Easier management systems for sheep

The Beef and Sheep Development Centre, run by Hybu Cig Cymru, is managed by the Welsh Assembly Government as part of Farming Connect.

About HCC

Hybu Cig Cymru - Meat Promotion Wales (HCC) is the strategic body responsible for the promotion and development of Welsh red meat and the development of the Welsh red meat industry. Its mission is to develop profitable and sustainable markets for Welsh lamb and Welsh beef for the benefit of all stakeholders in the supply chain.

HCC's five strategic goals are:

- Effective promotion of Welsh Lamb and Welsh Beef and red meat products in Wales
- Build strong differentiated products
- Improve quality and cost-effectiveness of primary production
- Strengthen the red meat supply chain
- Effective communication of HCC activities and industry issues

This booklet forms part of a series of publications produced by HCC's Industry Development team.

The Industry Development team deal with a range of issues that include:

- Technology Transfer
- Research and Development
- Market Intelligence
- Training
- Demonstration Farms
- Benchmarking

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Forward

With less direct support available to farmers, sheep need to generate more income and be less work whilst also helping to meet environmental goals. In Wales, statistics show that few farmers are meeting their cost of production; we have the highest labour costs and the highest number of hours spent per sheep (much of which is unpaid labour and therefore goes unnoticed). Current flocks sizes in Wales average 630 ewes giving us two options – we can either keep the same number of sheep but manage them in a way that allows more time for other income generating activities, or adapt our systems so that larger flocks can be managed with the same time commitment. Both of these options need easier and more efficient management systems. This booklet provides information about the management and breeding strategies which can help you to achieve this.

Easier management does not necessarily mean rapid and radical change - it takes time and planning. Easier management can help farmers to work smarter, not harder, in order to boost existing business productivity and sheep welfare. Many farmers in Wales are already moving to easier management systems so that they can cope with lower labour availability whilst still keeping sheep of which they can be proud.

Grassland management for easier lambing

Easy care systems are not about year-round management of sheep on grass. On most Welsh farms this would mean that there is nothing left to graze in the spring when you most need it. In-wintering is necessary on many farms. On others, hill grazing or a sacrifice area with supplementation is needed to free up good pasture to produce high quality feed for lambing and lactation. Careful consideration of this required to avoid any cross compliance issues.

Timing and expectations

The main feature of the easier care lambing concept is that ewes lamb outside on grass without daily supplementation to avoid mismothering. This requires a good grass supply – a sward height of at least 4cm and preferably 6-8cm from 10 days pre lambing.

Recent studies have shown that grass is an ideal feed and that responses to supplementation are nil. Unsupplemented ewes outdoors had heavier birth weights and faster daily gain to weaning (see table) compared with indoor lambing ewes on silage and concentrates.

Effect of lambing system on lamb mortality and growth rate (mean of 2 years), Greenmount

	Indoor Lambing	Grass Lambing
Number of lambs born per ewe	1.81	1.78
Lamb birth weight (kg)	5	5.2
Percentage lamb mortality (birth to weaning)	11	14
Number of lambs weaned per ewe	1.61	1.51
Lamb growth rate (g/day) Birth to 6 weeks	317	331
Lamb growth rate (g/day) Birth to weaning	281	292
Weaned lamb output (kg/ewe)	57.0	55.9

Outdoor lambing in many parts of Wales would need to be in mid-late April with grass set aside for this grazing over Feb-April. Scanning percentages may be 10% lower than with an indoor March lambing but this is made up for by fewer lamb losses and significantly lower feed, labour and lambing sundries costs. Time is saved by not having to move lambs to grass after lambing.

Easier Management at lambing

Easier lambing and better bonding occurs when a ewe has had time to choose her lambing spot and is left on it for a few days. Lowland farms may stock twin bearing ewes at 17 per hectare and singles at 27; thus a 15 acre field would carry 100 twins or up to 150 singles. In the uplands it is more important to consider the shelter aspect. They should be inspect three times a day.

Singles can be brought in at night if oversize lambs become a problem. Abandoned lambs from multiples picked up in the day can be fostered overnight, for example, the wet foster method. For example, dunk the lamb to be fostered in warm water, smear with amniotic fluid from the foster ewe and present just before she delivers her own lamb.

Ewes need to be in condition score 2-2.5 at turnout (almost thin), ewes that are fatter are prone to prolapse and lambing difficulties. One person can look after up to 600 ewes with some help when required.

Lambs can be tailed and rung as soon as possible after birth (as long as they have suckled), and left in their field for a few days and then moved on, leaving unlambed ewes in the field. Alternatively (and preferably in bad weather) lambs can be left entire and undisturbed. If necessary they can be castrated using a burdizzo and tailed at 2 – 3 weeks of age by a suitably experienced person. Use a set of mobile gates in the field to reduce having to move young lambs and ewes. (N.B. rubber rings may not be applied after 7 days of age).

Providing minerals and vitamin E helps lamb survival in outdoor lambing flocks. Some products have been shown to increase colostrum immunoglobulin concentrations and these can be useful for triplet bearing ewes, thin ewes carrying twins and first time lambers.

Summer pasture management

Summer management must achieve high lamb growth rates to finish a reasonable proportion (potentially 100%) off grass. Checks on growth must be avoided. The top priority is to manage grass quality so that lambs can finish quickly, delayed finishing costs money. Every extra day a lamb is on the farm takes a day's flushing feed off the ewe and contaminates pastures with worm eggs which will affect next year's lambs.

High stocking rates to maintain sward height at 4cm in May improves pasture quality in July/August and maintains the sown species content of swards. Swards managed correctly during this period will have protein levels of 20-30% and lamb growth rates will reflect this. Target growth rates on grass based swards are 250-280g/day to weaning at 16 weeks and 300-320g/day on swards containing at least 30% red clover.

After weaning growth rate targets are 100 and 180g/day at 4-6cm sward height respectively. Aim to finish as many of the lambs off grass or grass/clover, and the remainder finished off sown forage crops. High clover content swards reduce worm burden and increase trace element availability, cut fertiliser costs and labour for spreading, and allows lambs to finish earlier.

Post weaning management
Weaned lambs with high growth rate need less feed to grow from 30 to 40kg.

Growth rate g/d	Days to finish (d)	Feed requirements	
		per day (kg)	Total (kg)
100	100	1.0	100
200	50	1.4	70
300	33	1.7	55

Clover content is key to pasture quality as it results in low fertiliser bills and high intake that drives animal growth rate. If using clover in the sward post weaning then 6-8cm sward height is needed to maintain clover for the following season and to reduce selective grazing.

Pasture specification to achieve these target gains:

Growth rate (g/day)	Species mix	Sward height	Parasite status
100	Grass only	4-6cm	Lambs challenged and dosed
200	30% clover (DM basis)	4cm	Low worm burden
300	30% clover (DM basis)	6cm	Low worm burden

Grazing mixtures containing a percentage of late heading tetraploids are more compatible with white clover. For short-term high quality conservation and aftermath grazing use red clover/hybrid ryegrass mixtures.

Getting more lambs finished off grass

To move lambs off grass cheaply and quickly:

- Address soil nutrient and physical status to produce a leafy quality sward
- Control scald by footbath treatment (3% Formalin) at the first sign
- Maintain short, leafy swards (4-6cm) with high intake characteristics
- Reduce worm challenge, monitor FEC and where necessary use long-acting products on ewes and treat lambs with a high FEC
- Use rams with high EBVs for growth rate
- Where appropriate, supplement with cheap cereals
- Avoid weaning stress

Select rams with high growth rate EBVs

Will feeding supplements pay?
It is tempting to use supplements to finish later born lambs but with barley on farm at around £100/ton and lamb finisher at £180/ton the economics must be considered.

Feeding can be via hoppers, with pelleted feed introduced to lambs within 7kg of their target liveweight. Move to a 50:50 cereal/pellet mix to cut costs once intake is established. Alternatively, build lambs up to 0.5kg of mineralised whole cereal per day fed from troughs – this takes more labour but if all the lambs are trained to eat together they will finish together making marketing easier. Feed conversion of supplement to liveweight gain at around 7.5:1 leaves a little room for profit. Supplementation should not cover up for poor management – forage crops should be considered in areas where most lambs clearly will not finish off grass.

Finishing lambs off forage crops

Later lambing systems often rely on using forage crops to finish a proportion of lambs. These may also be used to feed ewes over flushing/tupping and early winter. Forage crops – where they can be sown – have an important role to play in the establishment of reseeds as they remove weeds and build soil fertility. Decide when quality feed is likely to be short, choose a crop that your farm is good at growing and a field that is suitable, then plan the lamb finishing and ewe feeding around this resource.

Potential forage crops for later born lambs

Crop and situation	Sowing date	Typical varieties	Feed during	Lambs finished /ha	DM yield Tons/ha
Forage rape usually sown after grass then resown next year to grass	June - July	Hobson, Bonar Swift (New)	Oct-Dec/Jan	35 - 60	3 - 5
Stubble turnips after winter barley	July - August	Rondo Barkant Samson	Mid Nov-Feb	20 - 35	3 - 5
Stubble turnips after grass	May - June	Tyfon	Aug/Sept	35 - 60	2 - 7
Kale – full crop	May - June	Maris Kestral	Nov-March	50 - 90	5 - 7
Kale – as catch crop	Mid July	Grampian	Nov/Dec	35 - 60	3 - 5
Swedes	Late April - May	Airlie Magres	Nov-March	50 - 90	6 - 9
Red clover /hybrid ryegrass mix (silage)	April	Milvus	Aftermath Sept	45 - 70	3 - 4
Perennial Chicory +grass	April - May	Puna II	July/Aug	70 - 100	5 - 7

Expect gains of 120-200g/day, supplement leafy brassicas with up to 0.5kg/day mineralised whole grain, add protein to 25% CP only when feeding bulbs/stems. Long roughage as silage or hay helps utilisation of forage brassicas and always provide a run back (cross-compliance).

Tips for finishing lambs and tupping ewes on forage brassicas

- Sow 45m strips of kale and 9m strips of yellow turnips across the field to provide easier access to set up breaks
- Introduce kale gradually – on and off for the first 3-4 days, then full time
- Provide an adjacent field of long forage as a runback or straw in the field margin
- Sort lambs into weights ranges with 5kg increments
- Address mineral deficiencies if required
- Creep feed – feed *ad lib* concentrate from creep feeders to smaller lambs. A mix of whole cereals and short lengths of straw that has come through combine is best with leafy brassicas
- Use a raft of rolled out straw around the creep feeder to reduce risk of spreading footrot in muddy conditions
- Remove lambs to a sheep shed with a creep feeder for 3-4 days to clean up before sale
- Ewes can graze forage brassicas on and off for 24 hours but avoid re-introducing them to kale on a frosty morning
- Tups can be put out whilst ewes are on kale

Autumn/winter management and feeding

Easy management wintering systems involve more reliance on forages. Many farmers need not feed concentrates at all to most of their stock. This can simplify housing/feeding set ups. Inwintering is necessary on many farms to protect pastures from poaching, on drier farms feeding silage on a sacrifice area or hill grazing works. The choice of a suitable site will reduce environmental damage and cross compliance issues.

At mating, maximise your lamb crops by having ewes in condition score 3-3.5, avoiding stress and maximising food intake. Pastures should be sheltered with over 6cm grazing. Stock heavily and move to fresh pasture when 50% of the sward is eaten.

- Use teasers on yearlings two weeks before rams go in to help compact the lambing period
- In late tupped flocks, where swards are below 4cm access to high energy feedblocks can increase lambing percentage by around 10%
- Check that liver fluke has not appeared on your farm by getting abattoir reports from lambs and consult your vet on appropriate strategy for fluke control on your farm. Fluke can reduce lambing percentage markedly

Control of feeding should aim to reduce condition score to 2-2.5 at turnout. To make it easier to see ewes lambing outside they should be crutched in March. Alternatively in-wintered sheep can be winter shorn – shear both ewes and rams before tupping if tupping inside. Winter shearing six weeks before lambing also helps to keep the sheep cool when housed so that space allowances can be reduced. Shorn sheep will also have an increased forage intake so less purchased food will need to be used to maintain condition.

Winter shearing keeps sheep cool and increases forage intake

The decision to house adds cost not value. Farmers often have no choice to house due to factors such as high rainfall, heavy soils and high stocking rates. Housing is justified where considerable damage may be done to the pasture by the sheep.

When out-wintering, silage feeding is commonly used. However, sheep find it hard to pull out material from dense bales with hard centres in ring feeders. These feeders provide too small a feeding area in relation to bale usage resulting in bullying, feed wastage and listeriosis. Ewes stand on the feeding area to get at the bale top and then reject the mud-contaminated areas on which they have trampled.

A feeder with sides pushed in by the sheep solves these problems, a bale is shaken up so that it covers the area of two bales at half the height and a horizontal offset bar on the feed face stops the sheep putting their feet on the feed. This reduces silage wastage and ewes lamb in more even condition.

As the winter feeding stops 2-5 weeks pre lambing when demands are highest, very high quality forages fed alone can meet most needs for housed and out-wintered ewes most years. This significantly cuts feed costs and trough requirements.

Winter Housing

Sheep housing can carry up to 30% more ewes on easier managed systems. Conventionally fed ewes inside need 1.2 m^3/ewe and 0.45 m. trough space/ewe. Typical Sheep shed design as seen below means that a lot of space ends up as tractor passes. Unrolling big bales of straw down these narrow pens is very labour intensive.

Figure 1 - Typical layout

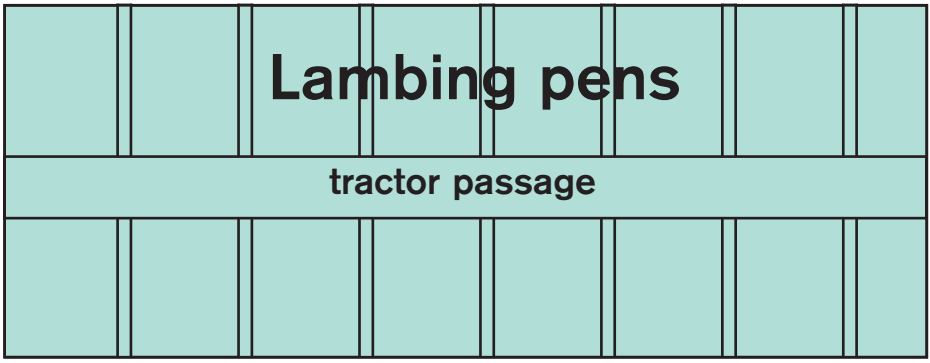
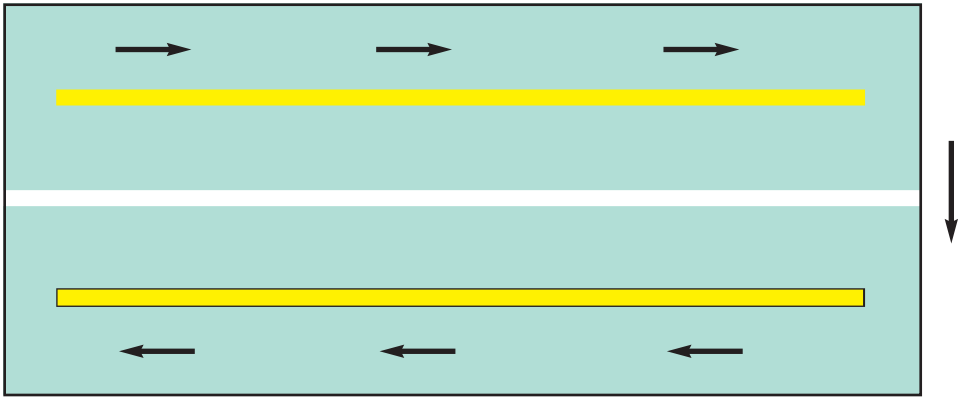


Figure 2 - Changing housing layout



Deep pens allow sheep to pass mechanised feeding or bedding

Trough space requirement can be eliminated by on-floor feeding on well-bedded systems or relying on silage plus feedblocks/buckets.

Removing all passageways and feeding a TMR through the outside walls of the shed is possible where there is access around the sides. This reduces feed space per ewe to 20-30cm and pens can be 10-12m deep, increasing carrying capacity of the shed. (Fig 2)

Mechanical strawing of pens is possible but if ewes are fed restricted silage in the early part of winter they will pull apart big straw bales if not put in a ring feeder and bed themselves. In early pregnancy, feeding silage for 5 days and straw at weekends cuts labour costs and keeps condition under control.

Health planning for easier sheep management

Use preventative measures including vaccinations and drenches based on a flock health plan rather than fire-brigade actions.

Health planning is an important part of every sheep management system and working with your vet to develop a working health plan for your farm saves time and money in the long run. Skimping on vaccinations and drenches is counterproductive, health care should be planned and sensible preventative medicine used on the basis of need.

Understanding the cause of the problem helps prevent disease

Use safer grazing (no lambs in the previous year on this year's summers grazing) to help reduce worm challenge and the work associated with drenching. To achieve this avoid stocking next year's lamb finishing fields with sheep after weaning.

Many Welsh farms have copper, cobalt and selenium deficiencies. Monthly trace element drenching is labour intensive and fails to provide a daily cobalt supply. Free access minerals are expensive and may contribute to scouring due to their magnesium content when lambs are parasitised. Pasture dressings of trace element supplements may save time and labour. Treating fields that are also used for tupping on gives a double benefit as it is saves feeding concentrates at tupping to supply trace elements.

Weaning Strategies

Clear ML drench given to lambs identified with a high faecal egg count at around three weeks pre weaning is a useful strategy. At weaning any finished lambs can be sold and the remainder left on the field rather than moved to an aftermath. Moxidectin (ML) continues to protect lambs whilst on contaminated pasture after weaning and this helps to reduce stress, allowing regular drawing of finished lambs. By removing ewes, sward height rises encouraging high intake and lambs to fatten, moving them later onto hay or silage aftermaths.

Handling facilities for easier sheep management

Time is often wasted with inadequate handling and feeding facilities – thinking ahead saves time and work. Use preventative vaccinations and drenches based on a health plan rather than fire-brigade action. (NB see HCC sheet on sheep handling systems).

A set of aluminium or similar mobile handling facilities are invaluable and the new clamp-style of systems make life easier as sheep are restrained as long as the operator applies gentle pressure to the footplate. For larger farms and for farmers with back problems the pneumatically operated power clamps allow advanced drafting capability and one man operation. It enables easy recording for breeding and management purposes especially if it is combined with electronic tagging.

Increasingly quad bikes are used for checking stock. The labour cost of opening and shutting gates at 18 hours per gate per year is high versus the alternative of bike ramps at £180-£200.

Bike ramps reduce travelling time and are a useful investment.

Breeding sheep for easier management

Easy care systems have developed from farmer-led initiatives in countries where subsidies have been withdrawn. Some farmers have imported their genetics, some are using other methods to get easier care sheep following the rule: “Never make an excuse for a sheep, it does not matter how good an animal looks, if it has had problems, was assisted at birth or to suck do not breed from it.”

In Wales, a number of breeders are already breeding from sheep that will make their management easier.

Breeders in Wales are now beginning to record “easier management” traits as well as production and performance traits. FEC EBVs, for example, are a good way to select animals which are naturally more resistant to internal parasite infections.

DNA-based parentage tools are now being used by breeders to make it easier to record large numbers of animals by reducing the amount of manual recording at tupping and lambing. Genetic markers will also help breeders to identify animals to include or exclude from breeding programmes.

Arfon and Sian Hughes select their Lleyn ewes on performance and record individuals that needed more attention at lambing and have reoccurring lameness so that they can be removed. They only breed from ewes that won’t cause them extra work.

Wyn and Christine Owen have developed a production system for their Hardy Speckles that relies on low labour inputs. They now assist very few births and any sheep that causes them extra work is not bred pure but is put to the terminal sire so that her offspring is not kept for replacements.

Breeding for easier lambing

Studies have shown that human intervention at lambing can cost anything from £46 to £280 per 100 lambs. More time at lambing is spent on helping lambs to suck than on assisting births which usually only takes 2-5 minutes. Housed ewes are easy to catch but for outdoor lambing breeds or sires that lamb without assistance and ewes that stay longer with their lambs on the lambing site are desirable.

First-time lambers and ewes with triplets always need more assistance to get lambs started with sucking. There is no need to cull ewes that have been helped only once to lamb but assisting a second time should be a reason for culling. However, some ewes have big teats, mark these and put to a terminal sire. It is more effective to select replacement rams that leave active and vigorous lambs that suck unaided at birth than to cull ewes that fail to rear lambs or need help at lambing.

The Suffolk and Texel breed societies are now working on ways to identify sires within the breed that are better than breed average for lamb vigour at birth and lambing ease.

The "Easicare selection toolbox"
In self-contained flocks use the Easicare selection toolbox to select your replacement rams. Select rams that score +1 for all traits below.

Score	-1	0	+1
Lambing ease	Assisted	Very minor help	No assistance
Mothering ability	Leaves lamb	Stands well back	Follows whatever
Lamb vigour	Has to be sucked	Slow to suck	Up and sucked

Lambs are tagged as the ewe and lamb are moved out of the lambing field/house and scores written in a diary. To score mothering ability note how close the ewe stays to her lamb when it is tagged.

Pembrokeshire farmer Neil Perkins is using the Easicare Toolbox to ensure that his flocks of Suffolk and Lleyn sheep become less labour intensive. His aim is to keep his own Suffolk replacement rams that will cross easily with the Lleyns to produce an easily managed and productive flock. He is also using EID to help with performance recording so that he can more easily identify his most productive sheep.

Making ram investment pay

Mainly self-contained flocks such as purebred Lleyns are increasing in popularity (there were 83,000 Lleyn ewes in 2003 rising to 230,000 in 2006). These flocks allow farmers to have high biosecurity and to select for both the maternal performance traits and the easy care traits they deem important. Bought in sheep are restricted to rams.

Most of the breed improvement effort in the UK to date has been put into improving carcass traits and growth rate in terminal sire breeds which is worth around £2-£3 extra per lamb between high and low index rams.

A recent project to develop an appropriate selection index for Longwool crossing breeds (eg, Bluefaced Leicester) to breed better Halfbred/Mule ewes has recently been completed, and this shows the high importance of ewe longevity and lamb survival to economic returns, and these factors are being built into the selection index alongside carcass traits. However, there are no easy proxy measures at young ages that can be used to identify 'superior' rams, implying that direct measurement of lamb survival and ewe longevity within the Longwool breeds will be required.

Farmers are now realising that selection for easier management traits and breeding for performance, not looks, offers additional rewards.

Sheep in closed flocks have the benefit of being bred in the environment in which they are expected to perform and can be selected for improvement in maternal and easier management traits as well as performance. Breeding for performance traits actually helps easier management, in the table below less intervention at lambing was needed in a selection line.

Lambing	Selection (S)	Control (C)	Industry (I)
Percentage assisted (after adjusting for birth weight)	7	5	11

Rams selected for a blocky conformation will produce lambs which need more help. If you choose rams with wide shoulders then you will need to assist their lambs.

Terminal sire breeding

UK terminal sire breeding has traditionally been based mainly on selection for size and conformation with high levels of concentrate feeding prior to sale. While this may be fine for intensively managed early breeding flocks, it is not necessarily ideal for farmers looking to finish their lambs off grass. In addition, pushing for such high growth rates in early life through high levels of concentrate feeding may result in terminal sire rams that may not thrive well in commercial flock environments. However, farmers using grass systems need lamb vigour and the ability to finish without creep feed and dosing. This is driving innovation in our terminal sire breeds.

There is an increasing number of terminal sire ram breeders involved in genetic breeding schemes. A number of breeders now raise their ram lambs at pasture with minimal concentrate imput and tend to sell them as yearlings. These animals have EBVs for growth and carcase traits and would suit commercial flocks.

The Meatlinc benefits from selection based heavily on EBVs and is a widely used sire in managed sheep production systems. The Hampshire Down has imported a lot of New Zealand genetics and has improved accordingly. There has also been recent interest in New Zealand bred Suffolks where evidence shows that reduced incidence of lambing difficulty saves in shepherding costs.

Sourcing rams selected for easier management systems

Ram purchase is not a cost – it is an investment in your sheep business. It is an opportunity to increase efficiency.

A high index ram can contribute £2-£3 per lamb in extra output. However, some sires could actually be adding up to £3-£5 per lamb to your shepherding costs and mortality at lambing because their lambs fail to stand quickly and suck causing extra work/losses.

- Selection for blocky conformation, 'bone and strong heads' adds to lambing difficulty
- Overfeeding of concentrates masks the ability of EBVs to reflect true conversion of grass to meat and parasite resistance
- Overfeeding reduces ram life and ram mating ability, reducing ram to ewe ratios

By rearing lambs predominantly off grass they can serve 100 ewes rather than 40 and they will live twice as long saving over £2 per lamb in ram costs. Farmers worry that with rams grown more slowly any old poor growing ram could be passed off as a good one. But if the ram has a high index then this is not a concern as these figures are more reliable than looks. If you select on looks and expect performance then expect to be disappointed, as you cannot breed by looking for things you cannot see – for example, the ability of a ram to leave daughters with good maternal traits.

Visual inspection should concentrate on 'teeth, testicles and toes'.

Wool shedding breeds of sheep

The UK has dual-purpose meat and wool breeds.

For many years wool has lost market share to synthetic fibres and this has been the main driver of the declining returns and reduced competitiveness of the industry. Synthetic fibre producers have invested substantially in R&D over many years to improve the performance and functionality and to lower the cost of synthetic fibres. Synthetic raw materials are generally far cheaper to buy and to process. Synthetic fibre manufacturers have the ability to manipulate fibre characteristics to precise specifications.

Shearing is a stressful event, for both the sheep and shepherd, with the risk of cuts and potential flystrike where precautions have been inadequate. Sheep need to be shorn every year unless they shed their wool.

The benefits of wool shedding are not having to shear sheep, reduced shepherding costs due to dagging, less sheep getting stuck on their backs, less flystrike, and better grazing drive in hot weather. They grow sufficient wool to keep them warm. However, being wool shedding does not make them completely non-susceptible to wool related problems. They are at similar risk to external parasites and other wool related problems as sheep that have been shorn, as the fleece is always very short.

UK sheep produce 1-2.5kg of coarse carpet type wool (30-35 microns) containing some hair fibres also known as kemp. There are now several wool shedding or hair breeds in the UK, that produce around 0.5kg of wool. Apart from the Wiltshire Horn/Easycare, these are mainly of African decent which tend to be parasite resistant, grow slowly and produce light carcasses.

Summary of Wool Shedding Breeds Present in the UK (2007)

Breed	Ewe Lwt (kg)	Colour	Horns	Easy Care Traits	Prolifi-cacy	Comment
Dorper	75	Black & white	No	Some	Fairly prolific	Fat tailed, breeds out of season, adapted to dry
White Dorper	75	White	No	Some	Fairly prolific	Feet problems in UK
Kathadin	60	Coloured	Some	Yes	Prolific	
Wiltshire Horn	75	White	Yes	Yes	Prolific (1.8)	Meat sire
Easycare	60	White	No	Yes	Prolific (1.8)	Developed for UK conditions

The Easycare breed was selected for shedding, no horns and easy lambing over 30 years from crosses of the Wiltshire Horn, Welsh Mountain, Cheviot and Terminal sire breeds. It is the most widely used and practical UK wool shedding breed. Half of first cross ewes from Easycare rams shed their wool, but less occurs in low nutrition hill conditions. Once the first cross ewes have been mated back to an Easycare ram well over 95% will shed wool and will not require shearing. Wool contamination of pastures appears to be less than with conventional breeds as the wool is shed over weeks in wisps.

Rams with easier management attributes and enough wool to make shearing cost efficient

The ideal is a sheep of sheep that has a valuable wool clip and efficiency traits such as maternal ability, growth and disease resistance. An example of this would be the Romney, which is able to perform in a wide range of conditions. Composite breeds from other countries are currently being evaluated in UK conditions. Breeders are achieving the lowest intervention rates at lambing with this breed. They produce 4.5kg of wool per ewe each year and need to be full belly crutched pre lambing or can be pre-lamb shorn in mild weather. Romney ewes are hardy and can perform well in a wide range of conditions. Other NZ composites have recently been imported and are being evaluated. They produce similar amounts of wool and have easy care traits.

Romney replacements

Planning your way to easier management

Easier management needs to be planned and developed to suit your farm and your aims

Study your systems and compare them to the easier management options.

Examine your physical and financial records to see where your business would benefit most. Paying attention to overheads and labour costs/ewe.

Identify those areas in which you believe you can readily adopt and manage change:

- **Can you manage your grassland for easier lambing?**
- **Can forage crops help you to finish your lambs better?**
- **Review your Autumn/Winter management and feeding**
- **Use your flock health planning to prevent diseases in the first place**
- **Could your handling facilities make life easier for you?**
- **Are you selecting animals for breeding that are easier to manage?**
- **Would a wool shedding breed suit your system?**

Further information

For further information on any of the content in this booklet or on the work undertaken by HCC please contact HCC on tel: 01970 625050, email: enquiries@hccmpw.org.uk or visit www.hccmpw.org.uk.

Advice can also be sought from your vet or sheep advisor.