The Scottish Government’s Veterinary & Advisory Services Programme

2013/14

Working for a Better Countryside
Scotland has a vibrant agriculture and rural sector that the Scottish Government aims to support, by encouraging the growth of good agri-business while still enjoying and protecting Scotland’s natural environment. Rural Scotland covers 95% of the land area and 18% of the population and is an integral part of the country’s economy, environment and culture. The Scottish Government wants to see a rural Scotland that is outward looking and dynamic - with a diverse economy and active communities, where rural prosperity will increase in ways that make best use of all resources.

The Scottish Government commissions the Veterinary and Advisory Services (VAS) programme annually to meet a range of statutory obligations and to assist in the achievement of the above objectives. Through the VAS programme the Scottish Government’s strategic outcomes, primarily for a ‘Greener Scotland’ and its sub-outcomes of supporting business, empowering communities and protecting the environment are supported.

In 2013/14 the Scottish Government funding of the programme was £7.25M. Of this £4.1M was allocated to supporting livestock disease surveillance and supporting animal health planning and welfare and the remaining funding supported a range of policy objectives including climate change mitigation, pollution control, diversification, food marketing, crop health, conservation, biodiversity plus farming and crofting in remote areas. Increasingly key outcomes are enhanced as a result of the ability to undertake collaborative activities across a range of Advisory Activities (AAs). AA Managers enhance delivery efficiency by working together to deliver a range of outcomes that have a positive impact on the various target audiences. Knowledge and advice imparted at various events results in the implementation of sustainable industry activities and best practice. Examples of collaboration across a number of AAs throughout 2013/14 include: the establishment of a series of Soil and Nutrient Network farms across Scotland; joint Animal Health and Welfare, Conservation and Biodiversity, Woodlands, Pollution Prevention and Climate Change events; joint Crop Health and Conservation and Biodiversity trial plot activity and multi-faceted activities delivered in the remote and disadvantaged regions of Scotland.

These multi-AA on-farm events connect and increase the range of information delivered to the audience and make best use of available budgets. Value is added for the farmer and the audience as a number of topics are covered at one meeting. Subsequent media reporting and articles produced ensure that multiple and linked
messages are distributed widely in an efficient and effective manner. The pie chart below shows a sector breakdown of the VAS programme audiences.

A number of programme activities also capitalise on collaboration with external organisations to ensure that at an industry level there is end-user focus, message consistency and national budgets are achieving the greatest impact. There are a number of specific successful examples of this collaboration illustrated throughout this document.

There is a statutory requirement for the Scottish Government to maintain an animal disease surveillance system. To deliver this the network of eight Disease Surveillance Centres (DSCs) throughout Scotland collects data from diagnostic materials submitted and provides information on the current health and disease status of farmed livestock. This ensures that any changes in the occurrence of animal diseases are detected and reported. Information is also disseminated in a timely fashion through a number of routes including the SRUC website, Animal Disease Surveillance News, monthly disease surveillance reports published in the Veterinary Record and SRUC farmer newsletters. This information is all linked to expert veterinary and husbandry advice which, utilising the network of DSCs and nationwide offices, supports the implementation of preventative measures across Scotland. This in turn increases the competitiveness of the agricultural sector in Scotland, highlights where further research is needed and where specific campaigns are required. New and emerging problems are identified and significant disease outbreaks investigated.

Zoonotic diseases (diseases which may be readily transmitted between animals and humans) are monitored as part of the VAS programme and expert advice on control measures is provided. This includes monitoring for signs of emerging antimicrobial resistance (AMR). As it is not possible to eradicate AMR and new resistance mechanisms are likely to arise in the future, careful management is required to limit its effects. The importance of AMR was highlighted by the release of the UK Five Year Antimicrobial Resistance Strategy in September 2013.

The VAS programme helps to implement the Scottish Government's proactive approach to biosecurity, health and welfare in Scottish livestock. This is supported through the Animal Welfare Management Programme which encourages the preparation and implementation of farm-level Animal Welfare Management Plans incorporating biosecurity measures. During 2013/14 the major milestone of over two thousand farm holdings registered on the Scottish Animal Health Planning System was achieved. Smallholders and growers have also been supported as they increasingly require advice on good welfare, biosecurity and disease. Training has been provided to ensure that all producers, irrespective of size of enterprise have access to the relevant advice and information. The right advice and support is provided to the industry and Scottish Government through the application of multidisciplinary expertise. This helps to maintain a high animal health status which supports high standards of animal welfare and efficient production. Both of these outcomes in turn reduce emissions per unit of output and help meet climate change targets.

Of increasing importance within the VAS programme is the need to raise awareness of the scale and nature of
global problems and opportunities caused by climate change. Through the Farming for a Better Climate (FBC) initiative practical actions at farm and croft level to reduce the overall Green House Gas (GHG) emissions and adapt to climate change are promoted, thereby contributing to the statutory targets set out in the Climate Change (Scotland) Act 2009 whilst also benefitting the farm business. The VAS programme also provides a free source of information and advice on renewable energy through the website www.sruc.ac.uk/renewableenergy.

The crop health early warning system for major pest, weed and disease problems has helped Scottish farmers protect their crops without additional risk to the environment. The major weather related problems over recent years have proved this to be an invaluable industry resource. The information held is also useful for policy discussion and development. Information is disseminated in a number of ways including the website www.sruc.ac.uk/crops, a Twitter account @SRUCCropClinic, Technical Notes and newsletter articles.

A series of Soil and Nutrient Network farms (SNN) has been established across Scotland to promote soil protection and improvement and highlight ways farmers can benefit from better nutrient use. Farmers have also been made aware of alternative watering options for field grazed livestock and received help to identify what works well and what could be adopted on their own farms. SRUC, working in partnership with SEPA, Scottish Government and the NFUS, is maintaining the Farming and Water Quality website www.farmingandwaterscotland.org which provides a good starting point for land managers wanting to know a bit more about how they can minimise diffuse pollution risks from their business.

New Entrants to agriculture have also been supported throughout 2013/14 as part of the VAS programme. Over 30 business workshops have taken place to equip new entrants with information, skills and guidance to help ensure their business ventures are viable and successful. A highlight of the year was the New Entrants’ Gathering in February 2014 with almost 150 delegates attending this key event. The increasing importance of local and regional food and drink has resulted in a growth in food and drink activities within the VAS programme. In April 2013 the Think Local initiative commenced and is targeting specific growth areas: farmers markets and events; local food retail and food tourism; added value; regional food development and collaboration. This focus on the development of local food and drink has seen collaboration across the food and drink sector with partner organisations working together to ensure the profile of small scale, high quality producers is in evidence at key showcase events.

Farm advisory services continue to be provided across Scotland including the remotest areas. Farmers and crofters in remote areas receive a range of support covering all programme activities. This generates internal benefits to the farm and crofter business as well as a range of external benefits for the environment, society and local communities.
Animal Disease Surveillance and Control

During 2013/14 the network of eight Disease Surveillance Centres has undertaken diagnostic testing on some 4,000 carcases of farmed animals and over 100,000 submissions of blood, faeces, swabs and other materials from veterinary surgeons in practice. Results from these diagnostic tests assist veterinary surgeons to provide effective treatment and control measures on their clients’ farms. In addition, the information on the current health and disease status of farmed livestock is interrogated and changes in the occurrence of animal diseases detected and reported. A few of the conditions recognised in the past year are highlighted below.

**Clostridial Enterotoxaemia**

In 2013, SAC Consulting Veterinary Services began further investigation into a disease in cattle known as clostridial enterotoxaemia. This condition is caused by a bacterium known as *Clostridium perfringens* type D. In sheep, this is a well recognised disease known as ‘pulpy kidney disease’, which commonly causes sudden death in growing lambs. It can also cause sudden death in cattle but the condition is much less understood.

*Clostridium perfringens* type D, like other clostridia, is a soil bacteria present in all areas and is part of the normal gut flora. Under certain circumstances, usually if the animal eats an excess of carbohydrate, the bacteria can multiply in the gut and produce a deadly toxin known as epsilon toxin. This toxin causes sudden death. An effective vaccine is available for cattle and sheep but not all farms use the vaccine.

To diagnose the disease in a dead animal, a test is used that identifies the epsilon toxin in intestinal content. However, it has been suggested that the toxin may occasionally be produced in the gut after death which could result in a false diagnosis. To determine if this is true, samples of intestinal content were collected from over 60 cattle submitted for postmortem examination regardless of the cause of death. These samples are in the process of being screened for the toxin. It is hoped that this will inform as to whether the toxin is specific for this disease or can also be found in cattle dying from other causes. The outcome of this investigation will aid diagnosis of this condition in the future and allow the best advice regarding prevention to be given to farmers.

**Idiopathic Necrotising Enteritis.**

Idiopathic necrotising enteritis (INE) was first identified as a new disease in the early 1990’s. The disease generally affects spring born beef calves between the ages of 6 to 12 weeks. Common clinical signs include depression, diarrhoea, elevated temperature and laboured breathing. Affected calves usually fail to respond to treatment and progressive depression and dehydration generally lead to death. The common post mortem findings include ulcers in the larynx, stomach, small and large intestines. Although this disease has been investigated thoroughly the causative agent has not been identified which means there are no known treatments and no ways to prevent the disease.

SRUC has recently performed a review of cases of INE submitted to its veterinary investigation laboratories in the years 2001-2012. A pilot postal questionnaire has also been sent out to the owners of previously submitted cases from the last 5 years (2009 onwards). The aim of this review was to ascertain if there were any common factors between cases and highlight any areas where further study could be focused. The data is still being analysed, however early findings show that the majority of cases have occurred in southern Scotland particularly in the south east and borders area and a possible breed predisposition is being investigated.

SRUC is also collaborating with the Roslin Institute to facilitate a further study of INE. Samples are being collected from all potential cases post mortemted at SAC Consulting DSCs. These samples are being sent to the Roslin Institute where further tests are carried out to look for novel pathogens.

“Course very beneficial as it has given me the confidence to carry out new tasks”
Schmallenberg Virus

SAC Consulting Veterinary Services DSCs were on the alert for cases of Schmallenberg virus (SBV) infection throughout 2013 after blood tests on 8 dairy cows from a herd outside Dumfries had tested positive for antibodies to SBV during the winter. Although there were no calving problems with that herd, the first confirmed case of Schmallenberg Disease was identified on a Dumfriesshire farm in April. The birth defects in the calf were consistent with the pathology of the disease and tests carried out by SAC Consulting Veterinary Services and Moredun Research Institute confirmed the presence of the virus. More cases of SBV were confirmed in Dumfriesshire and then surprisingly there were four cases of the disease in Aberdeenshire in June. No cases were detected in other parts of Scotland and the testing of 100 sentinel dairy herds carried out in association with the NFUS failed to show evidence of infection.

Schmallenberg virus is related to a known virus called Akabane, which is spread by midges and which classically causes brain defects and foetal malformations, particularly deformities of the limbs. It was first detected near Schmallenberg in Germany in 2011 but subsequently spread into other parts of Europe and was first reported in the south of England early in 2012. Since then there have been outbreaks amongst lambing flocks and calving herds in other parts of England and Wales. The effects have been variable with some farms suffering high lamb or calf mortality while other herds or flocks suffered few effects.

The cases in Dumfriesshire indicated that SBV was spread by midges blown into the area from England during the autumn of 2012. Likewise the virus was introduced to Aberdeenshire at the same time. It is not known whether the Aberdeenshire cases were the result of midges blown in from infected areas or viraemic cattle brought in from infected areas that were bitten by local midges which went on to infect homebred stock over the late autumn/early winter. SBV is not notifiable in the UK and no restrictions are placed on infected premises. Vaccines are now available to protect cattle and sheep from the effects of the disease.

Cattle Scab

In March 2014 the first case of cattle scab to be confirmed in Scotland since the early 1980s was diagnosed by vets at SAC Consulting’s St Boswells DSC. The disease was found on a farm in the borders in a calf that had been recently imported, with its suckler cow mother, from outwith Great Britain. Cattle scab, otherwise known as psoroptic mange, is caused by mites that scrape the skin to feed and cause immense irritation. The signs are similar to those of sheep scab which is also caused by a mite.

Clusters of cattle scab cases have been found in Wales, south west England and Yorkshire but this is the first case in Scotland. The disease is also present in mainland Europe and Ireland. In Europe it is more common in beef cattle, but dairy herds have also been infected and in Belgium it is considered the most economically impactful ectoparasitic cattle disease. The disease has severe welfare and economic consequences and affected animals inevitably lose weight and in extreme cases death can occur.

The disease has the potential to become established in Scotland because of the movement of animals and the difficulties of treatment. Farmers have been urged to remain vigilant for any signs of cattle scab and to notify their vet of any suspect cases.

In 2011 vets at SAC Consulting and scientists at the Moredun Research Institute (MRI) in Edinburgh issued warnings urging farmers to be vigilant and to take care when buying in cattle. Since then SAC Consulting has offered a free analysis of suspected cases while MRI
The Veterinary & Advisory Services Programme researchers are developing a blood test to uncover hidden infection. Both have received cooperation from farmers and vets. Free testing of skin scrapings from suspected cases continues to be offered to encourage the submission of samples and practice vets have been encouraged to take blood samples from suspect cases.

Since the discovery in March 2014 industry organisations have praised the vets that picked up the disease following import as only prompt detection and follow up can help limit the repercussions. Repercussions could adversely affect the status of Scottish cattle and undo the hard work of the industry to establish a reputation for quality.

**Antimicrobial Resistance – A Global Threat**

The effects of microbes becoming increasingly resistant to the available antimicrobials combined with the lack of new drugs risks a return to the pre-antibiotic era with many infections becoming untreatable. SAC Consulting Veterinary Services provides the results of antimicrobial sensitivity tests to clients to help with treatment as well as using the data to monitor for emerging resistance. The information collected is also shared with other bodies within the UK collecting similar data and is a key element of monitoring for threats posed by emerging resistance.

In March 2013 the UK Government’s Chief Medical Officer reported that the growing problem of antimicrobial resistance (AMR) should be ranked alongside terrorism and climate change as a major global concern. The subject was also top of the agenda at a meeting of G8 science ministers in June 2013 and its importance was further highlighted by the release of the UK Five Year Antimicrobial Resistance Strategy in September 2013.

The overall goal of the five year strategy is to slow the development and spread of AMR by focusing on three strategic aims:

- improve the knowledge and understanding of antimicrobial resistance
- conserve and steward the effectiveness of existing treatments
- stimulate the development of new antibiotics, diagnostics and novel therapies

It is not possible to eradicate AMR and new resistance mechanisms are likely to arise in the future, careful management is therefore required to limit its effects. While the most immediate concern is for public health, it is widely recognised that AMR also occurs in animals, agriculture and the environment and that movement of resistant organisms and elements between these sectors is important to its spread. It will require the involvement of all these sectors in a ‘One Health’ approach to address this issue.

Information resources need to be strengthened to support health professionals, their patients, animal keepers and the public, so that all understand the value and importance of antibiotics to society. This will only be achieved if human and veterinary health professionals work more closely with their patients and animal keepers, before deciding if an antibiotic is really needed and in the event that it is, which one is most appropriate.

**Smallholder Events**

Four courses on good welfare, biosecurity and disease awareness for smallholders were held during November 2013. This training provision was the result of analysis of the needs of smallholders ascertained at the Scottish Smallholder and Growers’ Festival in 2012. Two of the courses focussed on sheep, one on pigs and one on goats. For each event the morning session provided information on the relevant topics and the responsibilities and legal requirements pertaining to keeping farm animals. This was then followed by an afternoon session focussing on developing the skills necessary to
Fluke Roadshow

Over 85 farmers attended the Fluke Roadshow which took place at 5 different locations across the Highlands and Islands, starting in Westray in August 2013, moving through Sutherland and Caithness then culminating on the Isle of Lewis in October 2013. These meetings were held on farm with a morning session comprising a series of topic specific talks and then a hands-on afternoon session focussing on a range of topics including lameness, land management and electronic weighing. An SAC Consulting vet highlighted the damage inflicted on the liver by fluke infection by undertaking a liver dissection. The common problem of incorrect dosage of flukicide was also addressed. Incorrect dosage usually results from under or over estimating livestock weights, so those farmers and crofters attending were asked to competitively guess the weight of tups, an exercise that clearly highlighted the issue.

SAC Consulting Veterinary Services has also provided input into meetings hosted by abattoirs and meat processors to discuss liver fluke. Again these meetings have been well attended and well received.

Scottish Animal Health Planning System

In 2014 the major milestone of over two thousand farm holdings registered on the Scottish Animal Health Planning System was achieved. The Scottish Animal Health Planning System (SAHPS) was developed to support vets and farmers involved in Farm Health Planning. The development of SAHPS has been fully funded through the Biosecurity, Animal Health & Welfare Advisory Activity. The first phase of this web based system, Sheep Health Plans, was launched in July 2008, while the second phase, Beef Health Plans, was launched in August 2010.
One of the holdings registered had suffered losses due to liver fluke in both their cattle and sheep enterprises in 2012/13. A key action in their 2013/14 health plan was therefore to take pre- and post-dosing samples through the autumn and winter period in order to understand the problem. The testing regime identified when there was a need to treat, established the product of choice and ensured efficacy of product choice. In this particular case a resistance issue was detected in the sheep flock. Products and treatment timing were altered accordingly and monitoring is ongoing - a great example of the merits of dynamic health planning.

A key outcome of this activity is the feedback from producers who find the system helpful, producers who, by working with their veterinary surgeons, have been able to make changes to their livestock businesses to address areas of concern. The resulting long term benefits will be increased profitability and ultimately business viability. Continuing to grow the number of producers using the system, who then see benefits as a result, will ultimately have a positive effect on the entire Scottish livestock industry.

**CPD Courses**

A number of Veterinary CPD training courses have also been provided as part of the Biosecurity, Animal Health & Welfare Advisory Activity. Seventy-one delegates attended a range of CPD courses provided and supported in 2013/14 which included:

- Health Planning for the Suckler Herd
- Beef, Sheep and Dairy Nutrition
- Infectious Diseases of Cattle and
- Cattle Lameness and Foot Trimming

**Restocking Honey Bee Populations on the Isle of Arran**

Varroa mite is a worldwide problem which has a massive impact on the beekeeping industry and over the years it has had a huge effect on the Isle of Arran. With the native honey bee population on Arran virtually wiped out due to the Varroa mite, it was essential to help the island’s beekeepers as they had no varroa mite management experience. Furthermore it was important that Arran was restocked with honey bees.

Arran formed a beekeeping group in January 2013 and soon after they were granted £2,000 from the Arran Trust in order to encourage new beekeepers as well as to source Scottish bred honey bees to help towards restocking Arran. From the grant the beekeeping group were able to source and order eleven nuclei which are small honey bee colonies with a population of approximately 8,000 honey bees including a newly mated queen. The colonies were scheduled to arrive in Arran in the summer of 2013.
During April 2013 SRUC was contacted and a varroa management training day was arranged. The objective was for the beekeepers to learn about the management of the varroa mite before the honey bees arrived in the summer. Without this training the new colonies would die out in time. The training course took place in April 2013. By providing the Arran beekeepers with sufficient expertise and knowledge of the varroa mite they would be able to use integrated pest management techniques. This would hopefully lead to achieving a sustainable and healthy population of honey bees for pollination and honey production on the Isle of Arran. The course had both theoretical and practical components and the beekeepers who attended felt it was very rewarding and reduced their concerns about dealing with the varroa pest.

The eleven nuclei duly arrived on Arran in August 2013; each beekeeper then transferred them into hives and prepared them for the winter. The Arran beekeepers’ next concern was how to manage their colonies for swarm control and prevention for the forthcoming season in 2014. SRUC was able to provide a second training day which was held in March 2014. The objective was to provide knowledge on efficient colony management and to impart skills to support future stock increases from the parent colonies that had arrived in the summer of 2013.

Coccidiosis in Game Birds

Coccidiosis remains one of the commonest conditions diagnosed in game birds submitted to SAC Consulting Veterinary Services in the summer months, despite the routine inclusion of anticoccidial drugs in the feed. This may reflect both the potential for large numbers of coccidial oocysts to build up and persist in the rearing and release pens, and the relatively low inclusion rates of the anticoccidial preparations in the feed.

In almost all of the pheasant submissions examined by SAC Consulting vets in which coccidiosis is diagnosed it occurs in the months June, July and August. In partridges however coccidiosis persists into the autumn, with 78% of partridge submissions with coccidiosis occurring in June to August, and a further 13% in September and October. The wider temporal spread in partridges compared with pheasants may be the result of differences in rearing and releasing practices as pheasants are usually released at around six or seven weeks of age but partridges are usually retained in their rearing accommodation for longer and released at around 12 weeks old. Further analysis of findings will provide information to feed into rearing and releasing practices.
Seabird Wrecks

In March unusually large numbers of puffins (*Fratercula arctica*), guillemots (*Uria aalge*) and razorbills (*Alca torda*) were found dead on the east coast of Scotland. Similar events were described on the east coast of England. They coincided with severe storms. Postmortem examination by SAC Consulting vets of birds submitted from Kirkcaldy, Arbroath and St Andrews showed that the birds had not been eating and had died in poor condition. Such mass mortality incidents, sometimes referred to as wrecks, are not unusual and are thought to arise due to a combination of adverse weather and inability to find sufficient food. Most commonly guillemots and razorbills are the species affected, but other species such as puffins can also be involved. As part of SRUC’s routine monitoring for avian influenza virus a representative sample of birds was screened, with negative results.
The Farming for a Better Climate (FBC) initiative is a targeted communication strategy aimed at land managers, farmers and crofters across Scotland. The strategy suggests practical ideas to be considered which could help to demonstrate the reduction of greenhouse gas emissions and adaptation to a changing climate while also benefitting the farm business. The initiative, based around five key action areas (KAAs), covers a range of practical activities common to most farming enterprises.

With help from specialist SRUC advisers, practical mitigation measures to reduce greenhouse gas emissions from routine activities have been highlighted through a range of farmer events and publications. Measures to benefit the farm business, through both reduction of emissions and ways to adapt to a changing climate, have been put in place and tested by four volunteer climate change focus farms, sharing their findings with their local farmer discussion group.

The initiative has also produced a series of Practical Guides, Farmer Case Studies and a twice yearly newsletter. Under Farming for a Better Climate, all farmers can benefit from low or no cost ideas that also make practical, environmental and business sense.

Moving into its fifth year, the FBC initiative has seen three of its four climate change focus farms report encouraging results and has expanded its reach, working in partnership with a range of other Advisory Activities and external organisations.

Results from the Climate Change Focus Farms

Volunteer climate change focus farm Stewart Tower Dairy hosted Scottish Government Environment and Rural Affairs Cabinet Secretary Richard Lochhead MSP to showcase the findings from three of the farms involved in the initiative. The fourth farm, Upper Nisbet in the Borders, joined the initiative a year later than the others and will report its results later in 2014.

The farms involved in the Scottish Government’s FBC initiative were already very technically efficient. However, the farms were still able to save almost £60,000 between them through tweaking current practices and improving farm efficiencies.

Despite challenging weather conditions over the three year monitoring period, Torr Farm near Castle Douglas and Glenkilrie below Glenshee still managed to improve farm efficiency and reduce their carbon footprint by at least 10%, with future reductions expected at Stewart Tower near Stanley.
Key Findings from the Torr and Glenkilrie Farms

Based on the five key action areas highlighted above, a summary of the measures put in place at these individual farms can be found by following the hyperlinks Torr and Glenkilrie respectively. Taking a second look at routine practices helped the farm businesses become more efficient and make better use of inputs. These practical actions helped Torr save around £37,000 and reduce the farm carbon footprint by 11% and Glenkilrie save around £11,000 and reduce the farm carbon footprint by 10%. Key Findings from these farm businesses are outlined in the following table.

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<th>Key Findings</th>
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<td>Monitoring is key to identifying current performance and will highlight opportunities for savings</td>
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<td>Technically efficient farms can still identify scope for savings</td>
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<td>Aim to maximise the performance of every animal on the farm</td>
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<td>The reduction in carbon footprints was lower than expected mainly due to the poor weather in 2012/13 and further reductions in costs and emissions are expected as the measures take effect on the farm</td>
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<tr>
<td>Weather has a big impact on farm costs and emissions as farms adapt to cope with adverse weather</td>
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<td>Implementing measures now can put the farm in better shape for the future, helping to hand on a more resilient farm in an uncertain climate</td>
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Nutrient Management

Not only can better nutrient management benefit the farm business, but it can also reduce pollution risks to both water and air. In a joint initiative with the Pollution Prevention Advisory Activity a series of Soil and Nutrient Network farms (SNN) have been established across Scotland. The objective of this initiative is to promote soil protection and improvement plus highlight ways farmers can benefit from better nutrient use.

Six farms have been identified and are spread across Scotland to ensure information generated is relevant for the whole farming community. A number of on-farm meetings have been held to date and have looked at practical actions farmers can consider to protect and improve soils and how they can make best use of nutrients to maximise yields and reduce pollution risks. To date, topics have included:

- PLANET Scotland, soil nutrients and pH status
- Organic manures, analysis of nutrient content in slurry and manure
- Nutrient storage and application
- Nutrient budgeting, how to make best use of nutrients on the farm
- Precision farming and use of GPS
- Soil structure and drainage

The aim is to revisit the host farms to hold a second farmer meeting a year down the line looking at how the management changes implemented have benefitted the farm business. As part of this initiative,
Workshops and Events Across Scotland

On-farm events demonstrating what other farmers have done, hearing how they have implemented the changes, and if they would do anything differently second time around, helps others considering low carbon practices for their farm. Specialist speakers plus Farming for a Better Climate Practical Guides and Farmer Case Studies at the events provide additional information and contacts for farmers to take these steps further.

In addition to the events at the focus farms and the Soil Nutrient Network, a further 16 on-farm events were held in 2013/14 attracting over 500 farmers from across Scotland and topics included are listed below.

- Heat from wood fuel: practical considerations about boiler types, systems, fuel source and benefiting from the Renewable Heat Incentive (RHI)
- Improving efficiency in the beef herd: looking at increasing feed efficiency and fertility plus longevity of breeding stock
- Maximising sheep productivity: minimising losses at lambing and ways to improve flock health and management
- Grassland productivity and soil health: the importance of soil structure and how to identify and remedy problems
- Soil aeration and land drainage: how to identify soil compaction, improve land drainage and decide what steps might be needed to remediate flooded land
- Better targeting of nutrients: knowing soil nutrient status, precision fertiliser application and making best use of on-farm slurry and manures using tools such as PLANET Scotland

Very interesting and knowledgeable speakers
Supporting Information

Not all farmers can attend meetings and events, therefore alongside the Farming for a Better Climate newsletter giving a regular update on the progress of the initiative, the project website also hosts a range of Practical Guides and Case Studies that can be downloaded.

Practical Guides help farmers by outlining a range of efficiency measures and highlighting where to get additional information. For example, Optimising Tractor Fuel Use and Improving Resource Efficiency on Arable Farms are just two of the recent titles added to the Farming for a Better Climate website.

Case Studies go one step further and detail a particular efficiency measure or suite of activities that have been put in place on a working farm. Topics for recent Case Studies include the wind turbine at Stewart Tower, adapting to climate change at SRUC’s Kirkton Farm and case studies from both Balruddery Farm and Glensaugh produced in partnership with ClimateXChange and James Hutton Institute.

Getting the Message Out

Along with a continued regular column in Farming Scotland Magazine, other items have been featured in the agricultural press. The NFUS continued its support for the Farming for a Better Climate initiative through running a series of articles in its Farming Leader magazine. This series of articles included business efficiency measures covering topics from energy use and renewables to managing grazing, and highlighted some of the practical measures being promoted under Farming for a Better Climate as well as how farmers could further improve farm efficiencies. In total nine articles were published including a summary article on findings from the climate change focus farms. Farming for a Better Climate also produces a regular newsletter and the FBC website www.farmingforabetterclimate.org hosts Practical Guides and Farmer Case Studies. This is supported by activity and discussion on the Farming for a Better Climate twitter account @SACFarm4climate.
Partnership Working

Farming for a Better Climate works closely with other Advisory Activities, for example Pollution Prevention, Animal Health and Welfare, Woodlands and Conservation. Combining activities has increased the range of information delivered at any single event; combined promotion of these key messages has added value to farmer meetings, made the best use of available budgets and allowed for a range of topics to be covered at any one meeting.

Farming for a Better Climate has continued to work with external organisations to help farmers consider ideas to reduce environmental risks and benefit the farm business. For example, working with Soil Association Scotland at Torr Farm highlighted a range of messages suitable for both conventional and organic farmers. Two linked workshops looking at woodland management on the farm and the use of wood fuel for a biomass boiler were held in partnership with the Forestry Commission’s Central Scotland Green Network on farms outside Ayr and Stirling.

Farming for a Better Climate - Next Steps

Due to the success of the programme, SRUC is in the process of recruiting another round of climate change focus farms in the north, north east and south west areas to participate in the Farming for a Better Climate initiative.

Alternative Watering Project Demonstrations

SRUC has been managing the Scottish Government funded Alternative Watering project at Orchardton Farm in Ayrshire and Brockholes and Monashee Farms near Grantshouse which culminated in demonstration farm walks held at both sites. Under the Pollution Prevention Advisory Activity the aim was to raise awareness among farmers of alternative watering options for field grazed livestock, to identify what works well and what could be adopted on their own farms. Over 120 farmers attended these meetings and information was provided on design and installation of the solar and papa pump, the pasture pump system, different abstraction point designs and the use of hot spot fencing. Positive environmental and conservation benefits were also highlighted. A series of five handouts was produced for these demonstrations including guidance on how to create abstraction points along watercourses and how to use solar, pasture and RAM pumps. These have been made available at other farmer meetings and will be incorporated into a Technical Note. The feedback from meetings was extremely positive.

“This was a very relevant topic for our farm. The demonstrations were really useful and informative. Quite inspiring really”
Know the Rules

SRUC in partnership with the Scottish Government, SEPA and the NFUS produced a series of Know the Rules leaflets and a Mind the Gap tractor sticker. These were launched by Paul Wheelhouse, Minister for Environment and Climate Change, at the Mind the Gap conference in Peebles on 12 November 2013. This information has been well received by the industry and has been promoted through the Pollution Prevention Advisory Activity.

NVZ Workshops

Nitrates Vulnerable Zone (NVZ) workshops have provided information to farmers about recent rule changes and have reminded farmers of their obligations under the scheme. Two workshops were held at Forfar mart in August and December 2013 where topics also covered changes to General Binding Rules. These workshops were well attended by 25 farmers on each occasion and feedback was positive. The attendees said that they would review and improve their records to ensure ongoing compliance with updated NVZ rules.

Farming and Water Quality Website

Working in partnership with SEPA, the Scottish Government and the NFUS, SRUC is maintaining the Farming and Water Quality website. The website provides a good starting point for land managers wanting to know a bit more about how they can minimise diffuse pollution risks from their business and enables them to read about what other farmers have done. It also features details of forthcoming meetings from the supporting partners and other external organisations which could help farmers identify and reduce pollution risks whilst also benefiting their farm business. See www.farmingandwaterscotland.org for details.

Diversification and Renewable Energy

SRUC maintains the popular farm diversification, non-food crops and renewable energy website www.sruc.ac.uk/renewableenergy on behalf of the Scottish Government. Interest in renewable energy has remained high, with 328 enquires made to SRUC consultants. Notably there was an upsurge in enquiries in the final quarter of the programme, which coincided with the launch of the Agri-renewable Strategy for Scotland. Forty-one percent of renewable enquiries related to
wind energy, with 20% photovoltaics and a further 20% renewable heat / biomass. Analysis over the past three years reveals that 2013/14 saw growth in the industry's interest in photovoltaics. Moreover the level of general renewable enquiries has fallen over time as enquiries from the industry have matured as people are more aware of the technological and financial opportunities. The continuation of the Feed In Tariff and the Renewable Heat Incentive has meant that the industry has remained interested in these developments, particularly given the healthy rates of return on investments.

Impact of Extreme Weather on Scottish Crops

Extremes of weather have impacted significantly on crop health and yield over recent seasons and consequently making the best crop management decisions has been very hard for growers. The crop health monitoring undertaken as part of this programme illustrates the huge variations in crops between years. The 2013 harvest followed another season of extremes, finishing with one of the sunniest Julys on record.

The start to the season was very different though as this sunshine was in total contrast to the summer of 2012 which was one of the wettest ever recorded. This had led to delays in crop harvest and to very difficult ground conditions which meant that it was often impossible for growers to drill winter crops and so areas of winter wheat, rape and barley were much reduced. Those winter crops that were established struggled in the wet conditions and were often thin and patchy with large bald areas where plants had failed to emerge at all. There was a corresponding increase in spring cropping where plans for winter cropping had to be altered in Scotland. The wet conditions continued all autumn and winter and then the spring of 2013 was one of the coldest on record. Again this illustrated the contrast between seasons as the spring of 2012 had been one of the warmest recorded.

Monitoring crops for growth stages is therefore critical as crops in 2013 were a month behind where they had been the year before. To be effective, crop protection sprays have to be applied at key growth stages of the crop and so the slow development of crops in 2013 led to difficulties in managing spray dates. The cold spring weather reduced disease and pest levels so the monitoring data from 2013 shows it was one of the

The diversification, non-food crops and renewable energy database (www.sruc.ac.uk/diversification or http://www.sruc.ac.uk/renewableenergy) remains well used with an estimated 11,000 visitors over the year viewing over 30,000 pages. Over 75% of the visitors were from the UK and it is estimate that about 25% of our visitors return to the site.
lowest pressure years on record – in contrast to 2012 which was one of the highest. Yields per hectare in 2013 were much better than in 2012 as crops had low levels of disease and could utilise all the sunshine to build yield.

The good conditions continued into the autumn of 2013 and many growers made good progress on rectifying soil problems and compaction left by the dreadful conditions of 2012. The crops in the ground for harvest in 2014 were forward and well developed in the autumn – but again extremes of weather had an impact. The mild autumn and winter lead to high levels of disease which meant extra management inputs. Within Scotland variation can be as great within one season as across seasons – for example the north east escaped the worst of the heavy rain in 2012 and, on lighter land, produced better than average yields.

There is no ‘normal’ season anymore so intelligence on the diseases and pests that are present and the development stages of crops is vital so that crop protection measures can be adjusted to the conditions of the season.

**Leatherjacket Pest**

Damaging leatherjacket activity in autumn-sown grass reseeds and winter cereals was reported, with severe damage in organic cereals and grass where chemical insecticides for control are not an option.

The levels of leatherjackets seen this year were so high and widespread that the annual leatherjackets survey took longer than expected to complete as an increased number of farmers asked for their fields to be sampled. Leatherjacket populations have been high across the board, with counts of 8.2 million leatherjackets per hectare being seen, which significantly exceeds the 1 million leatherjackets per hectare damage threshold for grass, and 0.6 million leatherjackets per hectare threshold for spring barley. As a result of the survey growers of spring barley after grass were advised to be aware of the threat from leatherjackets during the season.

**Neonicotinoids – How will the Ban Impact on Growers?**

The Crop Health Advisory Activity monitors the occurrence of pests in oilseed rape each season as one of its outputs. This has provided important evidence on the current and likely threats to oilseed rape production following a restriction on the use of neonicotinoid containing seed treatments which are currently applied to almost 100% of Scottish crops. This has been done to alleviate potential risks to bee health but has significant implications both to bee health (if the alternatives used are less bee friendly) and to oilseed rape production as current pests could build in numbers and novel pests could gain ingress.

The European Commission voted to restrict the use of neonicotinoid seed treatments for two years on certain crops upon which bees feed, and this was implemented from 1 December 2013. Initial monitoring shows that the proportion of oilseed rape crops drilled using neonicotinoid treated seed in the ground now (therefore drilled before the restrictions came into force) is unchanged on previous years. The two year restriction of use is to allow time for researchers to gather more data to determine whether the use of these neonicotinoid seed treatments has an effect on pollinators of flowering crops. The restriction of use will be reviewed in the light of additional data but won’t necessarily be lifted.

The neonicotinoids under review are primarily used in the oilseed rape seed treatments for the management of flea beetles and aphids. Loss of these seed treatments will mean insecticide sprays will need to be used instead at crop emergence. Unfortunately, the currently approved insecticides that can be used at this time of the season would have minimal effect on aphids. Poor control of
aphids could lead to direct feeding damage on emerging
seedlings and perhaps more importantly, the transmission
of turnip yellows virus which affects yield. This will be
carefully monitored. To alleviate the threat from aphids,
an approval for the use of an alternative pesticide has
recently been granted for use in the autumn on winter
oilseed rape.

Not all neonicotinoids are included in the restrictions
and so pressure will now be on the use of the remaining
‘approved’ neonicotinoids. Advice to growers on proper
stewardship and use has been a key output of the Crop
Health Activity this season as any incidents of misuse
or perceived impacts on bees and other pollinators will
make permanent restrictions more likely. Consequently
adherence to product labels and recommendations
by growers is essential, as is assessing whether their
use is strictly necessary and so advice on thresholds
and appropriate treatments has been integral to SRUC
activity. Activities and advice have also linked more
closely with SASA and its pesticide usage survey so that
the conclusions made on the impact of restrictions are as
well informed as possible.

**Farm Woodland Advice**

During the year two editions of Farm Woodland News
were distributed to all participants in the various Farm
Woodland Schemes and to agents and land managers;
about 3,200 people in total. Topics covered in these
editions included: rhododendron control; wood ants;
continuous cover forestry; drainage; mammal records;
restocking; sustainable forestry; woodfuel; tree hazards
and tree diseases. Advice and information was also
disseminated through other SRUC newsletters to farmers.
During the year this included an article on Chalara Ash
disease which provided information on what to look for
and how to report sightings of the disease.

SRUC forestry experts also contributed to the
development of the forestry measures in the 2014 – 2020
SRDP through consultation response and attendance at
several meetings of the Forestry Commission’s Customer
Representatives Group.
Rural Food and Drink, Organics and Diversification

Local Food and Drink

The growth of local and regional food and drink has been a focus for advice to food and drink producers throughout 2013/14. The Think Local programme started in April 2013 targeting specific growth areas:

- Farmers Markets and Events
- Local Food Retail and Food Tourism
- Added Value
- Regional Food Development
- Collaboration

The Think Local initiative has provided support across Scotland, and this has been supplemented by the Community Food Fund which supports the growth of communities, local food, networks as well as events and activities which celebrate and promote local food and drink.

Regional Identity

The development of regional identity is a key element in the growth of local food and drink. Through the Think Local initiative food and drink producers have been supported in the consideration and development of their regional identity as a key focus for event activity. Specific events which celebrate and promote a region’s local food and drink have received assistance. The Think Local team helped to coordinate the Highlands and Islands food and drink showcase at the Royal Highland Show in 2013 which highlighted a range of products from across the region. Think Local also provided support for Piping Hot Forres with regional food and drink being a key part of the European Pipe Band championships. The continued collaboration among businesses has also seen a number of new initiatives which link food and drink businesses come to fruition, and these include new trails linking artisan chocolate makers across Scotland, and an east of Scotland seafood trail.

“This was a learning journey for us all”

“Very well organised.”

The focus on the development of local food and drink has seen collaboration across the food and drink sector with partner organisations working together to ensure the profile of small scale, high quality producers is in evidence at key showcase events such as Homecoming Scotland, the Commonwealth Games and the Ryder Cup in 2014. In addition to these, Think Local supported the attendance at Borough Market in London of a group of Scottish food and drink producers to celebrate Burns’ Night. This provided an opportunity to engage with a consumer and trade audience in the south east of England and also provided a key learning opportunity on how targeted event activity can build business.
Regional Food Networks

Support for the development of regional food and drink has also come in the form of engagement with 13 new, refreshed or revived networks across the length and breadth of Scotland, from Shetland to the Borders, and many of these networks are now considering their approach to the market and the potential for collaboration for capitalising on new market opportunities, improving logistics or sharing resources and increasing consumer and tourist interest.

Protected Food Names

The development of Protected Food Names (PFNs) has been a core component of the Food Marketing Advisory Activity throughout 2013/14, and a number of applications have been developed. The latest full application to be presented was Dundee Cake which was presented during Scottish Food & Drink Fortnight in September 2013. The applicant businesses were a group of Dundee bakers looking to protect the heritage and tradition of their product under the EU scheme. Further applications are anticipated throughout 2014.

Telling the Story Behind the Product

The development of profile and a unique selling point is key to the growth of local food and drink and therefore the story behind the product is essential to creating interest and demand. Throughout the year advice and support has been given to a range of businesses, groups and regional initiatives. Collaborative activities have been encouraged and the opportunities presented through involvement in various events as well as food and drink awards have been highlighted, all of which support greater effective communication of a product’s story to the market. A great example of product stories compiled for the specific promotion of Scottish food and drink is a ‘Show and Tell’ bag of local produce. This was presented to a group of key stakeholders in February 2014.

The Organic Market Link Initiative

As part of this initiative the tenth annual SRUC Organic Market Link Producer survey was completed in March 2014 with a 71% response rate from the 432 Scottish organic producers who between them will have produced just over 9,500 head of organic beef cattle; just over 62,500 head of lambs and just over 14,000 tonnes of fully organic grains and pulses between July 2013 and June 2014.

Nearly half (48%) of respondents indicated that they planned to remain as certified organic producers for more than five years demonstrating confidence in the sector. This confidence was supported by the fact that less than 10% of respondents stated they planned to leave the sector within one year.
This initiative also provides a strong link across the organic sector through its EmailSales activity. EmailSales provides supply and demand information across the sector, encouraging collaboration and communication and therein strengthening supply chain links both vertically and horizontally. Throughout the year 25 fortnightly emails with more than 400 adverts have been circulated to 300 recipients.

Sector stability is vitally important as for the first time in five years the UK organic sector has returned to growth and the supply of organic produce will enable the sector to respond to the opportunities that this market growth offers.

Scotland’s Organic Action Plan


The Action Plan was prepared by the Scottish Organic Forum (SOF) in partnership with the Scottish Government. The SOF is an industry body comprising key stakeholders from within Scotland’s organic sector. SRUC experts sit on the SOF as well as providing both chairmanship and secretariat support.

Organic Farming Conference

The annual SRUC Organic Farming Conference was held at Duns in Berwickshire in February 2014. A series of presentations provided an overview of Scotland’s organic sector and the market prospects for the coming year. This was followed by a farm walk which considered the feed challenges faced after several successive difficult seasons. One specific area of focus was the production of good quality, high yielding silage.

Diversification

SRUC maintains a farm diversification, non-food crops and renewable energy website [www.sruc.ac.uk/diversification](http://www.sruc.ac.uk/diversification) on behalf of the Scottish Government. In addition to general updates of information the 2013/14 VAS programme saw new information sheets on ecotourism, maize mazes, Christmas trees, and the use of social media for a diversified business.

During changes to the SRDP in 2007 there was a significant downturn in interest in diversification opportunities and the current changes to the SRDP have been no different. In addition to the funding hiatus for business diversification projects CAP reform has been the focus for Scottish farmers recently, meaning that the diversification enquiries from the industry have reduced significantly (26% lower than 2012/13 and 49% lower than 2011/12). Uncertainties over the impact of the current CAP reforms on future farm finances has resulted in a focus on the farming enterprise, rather than adding potential risk to the business through setting up a new diversified enterprise. As Scotland’s final CAP reform package becomes clearer during the summer of 2014 farmers will be able to fully assess the likely financial impacts on their businesses and it is expected that this will stimulate renewed interest in diversification opportunities to coincide with the launch of the new SRDP in 2015.
New Entrants

Following its launch in 2012, the Scottish Government’s New Entrants to Farming programme has seen an increase in its activities and impact. A further three groups of participants were recruited in 2013 bringing the total number of new entrants engaging with the programme to over 140. Groups are now established in Caithness, Grampian, Argyll, West Lothian, Lanarkshire, Ayrshire and Wigtownshire.

The overall aim of this programme is to address the barriers facing new entrants to agriculture and the issues associated with an ageing farm workforce and low level of generational turnover. The programme’s objectives are to ensure those entering and aiming to enter the industry receive specific business guidance, geared toward ensuring they are as successful as possible.

Developing Skills for the Future

The core objective of the programme continues to be to ensure that those who have just joined the farming industry or who plan to do so in the near future are equipped with information, skills and guidance to help ensure their business ventures are viable and successful. To this end, over 30 business workshops have taken place during the year on a range of subjects including:

- Farm accounts
- Benchmarking and key performance indicators
- Business planning
- Joint venture farming
- CAP Reform
- Marketing
- Grassland management

These workshops have been well received with the average evaluation rating them as 4.4 on a scale of 1-5 where 5 is excellent and 4 is very satisfactory. In addition to addressing the targeted topics, these workshops offered participants the opportunity to network with a broad range of experts and professionals such as bankers and accountants. Another key benefit was that the workshops also provided a forum to share information and experiences.

New Entrants’ Gathering

As part of the 2013/14 programme a New Entrants’ Gathering took place in February 2014 with almost 150 delegates making up a vibrant and impressively youthful audience. Planned to both inform and inspire delegates, the programme included presentations on key issues affecting new entrants, including a keynote address from Richard Lochhead, Cabinet Secretary for Rural Affairs and Environment together with presentations from farmers who shared their own experiences of getting established as new entrants and offered some tips on continued success. Specific highlights from the day included the breakout and networking sessions, both formal and informal, where views and information were exchanged.

Totally wonderful event
Feedback from the event was overwhelmingly positive with a palpable desire to build on current activities under the New Entrants’ programme and other industry initiatives, coming through loud and clear, from what can only be described as the ‘New Entrant community’. Perhaps predictably, given the relative youth of the audience, the day’s events created considerable traffic on social media and were largely responsible for a peak in ‘retweet’ activity relating to SRUC’s main twitter account as illustrated by the Twitter reach statistics.

Information for New Entrants

To support new entrants a specific website www.sruc.ac.uk/newentrants has been created along with a series of Guidance Notes on a range of business topics linked to the workshops. Guidance Notes produced to date include:

- Business Planning and Financial Management
- Employing People
- Laying the Foundations for Business Success
- Leases and Joint Ventures
- Marketing and Negotiating
- Renewable Energy Opportunities
- Starting Up and Business Structures
Biodiversity and Conservation

Encouraging Bees and Other Beneficial Insects

Farmer and crofter meetings were held in Argyll, Orkney, Skye & Lochalsh, Angus, Lothians and Fife with the aim of encouraging farmers and crofters to help bees and other beneficial insects by taking a few practical measures to provide habitat and food sources and by assessing their pesticide use.

At these meetings almost 170 farmers and crofters learned that the loss of honey bees has increased the reliance on pollination by wild bees. It is therefore vital that pollinating insects have access to good food sources throughout the season. More pollen and nectar can be provided through appropriate grazing on moorland and semi-natural grasslands, maintaining semi-natural areas within field margins and burn banks to allow plants and herbs to flower, as well using more clover leys in the farming system.

Agri-environment schemes can help to create a more pollinator friendly habitat through sowing wildflower seed mixes rich in nectar and pollen and appropriate grazing which allows flowering and the creation of a varied vegetation structure. SRUC biodiversity and conservation specialists worked alongside SRUC crop researchers to establish demonstrations of pollen and nectar rich mixes along with other crop trials. These colourful and insect rich plots were the focus of much discussion at demonstration open days in Perthshire and Fife.

The amount of pollinator habitat needed in the landscape is estimated to be between 1.25% and 2.5%. This could, in part, be met through agri-environment schemes and greening. Also the development of water margin buffers provides linkages between habitats helping pollinators to migrate and also reduces diffuse pollution.

Bracken Control Demonstrations

Following two extremely successful meetings in Argyll in 2012, a further two practical demonstrations were held in Lochaber and Perthshire to look at integrated bracken control methods and management. A total of 39 farmers attended along with conservation specialists, agricultural consultants, representatives from Butterfly Conservation, SGRPID, machinery suppliers and a vet, to discuss the impact of bracken on the farm business, biodiversity, the landscape and health and welfare.
A range of topics was covered including control methods, follow up management, funding sources, Single Farm Payment, cross compliance, bracken poisoning, tick borne diseases in both livestock and humans and the use of Asulox. Bracken treatment methods were discussed in detail and the pros and cons of each treatment and its appropriateness in the particular circumstances were considered along with follow up treatment. The relevant merits of burning, trampling or harrowing the litter as part of the follow up were covered. Finally the group considered the biodiversity effects of bracken control. These discussions were followed by practical demonstrations of the equipment available including a helicopter with sprayers and crushing and weedwiping machinery.

The veterinary discussion focussed on the reduction in animal immune systems caused by ticks. This generated much discussion and gave many participants much to think about. Farmers and land managers attending were interested in bracken management in relation to hill sheep and beef and grouse, and the events provided clear and practical solutions to extensive bracken infestations.

Not only was in-depth practical information on bracken management provided but there was also good interactive discussion. Participants now have more information at their disposal and many said they would change their practices as a result. Increased knowledge of bracken control saves money by using the right treatments at the right time, and limited resources are more effective at controlling bracken in the right places.
Support to Remote and Disadvantaged Areas

SRUC’s network of local offices across Scotland continues to ensure the delivery of public good advice as well as access to up-to-date and relevant business advice to the remote and disadvantaged areas of Scotland. With the support of the VAS programme, farmers and crofters across the country continue to access the advice necessary to operate their businesses viably and to the sustainable standards that the Scottish Government recognises are necessary to make all of Scotland a successful country.

The presence of a locally based consultancy that provides a discounted service on a wide range of technical and business issues is one major benefit of the support to the crofting counties of Scotland delivered through the VAS programme.

The Rural Priorities (RP) component of the Scottish Rural Development Programme (SRDP) was a competitive scheme offering grant support for capital works as well as for multi annual agri-environment commitments that closed in 2012/13. In the last three years of the scheme local SRUC staff assisted a total of 959 applications with a success rate of 86% and a total value of approved projects of £50.8M.

The local offices also assist with IACS applications each year and in 2013 assisted 2,461 farmers and crofters in the Highlands and Islands in completing their forms with 97% of these completed online to ensure accuracy and timeliness. The Single Farm Payment (SFP) secured for these businesses amounted to some £38.2M in 2013. Funding into the crofting counties provided through the VAS programme is one example of the significant impact of the programme in remote areas, which helps to support business performance. Highlighted in the following articles are just some of the initiatives delivered in the remote and disadvantaged areas including the delivery of public good benefits.

Stornoway Fluke Event

This Stornoway event was part of the Fluke Roadshow and was held during the evening. The objective was to highlight the problem of liver fluke and offer solutions to crofters. Throughout the evening several different interactive sessions were delivered, facilitated by local SRUC staff. All attendees had the opportunity to see fluke infested livers from both sheep and cattle. Delegates then heard and discussed feedback from a review of the local vets’ findings for the Stornoway abattoir 2013 autumn season. This was followed by a session on assessing the ewes and tups for fluke, looking at the weight of individual ewes and discussing issues relating to over and under dosing with fluke products. The evening concluded with a tup MOT. The event was well received by those who attended and feedback was very positive. A range of leaflets on fluke and wormers was provided for each attendee.

Highlands and Islands Bull and Suckler Cow Management Workshops

During August 2013 approximately 100 Farmers attended three on-farm events held in Tiree, Bonar Bridge and Shetland. The focus of these events was cattle management for both bulls and suckler cows and included topics such as welfare, cattle health and particularly bull selection. The use of different breeds of bulls was discussed as well as selection using EBVs to avoid calving problems. These presentations were supported by input from a local vet looking at local issues along with discussions on topical diseases such as Schmallenberg Virus, Fluke and Johne’s. The host farm then facilitated a farm walk to highlight and discuss issues specific to their farm. These events proved very popular with over 75% of attendees rating them as “excellent” and the remaining 25% rating them as “very satisfactory”.

The Veterinary & Advisory Services Programme
Improving Water Quality in Orkney

As part of its Pollution Prevention Advisory Activity SRUC held meetings across Scotland to raise awareness on pollution prevention. This included a meeting in Orkney which was organised following concern about water quality in Kirbister Loch. The meeting included presentations from the local SRUC consultant, SEPA and Scottish Water. Topics included highlighting the value of slurry and manures to the farm business and options on alternative watering based on Scottish Government funded work. Recent changes to the Diffuse Pollution General Binding Rules and the Mind the Gap leaflets were also promoted and the event concluded with a talk on the Scottish Water Sustainable Land Management Incentive Scheme which is being extended to include the catchment areas around Kirbister, Boardhouse, Bea and Burness Lochs. As a result of the meeting a number of farmers will be preparing Water and Environment Management Plans to protect local water quality.

Community Retailing

Support has been delivered for the development of local food retail through a joint initiative with the Plunkett Foundation in delivering community retailing workshops in Lewis, Harris, Skye and Shetland. These workshops highlighted best practice, invited local producers to showcase their products and encouraged the development of local food procurement as a driver for sales both among locally based consumers and from visitors to the islands.

Grasslands for Crofting and Wildlife on the Western Isles

SRUC held events on Uist and the Isle of Lewis to discuss the management of improved, semi-improved and machair grasslands for crofting, corncrakes and bumblebees. The events were attended by 34 crofters with input from the RSPB and machinery companies.

The meeting at Ness, Isle of Lewis focussed on grasslands for corncrakes within a corncrakes Special Protection Area (SPA). Active crofters entered into agri-environment schemes were in attendance to learn about providing the optimal habitat for cover, feeding and breeding for corncrakes from their arrival in the spring to their departure in the autumn.

Local grassland management issues were the focus of the meeting held in Uist. With many crofters participating in agri-environment schemes to benefit corncrake and farmland waders, achieving a balance between forage quality and habitat quality has become challenging. Speakers emphasised the effect that pH has on fertiliser uptake, the importance of appropriate fertiliser use and how the timing, rate and type of fertiliser should be tailored to soil nutrient status and crop requirements. There was also a short interactive session on spreader calibration and the legislation which is in place to reduce diffuse pollution namely the buffers required when spreading near watercourses. The final discussion focussed on weed management and use of clovers to enhance machair grassland for pollinators.
Programme Evaluation

Each Advisory Activity across the VAS programme is assessed for its effectiveness in meeting the Scottish Government’s strategic objectives and outcomes. There is a range of assessment criteria specific to each activity. In the veterinary part of the programme this includes, amongst other things, disease identification, the provision of disease specific information and the uptake of animal health plans. In other parts of the programme this includes the provision of industry support and information as well as the implementation of changes in management practices and best practice.

To ensure that objectives and industry expectations are being met VAS programme events are evaluated. Event attendees are asked to categorise events on a scale of 1-5 from ‘poor’ to ‘excellent’. A summary of event evaluation for 2013/14 is shown in the pie charts below. These indicate that 51% of respondents rated the events as ‘very satisfactory’, 40% rated them as ‘excellent’ and 83% of respondents stated that they were going to make changes to their enterprises based on what they had learned. There are a number of quotes throughout this document that illustrate specific feedback received from delegates attending events.

Overall Evaluation of the Event

- **Excellent**: 9%
- **Very Satisfactory**: 40%
- **Satisfactory**: 51%

Will You Implement What You Have Learned?

- **Yes**: 83%
- **No**: 17%
For further information on the Scottish Government’s Veterinary and Advisory Services programme contact Mrs Ceri A Ritchie, Marketing Manager, SAC Consulting      T: 01224 711049       E: Ceri.Ritchie@sac.co.uk