В	-25	-45	-80
U	В	+8	+8	В	-25	-45	-80
R	-5	В	В	-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

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.

B = Base price

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 Eire on beef cattle from 2004
- UK trials have shown it is reliable for conformation but variable for fat particularly higher fat levels
- · Has potential to measure meat yield



Hot weight rebates

Hot weight rebates are used to establish 'cold' carcase weight, ie 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 calibro	ated to 0.2kg	Scales calibrated to 0.5kg		
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 (tail on)
- Tail removed which equates to an average loss of 0.2kg





Tail on

Tail off

Dressing practices vary between abattoirs. One 'company' specification being adopted is 'Excluding Kidney Knob and Channel Fat' (KKCF). This equates to an average reduction of 0.5kg.





Exclusive

Inclusive

Trimming neck and belly flaps also affects carcase weight. It is important to compare dressing specifications when deciding which outlet to target.

Dressing impact on weight

Compar	y Spec 1	Company Spec 2		
Ex KKCF	0.5kg	Ex KKCF	0.5kg	
Ex tail	0.2kg	Ex tail	0.2kg	
		Ex neck flesh	0.2kg	
		Ex breast/ flaps	0.2kg	
Total	0.7kg	Total	1.1kg	

BRP Deadweight Price Calculator

Compare the prices offered by two abattoirs with the BRP 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 beefandlamb.ahdb.org.uk.



Selecting lambs for slaughter

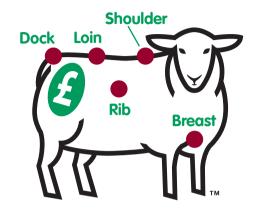
Weight and visual appraisal are general guides to an animal's readiness for market, but to ensure accurate selection, handling the live animal is essential.

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









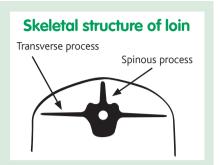






Conformation

- **E** Spinous processes undetectable, flesh creating a very convex profile, very broad shoulder area
- U Spinous processes just detectable, flesh beginning to create a convex profile
- R Spinous processes less prominent with flesh creating a straight profile under the hand
- 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



At the same fatness level, lambs with good conformation will yield more saleable meat. This reflects differences in the meat-to-bone ratio – a factor largely determined by breeding. Good conformation carcases also yield more high priced cuts. Images below show differences in conformation and fat cover.





U₃H





02

For more photos of finished lambs take a look at the AHDB Beef & Lamb BRP Virtual Selection Programme, which shows how real and virtual animals look at different points in the classification grid. Email brp@ahdb.org.uk or call **024 7647 8834** for online access









Selecting lambs for slaughter

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

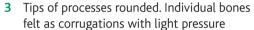


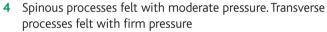
Loin





- 1 Very easy to feel between processes which are very prominent
- **2** Prominent spinous and transverse processes felt easily





5 Individual processes cannot be felt







- 1 Individual ribs feel very bare, prominent and easy to detect
- 2 Individual ribs show slight cover but still easy to detect
- 3 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



Breast





- I Skin tight with no lateral movement, very bare feel
- 2 Some lateral movement in skin, providing a slight pinch of fat
- **3** More pronounced movement in skin providing definite pinch of fat, softer feel
- 4 A ridge of fat is evident, providing a positive and more pronounced pinch of fat soft feel
- 5 The thick ridge of fat has become very pronounced, resulting in a thick pinch and soft, rolling feel



Killing out percentage (KO%)

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

Factors affecting KO% are:

- Breed and genetic performance of the sire and dam
- Stomach content at live weighing. An empty stomach gives a higher KO%
- Seasonal variation. On average spring lambs have 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



A full stomach can weight twice as much as an empty one.

- 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%

Meat yield

Meat yield is the total percentage of saleable meat from a carcase. Better conformed carcases 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 3.

Table 3: The percentage of saleable meat from carcases of different fat class

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

U3L and R4H wastage comparison

Table 4: Comparison of waste from two different lamb carcases

	Lamb A - U3L kg/whole lamb	Lamb B - R4H kg/hole lamb
Total carcase weight	19.00	19.00
Leg	4.76	4.40
Shoulder	4.14	3.56
Chops	2.86	2.86
Chump	1.44	1.02
Lap neck	2.06	2.40
Total meat	15.24	14.24
Trim and fat	3.76	4.76

Lamb A has a higher retail value than Lamb B. Lamb B has also incurred additional costs in feed on the farm and processing time at the abattoir.



Other BRP publications available

Sheep BRP

- Manual 1 Marketing prime lamb for Better Returns
- Manual 2 Buying a recorded ram to generate Better Returns
- Manual 3 Target lamb management for Better Returns
- Manual 4 Managing ewes for Better Returns
- Manual 5 Growing and finishing lambs for Better Returns
- Manual 6 Target easier management for Better Returns
- Manual 7 Reducing lameness for Better Returns
- Manual 8 Worm control in sheep for Better Returns
- Manual 9 Improving ewe breeding for Better Returns
- Manual 10 Controlling external parasites for Better Returns
- Manual 11 Target ewe fertility for Better Returns
- Manual 12 Improving ewe nutrition for Better Returns
- Manual 13 Improving sheep handling for Better Returns
- Manual 14 Reducing lamb losses for Better Returns

Joint Beef and Sheep BRP

- Manual 1 Improving pasture for Better Returns
- Manual 2 Improved costings for Better Returns
- Manual 3 Improving soils for Better Returns
- Manual 4 Managing clover for Better Returns
- Manual 5 Making grass silage for Better Returns
- Manual 6 Using brassicas for Better Returns
- Manual 7 Managing nutrients for Better Returns
- Manual 8 Planning grazing strategies for Better Returns
- Manual 9 Minimising carcase losses for Better Returns
- Manual 10 Growing and feeding maize silage for Better Returns

See the AHDB Beef & Lamb website beefandlamb.ahdb.org.uk

for the full list of Better Returns Programme publications for beef and sheep producers.

For more information contact: Better Returns Programme

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