

LIVESTOCK+

QMS Sharing best practice from Scottish livestock businesses **SUMMER 2015**

+Features

HEALTH PLANNING IS KEY
SAYS DUMFRIES FARMER
PERTHSHIRE FARMER BENEFITS
FROM IMPROVED PASTURE
MANAGEMENT
FACTORS AFFECTING
THE RED MEAT MARKET

UPDATES

**Johne's Control
in Beef Herds**

**Managing Ewe Condition
Scores Can Pay Dividends**

**Pig Monitor Farm
Boosts Piglet Survival**

Inside

Latest news, innovations,
case studies...
+ more online at
www.qmscotland.co.uk



HEALTH PLANNING • MARKET TRENDS • GRAZING GROUPS • MONITOR FARMS

Scotch Beef Farm of the Year

- open for entries!



Your farm could be the next Scotch Beef Farm of the Year



THE FARM
BUSINESS EVENT

Don't be shy - help raise the profile of the dedication and commitment farmers round the country devote to producing Scotland's favourite food - Scotch Beef PGI.

To enter, nominate another farm or find out more, email enquiries@agriscot.co.uk

Good luck!

2014 finalists - from left to right David Houstoun from Glenkilrie Farm near Blairgowrie, Graham Cameron from Wester Bonhard Farm near Scone and James Gilchrist from West Meikle Pinkerton Farm near Dunbar.



2014 winners - Wanda Hobbs with her parents Marion and John Tilson of Wedderlie receive their award from Richard Lochhead.





LIVESTOCK+

How to contact QMS:

visit www.qmscotland.co.uk

email: info@qmscotland.co.uk

or call us on 0131 472 4040



For the latest, up-to-the-minute information follow us on Twitter or Like our Facebook page – Quality Meat Scotland.



Sign up for our free weekly e-newsletter at www.qmscotland.co.uk



Published by Quality Meat Scotland, 2015

All rights reserved.

© 2015 Quality Meat Scotland

ISSN 2057-0368

WELCOME



The picture on the cover of your Summer 2015 issue of **Livestock+** communicates some of the great attributes which set our industry apart which, in my view, we should all be very proud of.

As farmers we might look at that picture and simply see a fellow livestock producer, a collie “dug”, some decent-looking beasts and a man from the Scottish SPCA.

But ask typical members of the public (our consumers) to take a look and they see much more. They see a picture that tells them that we as an industry care about what we are doing – about our environment and about the welfare and wellbeing of the animals we work hard to produce.

It’s a picture that shows good stockmanship and a pride being taken in the way we treat our animals. These are key parts of the quality assurance schemes - of which we are proud to have you as a member – which are celebrating their 25th anniversary this year.

In recent months QMS has launched an “Animal Welfare and Wellbeing Charter” which articulates the importance placed by us as an organisation and by those working in our industry, on animal welfare.

We have also recently announced a formal partnership with the Scottish SPCA, Scotland’s leading animal welfare charity and you can read more about this on page 6.

We were encouraged by the industry to undertake a recruitment drive to attract eligible non-members into the schemes and around 160 new applications were received in the first four months of this year – very encouraging.

If you know of someone who is not a member of our quality assurance schemes who could be, encourage them to apply for membership and avoid being left behind.

Going back to that cover picture – along with all the other attributes it communicates, it is brimming with something very valuable. Positivity.

It is true that our industry faces a lot of challenges, many of them frustratingly outwith our control, but we stand a much better chance of tackling them with a positive outlook.

With our heads up we can look for opportunities to further improve the efficiency of our businesses and enthuse those around us about our fantastic quality-assured Scotch Beef, Scotch Lamb and Specially Selected Pork brands.

Jim McLaren, Chairman, Quality Meat Scotland

CONTENTS

4 News

Latest news from QMS.

8 Health Planning Focus

Dumfries farmer says health planning is vital.

10 Managing Ewe Condition Scores

Free QMS resources available for farmers.

12 Controlling Johne’s Disease

Can soil management help to control Johne’s?

14 Pasture Management

Perthshire farmer sees benefit of rotational grazing.

16 Farrowing Management is Key

Pig producer improves piglet survival and profits.

18 Market Report

Factors affecting the red meat market.

Making the most of a range of events



I have been fortunate to be able to attend several of the events QMS has supported in the past few months – from industry-facing events such as the Scottish Beef Association's Beef from the Hills to consumer-facing events like Taste of Grampian.

It can be difficult to take time away from the office to attend events but it is invariably time well spent – whether as an opportunity to hear levy-payers' thoughts and ideas or to chat directly to the public about what our industry's brands stand for and share our health and education messages.

Two other events QMS has had a strong presence at in recent weeks were Young Scot, which celebrates exceptional young people and is a great opportunity to get our health message to Scottish families, and the Guild of Food Writers Awards in London – a fantastic opportunity to inspire hundreds of key journalists and bloggers about our industry and brands.

However, there is one event at which all of the above opportunities for us to engage with different audiences are rolled into one – the Royal Highland Show. This is a fantastic occasion for our industry to showcase all the work, skills and dedication which go into the production of Scotch Beef, Scotch Lamb and Specially Selected Pork.

Visitors to the QMS stand were able to view cattle, sheep and pigs and hear directly from stockpeople about the high standards involved in livestock production and the range of career opportunities our industry offers. We also had cooking and butchery demos running on the stand throughout the four day event and, with the Royal Highland Education Trust, we cooked with hundreds of children in the Scotch Beef Children's Cookery Theatre at the show.

If as a farmer you have never visited the Discovery Centre you should make this a priority for next year.

ITV X-Factor star Emily Middlemas gave a phenomenal performance on our stand for the final of our #TasteScotland Schools burger competition. We also set a new Guinness World Record for the most sausages made in one minute when butchers Nigel Ovens from Wemyss Bay, and Alastair Paul from Inverness went head to head in a very entertaining challenge.

We also announced the winners of our new "Bright Sparks" initiative with the Scottish Association of Young Farmers Clubs and Campbell Dallas Chartered Accountants.

The "Highland" offers an unrivalled opportunity to meet 100s of our levy-payers and thousands of consumers face-to-face in the space of just a few days and it is also a valuable chance to remind farmers and others who work in our industry of the very wide-ranging activities the small QMS team delivers on your behalf.✦

Uel Morton

Uel Morton,
Chief Executive
Quality Meat Scotland

Successful Butchers' Campaign Captures Taste of Summer

A new recipe booklet produced by QMS has been distributed to over 50,000 consumers over the summer as part of a successful butchers' campaign.

"Simple Summer Cooking" promoted Scotch Beef PGI, Scotch Lamb PGI and Specially Selected Pork as the perfect ingredients to create simple summer recipes.

The collection of easy-to-follow recipes was created to inspire consumers during the summer season, whether they were looking for something to sizzle on the BBQ or to serve with a light seasonal salad.

Commenting on the campaign, QMS Marketing Executive Graeme Sharp said:

"Summer is a great time for relaxing and getting together with friends and family. Having meals you can prepare without fuss or spending ages cooking is ideal.

"With this in mind, we have put together a helpful guide of popular cuts of meat and delicious recipes that are quick to cook and perfect for eating indoors or out."✦

The recipe booklets can be found in over 300 Scotch Butchers Club shops around the country. To find your nearest Scotch Butchers Club member, visit www.scotchbutchersclub.org and for more recipes visit www.scotchkitchen.com and www.speciallyselectedpork.co.uk



Scotch Lamb Campaign Targets 3.7M Consumers

A high-impact advertising campaign developed by QMS to promote Scotch Lamb PGI to 3.7 million consumers is underway.

The 2015 Scotch Lamb PGI campaign - set to reach over 90% of Scottish adults - builds on last year's very successful campaign which boosted retail sales of lamb in Scotland by 11%. QMS's award-winning "Wham Bam Lamb" campaign resulted in demand rising by 87 tonnes of lamb over the 12 week activity in 2014, with an extra 28,800 Scottish households buying lamb between August and October.

This year's campaign is very much building on last year's recipe for success and the two month long campaign will harness a range of marketing activities to drive Scotch Lamb sales. The marketing push includes billboard, press and radio advertising as well as on-line and in-store activity including 80 days of activity by Scotch "Lambassadors" in Tesco and Asda.



Recipe leaflets and other point of sale materials are also being distributed to consumers via the members of the Scotch Butchers Club, run by QMS. A range of new videos for on-line and social media use, featuring Edinburgh-based chef Daniella Forbes and Glasgow-based chef Justin Maule demonstrating simple, delicious dishes, have also been developed.

This year's "Love Scotch Lamb Weekend" will be on September 5th and 6th, when a range of activities will take place around the country to celebrate all that is wonderful about Scotch Lamb PGI. Historically, Scotland has consumed less lamb than other parts of GB.

Around 4,000 tonnes of lamb (worth around £34 million) is eaten each year in Scotland with about 44% of the population purchasing lamb at least once in the last year (versus 57.8% in Great Britain).

"The target audience for the campaign is young professionals and busy working parents and the message is that lamb is not just for roasting at the weekend - it can also make a quick, nutritious mid-week meal for all ages to enjoy," said Suzie Carlaw, QMS Marketing Controller. "There is the perception by some that lamb is slow and difficult to cook so we have a huge opportunity to raise the profile of lamb as a quick and easy, value-for-money meal option. 'The main focus of this year's campaign will be to promote simple, speedy dishes that the whole family will enjoy.' +



Aspiring Young Chef Combines Love of Food and Farming

Eilidh Davidson, a 17 year-old student of Professional Cookery at North East Scotland College in Aberdeen, has emerged as the overall winner in the Scotch Beef Young Aspiring Chef Challenge after a cook-off final at Taste of Grampian in June.

The competition, sponsored by Quality Meat Scotland, gives young chefs the opportunity to demonstrate their innovation and talent as well as highlighting the quality of local produce such as Scotch Beef, Scotch Lamb and Specially Selected Pork.

Eilidh lives on the family farm at West Cortiecrum near Mintlaw which has 500 continental finishing cattle and 1,750 feeding lambs. She said: "I like to help on the farm whenever I can. Some people

don't understand where their food comes from but, having been brought up on a farm, I really appreciate the hours of hard work that go into looking after the animals and how that leads to a top quality food product.

"Scotch Beef is my favourite ingredient - I find it really versatile. When I was deciding on my menu for the challenge, I knew right from the start that I wanted to have beef as the main course."

The final was judged by three judges, including award-winning cook and food writer **Lady Claire MacDonald.** +



X-Factor Star Presents Schools Burger Competition Awards

Scottish X-Factor star Emily Middlemas presented the awards to the finalists of our Scotch Butchers Club #tastescotland schools burger competition at the Royal Highland Show this year.

As well as revealing the overall winner – Greenwood Academy in Ayrshire – sixteen-year-old Emily performed a live set on the QMS stand, including her favourite song from Bootcamp. The main objective of the competition is to encourage youngsters to take an interest in quality, local ingredients such as Scotch Beef, Scotch Lamb and Specially Selected Pork and to understand how simple it is to cook tasty, healthy food.

As 2015 is Scotland's Year of Food and Drink, the over-arching theme for this year's home-made burger competition was "#tastescotland". From over 120 entries, the three finalist schools were Greenwood Academy from Ayrshire, Webster's High School in Kirriemuir and Airdrie Academy in North Lanarkshire, with Greenwood's Specially Selected Pork "Clapshot burger" emerging as the overall winner.✚



Pride in Scottish Livestock Welfare Highlighted in QMS and Scottish SPCA Partnership

The priority the Scottish red meat industry places on animal welfare has been highlighted by the establishment of a formal partnership between Quality Meat Scotland (QMS) and the Scottish SPCA, Scotland's leading animal welfare charity.

QMS and the Scottish SPCA have a long history of working closely together with the aim of promoting and encouraging a

high level of animal welfare in the Scottish livestock industry. Animal welfare is an important aspect of QMS's quality assurance schemes and something which continues to be of increasing importance to consumers. QMS's commitment to animal welfare in the production of beef, lamb and pork in Scotland is highlighted in its "Animal Welfare and Wellbeing Charter", which clearly articulates the priority placed on animal welfare and wellbeing by QMS and others working in the Scottish red meat industry.

The partnership will advise and inform the QMS board on matters of animal welfare and wellbeing through the committees which set the standards for QMS's Quality Assurance Schemes and other channels. The QMS board may also consult the Partnership on matters relating to animal welfare and wellbeing.

Jim McLaren, Chairman of QMS, welcomed the establishment of the partnership as a very clear indication of the priority placed on high standards of welfare in Scotland.

"This partnership reflects Quality Meat Scotland's ongoing commitment to animal welfare in the wide-ranging work we undertake. It also reflects the value QMS places on the work undertaken by the Scottish SPCA, which has a very long history of working closely with the Scottish farming industry.✚

SCOTTISH SPCA
Scotland's Animal Welfare Charity

Report Highlights Importance of Red Meat Production to Scotland's Economy

The 2015 Scottish Red Meat Industry Profile draws together a wide range of information on the Scottish red meat sector and encompasses the whole production chain, from producer to final consumer.✚

Email info@qmscotland.co.uk to request your copy or download a copy from www.qmscotland.co.uk/publications



Keen Interest in Scotch Beef and Scotch Lamb at Hong Kong Event

Buyers took a keen interest in Scotch Beef PGI and Scotch Lamb PGI in Hong Kong earlier this year at Hofex, Asia's leading food and hospitality trade show.

As well as a high profile stand in the Prime Meat Hall, QMS also had a presence at Scotland Food & Drink's Scottish Pavilion, where a chef served samples of top quality produce for potential buyers to savour. Master butcher Viv Harvey also attended the event and displayed his butchery skills using top quality Scotch Beef and Scotch Lamb in a large demonstration theatre.

"There has been very keen interest here in Scotch Beef and Scotch Lamb, and numerous contacts have been made to develop sales of our beef and lamb in the area," said Laurent Vernet, Head of Marketing at QMS. He added: "The China, South Korea and Japan markets offer huge growth potential."+



UK's Top Food Writers Join Scotland's Year of Food and Drink Celebrations

QMS promoted the qualities of Scotch Beef PGI, Scotch Lamb PGI and Specially Selected Pork to top food writers from throughout the UK at an industry awards event in London in June.

Around 350 food journalists, bloggers, writers and authors attended the Guild of Food Writers Awards and heard about the fabulous produce from Scotland during the event, which celebrates the very best of talent of those who inform and inspire the public about great food.

QMS was the main sponsor of the vibrant event where attendees enjoyed Scotch Beef PGI and Scotch Lamb PGI, provided by Macbeth's at Forres, after the awards ceremony.+

Celebrity chef Rick Stein received a Lifetime Achievement award

Sausage-Making World Record Set at Royal Highland Show

A sizzling new Guinness World Record was set on the QMS stand at this year's Royal Highland Show for the most sausages produced in one minute.

Ally Paul from A&I Quality Butchers in Inverness is set to be crowned the world record holder after successfully linking 36 Specially Selected Pork sausages in 60 seconds. Hard on his heels was Nigel Ovens from Mearns T McCaskie butchers in Wemyss Bay, who made 35.

A large crowd gathered to witness the landmark moment in sausage history, which was commented on by TV and radio presenter Bryan Burnett and filmed by BBC Landward.

Carol McLaren, Head of Communications at Quality Meat Scotland, said: "One of the main aims of the world record attempt was to raise the profile of the skills and commitment of our butchers, who are at the heart of communities around the country."+



HEALTH PLANNING UNDERPINS STRONG PERFORMANCE

Andrew Nelson of Cogarth Farm, Castle Douglas is proud of the performance of his livestock, and rightly so. In 2015, the farm's calving period was a very compact eight weeks and 90% of the ewes lambed within the first 14 days of lambing.



COGARTH: AT A GLANCE

500
acres
owned

Farmed by
Andrew Nelson
with his parents,
John and Margaret

150
suckler cows,
mainly Angus x
Friesian
and Angus x
Montbeliarde

500
Cheviot mule
and Texel cross
ewes

Calves sold store as
yearlings through
Wallets Market,
Castle Douglas
Lambs finished and sold
through Farm Stock Ltd
and Galloway Lamb

96%
of lambs sold
off grass by
Christmas

Flock
vaccinated
against enzootic
abortion and
toxoplasmosis

Sheep feet problems
managed through
swift treatment for
lameness and culling
of persistently
lame sheep

Achieving these targets is the result of striving to get the genetics and nutrition right but Andrew also maintains detailed health plans for his stock to help improve performance. The remarkable figures are indicative of livestock in excellent health.

“We have always prioritised the health and welfare of our stock,” says Andrew, who runs the 500-acre upland farm with his parents, John and Margaret. “We were early adopters of BVD eradication and one of the first to recognise the benefits of quality assurance. We became members of Quality Meat Scotland’s Quality Assurance scheme quite early on. Our membership number is 402,” he adds.

As Cogarth moved away from breeding their own replacements, Andrew and I discussed how to minimise the disease risk from bought-in stock and now have particularly robust quarantine procedures in place.”

The heifers calve to an Angus bull, with the main herd put to Charolais bulls that are selected for ease of calving and on the basis of their EBVs for 200-day and 400-day weights. Only five out of the 150 required assistance at calving this year and 97% calved within eight weeks. Andrew’s proactive approach to health and nutrition means the calves face little in the way of disease challenge; he finds he has a very even batch of yearling stores, which he sells through Wallets Market in Castle Douglas.

On the sheep side, the flock follows an annual programme to prevent losses from clostridial diseases and the gimmers are vaccinated to protect against the main risks of abortion. However, problems with feet are managed without the use of vaccination and this is recorded in the health plan. Andrew will treat a lame ewe swiftly with antibiotics and record her tag number in his diary; any ewe with recurring lameness will be culled, thus quickly reducing the risk to the rest of the flock. The programme works and lameness is less than 2%.

With a reputation for healthy stock, he has regular customers for his ewe lambs, with about 150 sold privately each year for breeding. The remainder are sold off grass through Farm Stock Ltd and Galloway Lamb. Last year, all but a handful were finished by Christmas. The average sale weight was 19.8 kg, and 97% reached the target specification of an R3L or better with a third of these being E and U grades.✚

“Health planning is an ideal opportunity to weigh up the benefits against the potential costs. Prevention of disease is usually more straightforward than trying to cure an outbreak.”

The health of the spring calving suckler herd and flock of 500 Cheviot mules and Texel crosses is managed in conjunction with Stewartry Veterinary Group. Andrew works closely with his vet, David Nelson, to formalise the routine health procedures, initially on paper – though more recently he has started to utilise the web-based Sheep and Suckler Cow Animal Health Planning System (SAHPS).

David comments: “Sitting down together to plan livestock health is what we try to do with all farmers in the practice. It’s an opportunity to evaluate the past year and highlight where to improve performance.

This year, the steers at the first sale weighed 423 kilos to realise £1,075 and the heifers weighed 402 kilos at £960. Andrew comments, “The store calves sold in April 2015 averaged 1.4 kilos liveweight gain per day over the winter.”

The Stewartry practice consists of a team of five farm vets who all advise on day-to-day enquiries from farmers. It’s often a case of reassuring farmers that they can use products effectively and at the correct time to prevent overuse. “Health planning is an ideal opportunity to weigh up the benefits against the potential costs. Prevention of disease is usually more straightforward than trying to cure an outbreak,” comments David.



Replacement and Quarantine Policy at Cogarth

Stock	Purchase information	Tests and treatments	Quarantine
100 Cheviot mule ewe lambs.	Bought through Longtown Auction Market.	On arrival, they are isolated and treated for sheep scab with an Ivermectin injection. Another wormer is administered at the same time to reduce the risk of introducing resistant worms. They are also treated for liver fluke and run through the footbath.	Grazed away from the main flock until lambing at two years old.
30 Angus x Montbeliarde heifer calves.	Bought from a local dairy farmer at six weeks old. This source has provided calves for five years and is TB & BVD free and herd vaccinated for leptos.	BVD tested and vaccinated for BVD and leptos before bulling.	Kept separately from the main herd until calving at 2 1/2 years old.

MANAGING EWE CONDITION SCORES PAYS DIVIDENDS

Sheep are programmed for the seasons. Their natural cycle is to produce and gain weight when grass is plentiful and simply maintain themselves when grass is in short supply. Managing the supply of grass throughout the year is, therefore, crucial to profitable lamb production.



Image: Trevor Cook

Leading New Zealand vet and livestock consultant Trevor Cook believes there is potential to maximise the use of grazed grass, without compromising production, if the nutritional requirements of ewes at different times of year are fully understood. He visited Scotland earlier this year and spoke to farmers at six QMS grazing group meetings throughout the country. All the farmers were keen to learn more about how to improve pasture management and optimise livestock production on their own farms.

Michael Blanche, QMS Knowledge Transfer specialist, said: "The correct nutrition of ewes lays the foundation for a successful and profitable flock, and knowing how to condition score is the simplest and most effective way to assess if you are feeding your ewes correctly."

During his trip to Scotland, Trevor demonstrated a quick, effective way of assessing individual Body Condition Score (BCS) in sheep. This technique can be seen in a short video QMS has recently produced on condition scoring.

"Having the skill to make the judgment on the score quickly makes the task simple to carry out. If it's new to you or if you wish to teach the next generation how to assess condition in ewes, the film will help you to become proficient and accurate," said Trevor.

When to Condition Score

"Ideally, condition scoring should take place at two key stages in the production cycle - post weaning and scanning. At both stages, there is an opportunity to identify the ewes that are below target and raise their condition so they can achieve optimum performance."

Post weaning, farmers can draw out ewes with BCS lower than 3. Giving this group the best grass to graze and a minimum of 4cm good quality pasture will provide their energy requirements in order to raise their condition to BCS 3. Budget for eight weeks to move up a condition score, but you can do it in six weeks. At this point, ewes with a score of BCS 4 can actually be put onto poorer grass or used to tidy up paddocks. This will free up more pasture for the leaner ewes or finishing lambs.



Trevor added: "Reducing the number of very poor condition ewes going to the tup will deliver a big lift in scanning results and even eventual lamb performance."

The condition scoring process should be repeated at scanning time, when again ewes below the target of BCS 3 can be drawn out for preferential feeding. Ewes expecting twins or triplets will struggle to consume their nutritional requirements in late pregnancy so often rely on their body reserves as a buffer. The period between scanning and the five weeks prior to lambing is the last chance to put condition onto thin ewes and hence build them up to BCS 3 by lambing time.

"Ewe BCS also has a massive impact on lamb survival. Research has shown that ewes in optimum condition (BCS 3) at lambing give birth to decent-sized lambs, have increased mothering ability, produce more milk and wean heavier lambs with higher survival rates.

"At both these key points of intervention, the farmer has an opportunity to influence the BCS. Make it a target to minimise the number of ewes in your flock with less than BCS 3 at tupping and lambing, and you can expect to see significant increases in profitability," said Trevor.



Ewe Timeline Guide for Farmers

To help farmers manage the condition of their ewes throughout the year, QMS has developed a 'Ewe Nutrition Timeline' poster, which contains a wealth of information about target BCS and feeding levels for ewes throughout the breeding season.

Emily Grant, QMS Grazing Group Co-ordinator, commented:

"The timeline has some really useful information for farmers. It highlights how maintaining condition score and being aware of the ewe's increasing nutritional requirements are important for maximising efficiency and, therefore, profitability."

The timeline also highlights the golden 20 days around tupping when farmers are encouraged to offer ewes the best quality grass to enhance ovulation rates and embryo survival. The timeline can also help farmers select a lambing date to maximise the availability of high-quality spring grass to help drive ewe lactation.

The timeline is aimed at pasture-based lowland or upland flocks lambing at the end of March or later, and is available free of charge from QMS.+

QMS VIDEO ▶

In this short video Trevor Cook demonstrates a simple way to assess body condition score in ewes. He compared how the short rib bones of each ewe felt, compared with the bones in his own hand.



Body Condition score one: The short rib bones feel sharp like the tips of your fingers.



Body Condition score two: The short rib bones feel similar to the points of your knuckles.



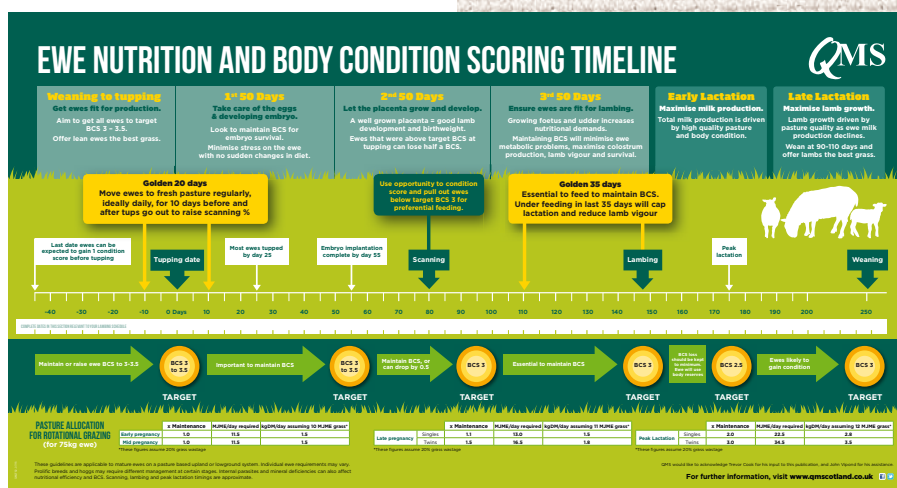
Body Condition score three (Ideal): The short rib bones feel similar to the flat part of your knuckles.



Body Condition score four: The short rib bones cannot be felt (like the back of your hand).

VIEW THE EWE CONDITIONING SCORE VIDEO
AT WWW.QMSCOTLAND.CO.UK/VIDEO-LIBRARY

**TO REQUEST A FREE
"EWE NUTRITION TIMELINE" POSTER,
email QMS on info@qmscotland.co.uk
or call 0131 472 4040**



SOIL MANAGEMENT CAN HELP CONTROL JOHNE'S DISEASE



Farmers from Stirlingshire gathered at the QMS Forth monitor farm to learn about how managing the environment can help reduce the risk of Johne's on their farms.

Duncan McEwen and his son, also Duncan, run breeding cattle and sheep enterprises at Arnprior Farm, an 815 acre (330 ha) mixed unit, 12 miles to the west of Stirling. They have been monitor farmers for over two years, and, like the other farmers who attended the meeting, were keen to hear the latest guidance on how to minimise the risk of Johne's disease for the livestock on their farm.

Johne's, an incurable gastrointestinal livestock disease, was first described by Dr Heinrich Albert Johne in 1895. The main signs in cattle are progressive weight loss and chronic diarrhoea, and in some cases death. There is no treatment, and diagnosis and control are difficult.

Johne's doesn't just affect cattle; it can also affect sheep, rabbits and deer, and there is research to indicate that these other species can pass the infection on to cattle.

"The lime spreading to lift the pH was intended to boost general farm productivity. It's good to know that this also helped to reduce the risk of Johne's."



There is no doubt that Johne's has been a challenge to scientists world-wide as they try to establish effective control methods for *Mycobacterium avium* subspecies paratuberculosis (MAP), the bacterium that causes Johne's.

The major way Johne's spreads in a cattle herd is via faecal material (dung), with calves under a month old being the most vulnerable. However, the disease can also spread from dam to calf.

At the meeting, Dr Rupert Hough from The James Hutton Institute highlighted some of the findings of the Scottish Paraban project – a joint venture to increase understanding of how the Johne's agent behaves.

"Many livestock farmers have health schemes and/or best practice management in place to attempt to control the spread of Johne's.

Duncan McEwen junior



For more information
about John's disease
visit:
www.qmscotland.co.uk/johnes-disease

John's Ready Reckoner

John's Ready Reckoner	High risk	Medium risk	Low risk
Manure management	Store manure for 3 months or 3 years prior to spreading	Store manure for 2 months or 2 years prior to spreading	Store manure for 1 month or 1 year prior to spreading
Slurry management	Apply slurry to pasture after rainfall or irrigation	Apply slurry to pasture after rainfall or irrigation	Apply slurry to pasture after rainfall or irrigation
Slurry storage	Store slurry in a covered tank or silage pit	Store slurry in a covered tank or silage pit	Store slurry in a covered tank or silage pit
Water	Test water for coliform bacteria	Test water for coliform bacteria	Test water for coliform bacteria
Pasture	Test pasture for coliform bacteria	Test pasture for coliform bacteria	Test pasture for coliform bacteria

"While some of these measures are successful, they do not seem to work on all farms, suggesting that there are other factors associated with disease prevalence," he said.

"While the biggest risk to cattle is thought to be other infected cattle, the potential for MAP to survive for lengthy periods in the environment is one of the reasons why it is so difficult to control. There is evidence to suggest that soil characteristics play a role in its survival."

As part of the Paraban project, MAP bacteria levels were assessed in numerous soil samples taken from eight Scottish mainland farms, a mix of beef and dairy, ranging geographically from the far north-east to the south-west.

"We established that pH and levels of available iron seem significant to the length of survival of MAP in the soil. As soil pH levels decrease, the availability of iron within the soil increases," said Rupert.

He added: "Our research suggests that MAP seems able to survive for many years in acidic soils. In trials, we found that liming to raise soil pH to 6.5 led to a significant decrease in bacteria numbers."

This was encouraging news for the McEwens who have, over the last decade, concentrated on soil improvement, in particular lifting the pH levels.

"In the mid-1990s, we soil-sampled over the farm and discovered that the pH levels were generally low," explained Duncan McEwen junior.

"Since then we've limed every field, spreading half a tonne per acre annually for several years, and then we soil sampled again. Now most fields are at pH six or above, with some small areas still needing a bit more lime to get the pH right.



Dr Rupert Hough, The James Hutton Institute

"The lime spreading to lift the pH was intended to boost general farm productivity. It's good to know that this also helped to reduce the risk of John's."

Rupert explained that MAP bacteria appear to favour a number of particular on-farm environments, including soils with high levels of organic matter and wet soils, created either through high rainfall or poor drainage.

To help livestock farmers understand everyday management practices which can influence the John's disease risk on their farms, Rupert and his colleagues have compiled a "John's Ready Reckoner", which outlines high, medium and low-risk methods of manure and slurry management, silage making, livestock water supply, pasture management, soil conditions and livestock husbandry.

With faecal material acknowledged as the main spreader of John's disease, Rupert highlighted the risk of taking dung from other farms with an unknown disease status, and advised that it should not be spread on grazing land.

Soil types vary at Arnprior Farm, with some gravel loam land south of the A811 road which dissects the farm. At an earlier meeting, Duncan McEwen senior had told the community group: "There's no such thing as too much dung for this gravelly land."

Consequently, in addition to dung from their housed cattle, the McEwens bring in extra from a neighbouring farm.

"After learning that this dung could be increasing our John's risk if spread on grazing land, I'm relieved we've only used it on cropping ground," remarked Duncan McEwen junior. "And we will most definitely continue to do so!"



BETTER PASTURE MANAGEMENT CAN DOUBLE PRODUCTION

Managing grass, and in particular white clover, was the theme of a QMS Grazing Group meeting held on **Alastair and Alex Brewster's** Rotmell Farm at Dunkeld earlier in the summer.

Several local farmers attended this fourth meeting of the Perthshire group and Michael Blanche, QMS Knowledge Transfer Specialist, said he was pleased with the commitment farmers are showing to the group.

"The aim of the grazing groups is to increase kg of liveweight produced per hectare through better utilisation of grass," said Michael.

"The theory is that farmers can double production over average set-stocking systems through better pasture management and, through the grazing groups, we are setting out to prove this."

There are six grazing groups in Scotland – from Tain in the north to Glenluce in the south – and they are now at a stage where benchmarking is starting to mean something.

Michael added: "We are developing cost of production figures meeting by meeting and measuring soil temperatures and grass growth in order to make comparisons.

"Everyone can see that grass growth is less than last year. However, we have measured it and we have grown less than 70% of the grass we grew last year.

"That is over a tonne of dry matter per hectare as of June 1st. Over three years, we will be able to build a picture of growth trends and costs of production. Knowing this information is one step; the real leap is how we fit our grazing systems to make the most of these growth curves and hence reduce production costs."

New Zealand pasture researcher John Brock spoke to the meeting about white clover. He said it underpins New Zealand pastoral agriculture, with research showing 60% of white clover in the diet is optimum for animal production.

There is no doubt that those present will have left the meeting with a better understanding of how to establish and manage white clover, and one of the key messages from John was that clover will only fix nitrogen if natural soil nitrogen is low, so there is no point in over-fertilising with bagged fertiliser.

ROTMELL FARM: AT A GLANCE

Run by
**Alastair
and Alex
Brewster**

986 ha
140 ha improved
pasture/
120 ha rough
grazing

100
Aberdeen
Angus cows



800
Blackface
ewes

For more
information about the
QMS Grazing groups
please visit:
[www.qmscotland.co.uk/
grazing-groups](http://www.qmscotland.co.uk/grazing-groups)

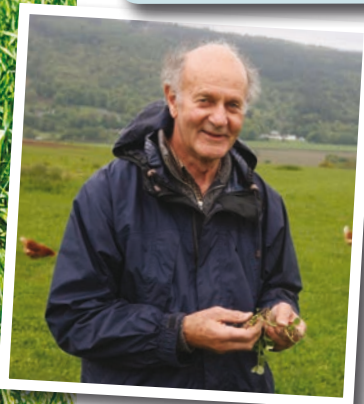


Image: John Brock

He pointed out that a relatively productive pasture will use approximately 1200kg/ha of nitrogen and the vast majority of that comes naturally from the soil. Clover can fix 50 to 200kg/ha of nitrogen per year but will only do so when it has to. This could be a real challenge for any Scottish farmers who think that if they do not fertilise grass then it will not grow.

John was encouraged by the pasture on most of the farms he has seen in Scotland, and particularly at Rotmell where the clover swards were impressive. He said: "The Scottish soils seem to have less organic matter which makes a difference to the clover, but on the whole the pastures are fine. It is the management which is important."

Alex runs 800 Blackface ewes and 100 commercial Aberdeen Angus cows on 986 ha at Rotmell. The farm is all LFA, with around 140 ha of improved pasture and 120 ha of rough grazing.

"Market prices are beyond our control, so we have to become more efficient at producing kg of liveweight from grass."

Although he has experimented with rotational grazing for a couple of years, since joining the grazing group in July 2014, Alex has picked up a lot of ideas from the meetings. He said: "It is good to get the feedback from other farmers who are genuinely trying to cut costs. The market prices are beyond our control, so we have to become more efficient at producing kg of liveweight from grass."

One of the ideas grazing group host Alex Brewster is putting into practice this year is to run his 50 spring calving cows and heifers as one batch with two bulls. He hopes this will improve conception rates and shorten the calving period, while helping with grass management. He operates a three ha paddock rotational grazing system and explained: "The ewes with twins are a priority in the summer and they get first shot at the grass for 48 hours, eating the best of the leaf and clover. Then the big mob of cows come in and clean up for up to 48 hours, before the field is left for 21 days until grass growth is 8 to 10cm or 2500kg/ha DM.

"The theory is that we are using stock to manage the grass while increasing production at the same time. Ryegrass and clover want to reproduce, so we are using stock to control the growth. We try to graze between 1500 and 2500kg/ha DM. If it gets to more than 2700kg/ha DM then it needs to be kept for silage, as it has lost its full grazing potential."

He is currently using electric fencing for his paddocks but is planning something more permanent this year. "It may seem like a lot of work moving stock every two days but it takes no longer to walk them through a gate into the next field than it would to check them," said Alex.

Michael said that managing grass is as much of a skill as stockmanship. He said: "Parallel to all grazing group meetings, we like to see step-by-step changes in how the rotational grazing is developing. We are definitely seeing that at Rotmell."

Alex agreed, saying: "As farmers, we are guilty of concentrating on stock and we do not give enough consideration to what the stock eats." He is heading to New Zealand for a couple of months in January to see for himself how grass is managed on the other side of the world.

"I believe that subsidies are on their way out, and in order to grow the business I need the tools to do it," said Alex. "Fertiliser and concentrate feed are very expensive, and lamb and beef prices are beyond our control, so the only way forward I can see is to be technically able and produce meat from grass." +

Paddock rotational grazing system



Sheep are grazed for **2 days** then cattle are grazed for **2 days**. The field is then left for **21 days** until grass growth is **8 to 10cm** or **2500kg/ha DM**



CAREFUL MANAGEMENT REAPS REWARDS

Careful management to ensure the vitality of new-born piglets after farrowing is a very worthwhile investment which reaps rewards, according to Carlos Casanovas, a Spanish vet who specialises in pig breeding units with highly prolific sows.



Image top: Jamie Robertson, LMS
Below: Danny Skinner, Lazyfold Farm.

His message was that producers should focus on the detail of management around farrowing, ensuring that resources are prepared and available for the first few hours around birth. This might appear expensive, but the rewards would make it very worthwhile.

The project facilitators, Jim Booth of SAOS and Jamie Robertson of LMS, organised a visit by the Spanish vet following a suggestion by one of the members of the community group involved in the monitor farm at Lazyfold in Aberdeenshire.

The group had identified that performance on the farm could be stronger in terms of pre-weaning mortality rates. However, the farm was already operating on a first-class basis in many aspects of production, with the unit achieving 29.5 piglets born alive per sow per year in 2012, from home-bred stock.

“As a unit, we were happy with some aspects of performance and steadily upgrading the farrowing house facilities,” said Danny Skinner of Lazyfold.

“However, with high numbers born we had struggled to achieve the pre-weaning mortality figures that we would have liked.”

Focus on pre-weaning survival

Focusing on pre-weaning survival rates was an early target for the monitor farm project, with additional analysis of the routine production data managed by monitor farmers Danny and Alison Skinner.

The age of the sows, time of year, type of farrowing room and reasons for any piglet mortality were all reviewed by the monitor farm group. Most of the data was typical of other high-performing breeding units.

There were small differences between farrowing rooms which appeared to justify the investment in the steady improvement of facilities, but careful consideration also highlighted that the first two to three days after farrowing are critical in managing piglet survival.



The ability to share data is a great strength of the Scottish pig sector.

Carlos said that as number born per litter increases it becomes harder to maintain average birthweights, meaning that the number of low-weight piglets is bound to increase. These light piglets can all make a profit for the business, but they need to survive the first 24–48 hours first.

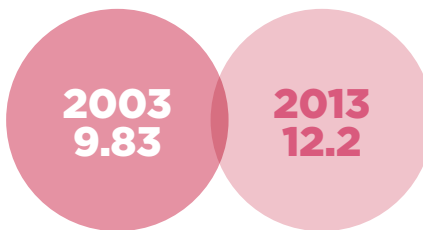
Stockman Brian Maitland subsequently focused on getting the sows as comfortable as possible before farrowing, and then aimed to visit the farrowing room at least every 30 minutes on farrowing day.

Piglet vitality enhanced

A student project was organised to collect further data from the period around farrowing to follow up on the advice given by Carlos. The project focused on ambient air and floor temperatures in each of the 18–20 farrowing pens in each farrowing room on days -1, 0, +1, +2 and +3 around farrowing. The project also investigated the impact of placing shredded recycled paper behind 50% of the sows before farrowing.

The study, carried out by Aberdeen University honours student Elisabeth

Number of piglets weaned per litter



Benefit of using shredded paper to reduce losses in farrowing areas.

Without paper = 38 piglets lost from a total of 599 (6.3%)

With paper = 20 piglets lost from a total of 589 (3.4%)



Dalton, showed clear results which the unit then applied with a positive impact on piglet vitality and survival (see above).

The attention to detail around farrowing, and the small but significant changes implemented by the team at Lazyfold, not only improved performance but improved the profitability as well.

Danny believes that the increase they have seen both in the number of piglets born and number of piglets reared, is due to a number of management improvements they have made at Lazyfold. He reported: 'A new feeding regime in the farrowing rooms has resulted in the sows being in the right condition at weaning. Getting the feeding right, has really helped boost performance as has the selecting replacement gilts carefully to make genetic improvements to the herd.'

Benefits of sharing data

The QMS pig monitor farm project has supported the availability of a single pig management software package to all the QMS quality assured pig units, and this greatly enhances the ability of producers to share and compare data.

Allan Ward, QMS Pig Specialist, had worked closely with the software supplier, Agrosoft, to increase the uptake of the

programme amongst the producers.

"The more progressive producers already had their management software in place and were understandably reluctant to change, and training in the new package was required across Scotland to facilitate the change. There was a lot of effort behind the scenes, but we made encouraging progress," said Allan.

"The ability to share data is a great strength of the Scottish pig sector, and while data sharing is totally voluntary, the monitor farm project can lead by example. The pre-weaning mortality data is a good example of the value of sharing data, as producers around Europe are all exposed to the same problems as sow prolificacy increases.

"It is a brave decision to open your business to the inspection of your colleagues and to have the raw data from the monitor farm process paraded in public. The return on that exposure needs to be an improvement in profitability, otherwise the whole process will struggle."

"Working with Danny Skinner and his family is all that we would wish for in the QMS monitor farm programme." +



Allan Ward, Pig Specialist at QMS.

FACTORS AFFECTING THE RED MEAT MARKET



With the exception of beef prices, which rebounded strongly through June and into July, producer prices for red meat are in a bit of turmoil. However, it is not just livestock prices that are under pressure but also milk and grains.

By **Stuart Ashworth**,
QMS Head of Economics Services

At the time of writing, lamb prices are at their lowest level for the time of year since 2009, pig prices their lowest since 2008, feed barley lowest spot price since 2010 and milk prices the lowest since 2010.

It is not just in Scotland that agricultural commodity prices have come under pressure. The Food and Agricultural Organisation of the United Nations (FAO) regularly monitors global trade prices for commodities, and their latest report shows that the decline in commodity prices has been a global as well as Scottish phenomenon. The FAO index for meat includes a basket of meat including poultry, pork, beef and lamb; nevertheless, it shows strong growth in prices in early 2014, going against the trend of dairy and cereal price movements followed by a strong correction over the past twelve months. Therefore, global prices and Scottish producer prices are behaving in a similar manner.

So what does the current turmoil in the market tell us, and what messages does it give us for the future? Is it simply a case of supply outpacing demand or it is the case

that consumer behaviour is changing? Is it all to do with exchange rates or the changing pattern of global trade in meat? The answer probably lies in a combination of all these influences – and more besides.

In the UK, consumer behaviour is changing and new pressures are being brought to bear. The attention of consumers is increasingly being drawn to an improved diet and reducing waste. The Scottish Government has, for

example, expressed views on both topics in its “Good Food Nation” discussion document of 2014 and its 2010 Zero Waste Plan.

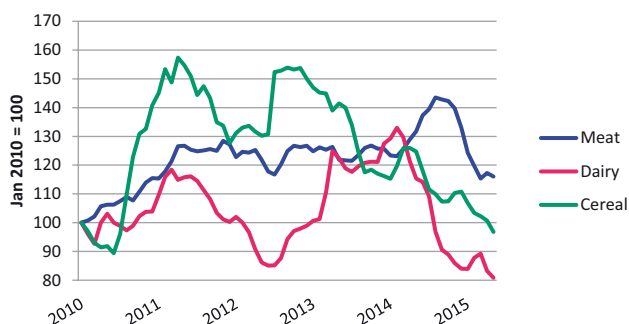
UK Government estimates suggest that 300,000 tonnes of meat and fish were thrown away by UK households in 2012 – about half of this because it was “out of date” or left over at the end of a meal. At the time, this was estimated to be costing households £1.52 per week.

As pressure is put on consumers to be more budget savvy and environmentally aware and – in some cases – required to collect food waste for separate disposal, attention is being drawn to the challenge.

This same research estimates that around 56,000 tonnes of beef is wasted, of which only 4,000 tonnes is unavoidable waste (described as bones).

Factors Affecting the Red Meat Market

FAO food price index



In the UK, consumer behaviour is changing and new pressures are being brought to bear.

Moreover, 18,000 tonnes of sheepmeat is wasted, of which 8,000 tonnes is unavoidable, and 140,000 tonnes of pig meat is wasted – of which only 23,000 tonnes is unavoidable.

These volumes amount to around 6% of annual UK beef and sheepmeat supplies, and almost 10% of pigmeat. To these volumes can be added meat thrown away in ready meals and from foodservice businesses such as restaurants and canteens.

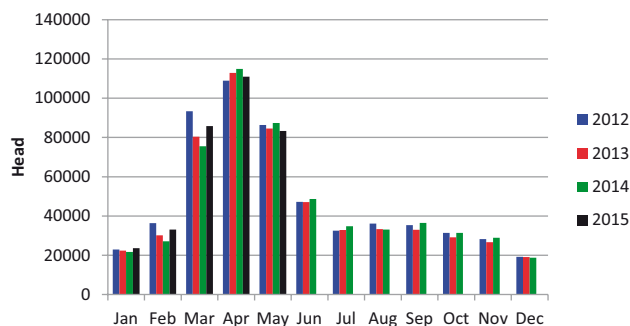
So what do these findings mean for primary livestock producers? The first thought is that true consumption may change little or even go up, as consumers seek to buy little and often and not throw food away, while at the same time the total amount of meat purchased may go down because less is thrown away. Consequently, demand is reduced. The second implication for producers is in respect of the size of retail packs of prime cuts; to throw less away at the end of a meal, consumers will look for smaller portion sizes or boneless product. This, in turn, will have implications for carcass size, particularly for beef producers. Similarly, attractive retail offers of heavy discounting for multiple purchases will become less popular if all you find yourself doing is throwing away the extra product because it is “out of date”.

Changing UK consumer behaviour is perhaps a slow burn in respect of producer returns; having a more immediate impact is change in global consumer behaviour and trade. In the global context the FAO and the Organisation for Economic Co-operation and Development (OECD), in their latest assessment of the agricultural product market, see all the growth in red meat consumption coming from developing countries while

the developed OECD countries will potentially see a small fall in consumption over the next couple of years. Scottish potential to benefit directly from this anticipated growth will be affected by market access provisions, but secondary benefits should remain as potential suppliers to the UK and Europe find alternative, more easily accessible, markets. Nevertheless, there remains a cautionary note as the rapid economic growth in China, for example, has clearly slowed – as has its desire to import red meat. This has in recent months impacted on New Zealand lamb export distribution, and has also affected the beef market. In the longer term though, prospects remain positive – subject, of course, to the politics of market access.

Meanwhile, in the shorter term, supply profiles remain the prime driver. Although cattle supplies have tightened considerably in the past couple of months, the fact that calf registrations were higher than the same month a year earlier for ten of the past 14 months in Scotland and the UK points towards a reversal of this trend in the medium term. Similarly, Bord Bia is already highlighting a small growth in 2014 calf registrations over 2013 and further increases in the first half of 2015 of over 100,000 calves.

Scottish calf registrations



After a slow start in June, UK prime lamb supplies are running ahead of year earlier levels on the back of a larger ewe flock, and prices have come under pressure. Without a weakening of sterling, which seems unlikely in the short term, or an improvement in consumer demand price, pressure is likely to remain on prime lamb prices.✚

For the latest market information please visit:
www.qmscotland.co.uk/market





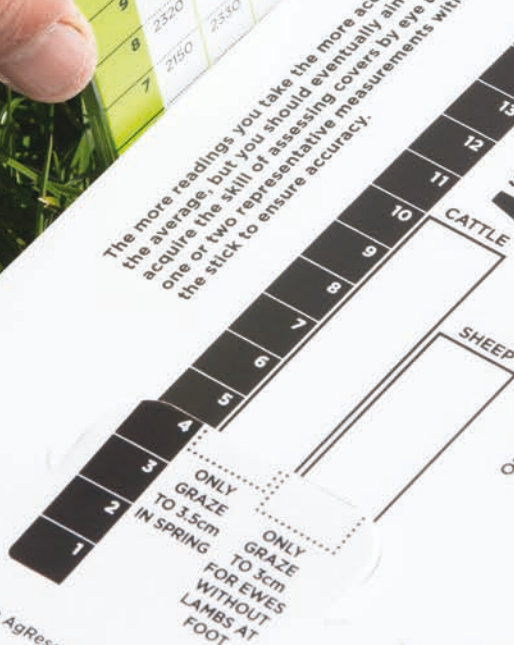
MEASURE TO MANAGE!

**QMS GRASS SWARD STICKS ARE AVAILABLE FREE
- HAVE YOU GOT YOURS?**

To receive your free QMS grass sward stick
please email your address to
info@qmscotland.co.uk
or phone **0131 472 4040**



The more readings you take the more accurate the average, but you should eventually aim to acquire the skill of assessing covers by eye using one or two representative measurements with the stick to ensure accuracy.



Lay the board on the pasture and use the stick to measure the compressed height. Dry Matter (DM) varies according to season.



OPTIMUM GRAZING ZONES FOR ALL SEASONS

Optimum grazing zones can be assessed in centimetres but when recording growth and when feed budgeting Kg / DM / Ha should be used.

www.qmscotland.co.uk