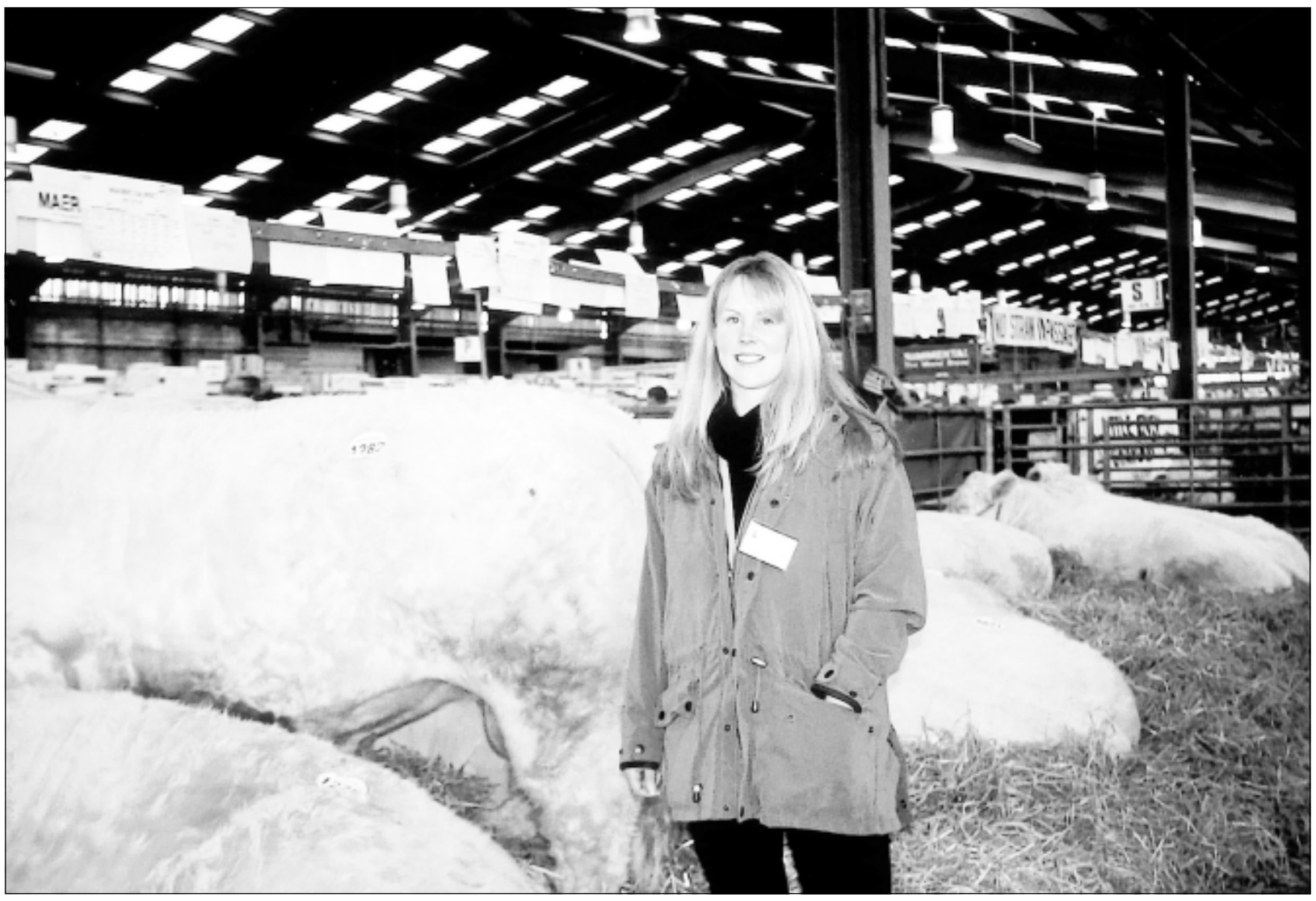
Island producers cash in on cattle health scheme

Beef and dairy farmers in Orkney have seen significant benefits from being part of a new cattle health initiative. **CLAIRE POWELL** travelled to Orkney to find out more



Karen Tait . . . her persuasion skills and dogged determination have resulted in a high percentage of Orkney farmers signing up for the scheme

CATTLE producers who are members of a health initiative in Orkney have seen their profits increase by up to 30% over the past three years. The eradication programme for bovine viral diarrhoea (BVD) in the islands has been hailed as an example of what farmers throughout the UK can achieve if they work together.

The initiative has the potential to cut disease costs over a decade by a conservative £6million.

BVD – widespread throughout the world – is regarded by vets as the most significant cattle disease in Europe and North America.

The most vulnerable animals are in-calf females which have not developed BVD virus antibodies. If these animals come into contact with the virus, they risk either losing their calf or giving birth to a BVD carrier, which often survives only a short and miserable existence, spreading the highly contagious virus to any other cattle it comes into contact with.

Additionally, the virus suppresses the immune system in cattle, lowering resistance to many health challenges, in particular pneumonia, scour and crucially, bovine tuberculosis (TB).

Scottish Agricultural College figures show the cost to a 100-cow beef herd is about £45,000 over a decade. Dairy herd losses are estimated at twice this level.

But in Orkney – which has highest density of beef cattle in Europe with 28,000 breeding cows on 247,000acres, as well as a further 3,500 dairy cows – the collaborative effort to tackle the disease has been impressive.

Kickstarted

George Baikie, the Scottish Agricultural College's area agricultural adviser in Orkney, said: "The resulting improved overall health of the cattle has meant that more and heavier cattle have been sold. While cattle returns have increased, costs, including veterinary bills, have fallen."

Orkney's eradication programme was developed after Shetland managed to eradicate its smaller cattle herd of the BVD.

Encouraged by the success of their northerly neighbours, Orkney cattle farmers in 2001 embarked on a voluntary scheme. The venture was kickstarted by Orkney Islands Council which gave a grant of £500,000 to cover the laboratory costs of initial herd blood tests.

Once this year's blood tests have been completed, well over half of the Orkney herds will be BVD accredited.

The results confirm the success of the scheme to date, with 186 carrier cattle identified and removed in 2002. Last year, 192 carriers were discovered, while this year, with just over half the calf crop tested, just three carriers had been found by late February

All but 13 of Orkney's estimated 550 cattle producers are members of Orkney Livestock Association (Ola) which administers the scheme.

Much of the credit for such a high percentage signing up goes to the persuasion skills and dogged determination of Karen Tait, the sole Ola staff member who operates from a small office within the Orkney mart building at Kirkwall.

She said: "One of the newest members told me that he had decided to join because his neighbours had constantly pressurised him and that he was so sick of being bombarded with mail and telephone calls from me, that he finally decided to surrender.

"That made me feel pretty good – I know I'm bossy.

"I thoroughly enjoy my work – it's a really positive thing we're doing in Orkney, and sometimes I think it's immoral to be paid for enjoying myself so much. It's great working with the farmers who are so enthusiastic about the scheme.

"A special bit of icing on the cake is when I travel to things like the Perth Bull Sales, and talk to mainland farmers about our BVD eradication scheme.

"On the negative side, I am sorry it's proving so difficult to get the last few farmers to join. Unless they do, Orkney as a county will not be able to claim full accreditation in the future. The time I'm spending on these farmers could be so much more positively spent working for the 500-plus who are in the scheme."

Orkney's scheme was developed by vet Iain McCulloch, of the Northvet veterinary practice, which cares for 95% of the cows on Orkney, and local farmer Michael Cursiter, who chairs Hi-Health, the Highland-wide initiative to improve cattle health.

They based the scheme on the Cattle Health Certifications Standards (CHeCS), but then compiled a set of rules to suit Orkney cattle systems.

For Mr McCulloch the success of the eradication scheme to date has been a double-edged sword – the sales of cattle medicine have dropped. Healthy animals, however, are his goal.

Mr McCulloch said: "Healthy cattle are productive cattle and farmers will need to maximise their output in the future to keep their enterprises viable. The unsubsidised pig and poultry sectors have made health a management priority to help reduce costs and increase production. Cattle farmers will need to do the same."

He added that with livestock farming the cornerstone of the entire Orkney economy, it was important the issue of disease was tackled.

"Cattle farmers cannot operate with disease, from not only an animal health and welfare point of view, but also financially. The biggest positive step they can take is to get rid of BVD – its suppression of the immune system provides the opportunity for other potentially fatal diseases to attack.

"Of growing significance is the well-established scientific evidence that BVD facilitates the spread of TB."

There are, however, wider considerations as Mr McCulloch explained.

He said: "Most of Europe is getting rid of BVD and it's not inconceivable that in the future BVD could be used as a reason not to reopen the overseas market to British beef."

Mr Cursiter farms 100 beef cows with his brother, Martin, at Evie. Their herd had been badly hit by BVD in 1996 and 1997. In 1997, 12 calves aged between two and three months, died. Additionally the surviving calves were sickly, poor "do-ers", suffering pneumonia, scour and joint-ill.

In 1994, with 96% calving and no BVD the cattle medicine bill was £615.

But in 1997, with a 78% calving as a result of BVD infection the medicine bill rose to £2,609.

Expanding

Mr Cursiter, however, puts the total cost of the virus over two years at £20,000 because of the calf losses, reduced fertility, hefty veterinary bills and poor returns from cattle that were not thriving.

The Cursiter herd, one of the first herds into the eradication scheme, now boasts BVD accreditation.

Marcus Wood, chairman of the Orkney Creamery, milks 250 dairy cows. Like many of Orkney's 23 dairy farmers, he is expanding his herd, which is now BVD accredited.

Over the last year he has bought 40 in-calf heifers from the mainland. Their health status was checked before purchase, nevertheless, on arrival at Berriedale Farm, the heifers were isolated and blood tested.

"They all tested white (clear)," said Mr Wood. "Had any been green (come into contact with a carrier) I would have been concerned their calves could be red (a carrier), so would have tested navel blood before they sucked, immediately disposing of any of them that showed they were infected."

Once a farm is clear of BVD, the trick is to keep it away. To safeguard the health of their herds, Orkney farmers not only need to rigorously practise bio-security, but also isolate and blood test any imported cattle from the mainland, not just for BVD, but for other detectable diseases.

This policy has paid increased dividends. Johnes disease has been found in some bought in breeding stock before they were incorporated into Orkney's herds.

As an additional BVD safeguard, farmers are recommended to also vaccinate all the breeding cattle in their herds including bulls which are often forgotten, prior to mating.

Orkney has the advantage of being surrounded by water – creating a natural barrier to animal disease.

Almost all the beef herds are closed, only buying in breeding bulls. Dairy farmers sometimes bring in-calf females on to the islands.

In-calf females pose a much greater threat than breeding bulls, as the BVD status of the foetus cannot be detected and the subsequent calf may be born a carrier.

Reforms to Europe's Common Agricultural Policy could have a dramatic effect on cattle numbers in Orkney, with many predicting a substantial reduction in cow numbers.

But in just three years the BVD eradication scheme has yielded improved fertility, cut calf mortality, helped reduce costs and ensured healthier and heavier stock for sale.

The SAC figures of up to 30% more profit suggest that BVD eradication will provide a financial cushion against the effects of the Cap reforms for Orkney cattle producers.

Their cattle producing colleagues throughout Britain, seeking ways to reduce costs and increase production may find part of the solution in Orkney.

● Claire Powell's trip to Orkney was made possible after she won the Guild of Agricultural Journalists' Open Book Award which was funded by animal health company Merial.

COLOUR CODE SYSTEM FOR ANIMALS

TO HELP Orcadian farmers easily understand the status of their animals after they had been blood-tested, a colour code was introduced:

● White – animals had not been exposed to BVD.

● Green – antibody positive, had been exposed to BVD and developed immunity.

● Red – virus positive, a carrier of BVD and highly infectious to other cattle.

The first step for any farmer signing up to the scheme is to blood test 10 young stock over nine-months-old.

If all 10 are declared white the farm is clear of the virus. If one or more are designated green it means the stock have come into contact with an infected animal.

Green results in the whole herd being tested to identify the carrier animals, which if found, is immediately removed.

Unless field boundaries are three metres and double-fenced to prevent contact with neighbouring livestock, Ola recommends that, once the BVD status is initially established, all white breeding females and bulls are double vaccinated, three weeks apart, prior to bulling. This protects the eventual foetus. Green females are naturally immune.

The following year, all breeding females and bulls are again vaccinated once as a protective booster prior to bulling.

Annual screen tests of 10 young stock from the previous year's calf crop establishes the presence or absence of BVD. After two consecutive clear annual screen tests, the farmer can apply for BVD accreditation. The status is maintained by continuing clear annual tests.

Opportunity to put index system theory into practice

by Andy McGowan

THERE was plenty of discussion among farmers at the ringside at the recent Perth Bull Sales about the new index format for estimated beef value (EBV) data presentation. It was the first time the commercial buyer had the chance to see the unified system in action.

Many producers arrived at the sales fresh from the Scotland-wide series of EBV workshops run by Quality Meat Scotland and the Scottish Agricultural College. These proved to be very popular and were specifically designed to help farmers further improve their ability to buy the animal most suited to their business needs by making the most of the index information system.

Perth gave them an opportunity to put the theory into practice and to use performance recording data to examine those hidden traits, such as calving ability, which are less easily identified by the eye.

Although some of the presentation still needs a little fine-tuning, the feedback from the industry has been positive and the consensus is that the subtle but significant change in the way information is being presented is extremely useful.

What has been accepted all along is that commercial buyers will use a system only if it can easily and quickly identify which is the most suitable bull or tup for them, regardless of which breed it is. That's why industry consultation on ways of improving performance recording was so important.

During a series of meetings with cattle and sheep breed societies last year it became clear that the major obstacle to a greater use and understanding of EBVs among commercial buyers was the proliferation of different systems for presenting the results.

The difficulty in trying to simplify the system was how to satisfy the needs of two very different sets of buyers: pedigree breeders with an understanding of EBVs who require the detailed figures; and commercial buyers who know what they need a bull or tup to do on their farm. The latter category are therefore more interested in a simple illustration of an animal's genetic performance rather than specific EBVs.

Various options were explored such as the use of stars to indicate better performing bulls and bar charts, similar to those used by some commercial dairy genetic companies. However, the most popular system among both pedigree and commercial producers turned out to be the indexing developed several years ago by the British Limousin Cattle Society (BLCS).

As we saw at Perth the majority of cattle breed societies have now agreed to adopt the BLCS Index system for their Scottish sales.

The Aberdeen-Angus Cattle Society, as expected, has expressed its intention to switch from using Signet Beefbreeder to the Australian Breedplan system. However, while some of the traits measured may differ from Signet, such as measuring muscle area rather than muscle depth, there is no reason why the format for presenting the results cannot remain the same.

The indexing system merely provides a quick reference for buyers to identify which bull is better for which trait within a breed, regardless of which computer system was used to generate the results.

The beauty of the index system is its simplicity. It ranks a bull against the breed average for each trait using 100 as the base. An index higher than 100 indicates above average performance for that trait and below 100 is poorer than the breed average.

As seen in the graphic there are two bulls which have a similar beef value. Their growth rates have also been broadly the same.

However, bull 1 has higher indices for fat and muscling and so would be most suitable for producers looking to improve their grading performance at the abattoir. Bull 2, on the other hand, has much higher indices for the maternal traits and so would produce female offspring that calve easily and have good milk production.

The process of developing a common format also needs to be carried out with the pedigree sheep sector and it is hoped that an agreement can be reached between breed societies in time for the autumn tup sales. If they adopt the same indexing system as the cattle breeds, this will simplify the explanation of EBVs to commercial farmers still further.

● Andy McGowan is industry development manager with Quality Meat Scotland.

LIMOUSIN BULLS STATISTICS

		EBV	Accuracy	BLCS Index
BULL 1	Calving Value	LM-3C	50	74
	200 day milk	-2	42	90
	200 day growth	31	67	126
	400 day growth	52	62	125
	Fat (mm)	-0.3	45	118
	Muscle (pts)	1.1	49	130
	Muscle Depth (mm)	3.9	59	126
	Beef Value	LM+31	54	127
		EBV	**Accuracy**	**BLCS Index**
BULL 2	Calving Value	LM+2C	56	106
	200 day milk	3	43	116
	200 day growth	28	71	122
	400 day growth	57	69	129
	Fat (mm)	0	52	96
	Muscle (pts)	0.7	57	115
	Muscle Depth (mm)	2.9	65	116
	Beef Value	LM+30	60	125

The Press and Journal

The Voice of Farming

Traditional plough followers are buzzed

by Ewan Pate

WHEN I was a Young Farmer I enjoyed nothing better than the wild life. Now its just plain wildlife that interests me. That's how it goes I suppose with the gentle passage of time. But it has made me reflect on how the natural population on this farm has changed over not much more than a generation. The answer, maybe surprisingly, is that it has altered quite markedly to the stage where the ratios of the various species is quite different.

Many farmers will have made the same observation without really worrying too much.

We mind our own business and the wildlife does the same. We sort of coexist. But remember we farmers advertise ourselves, when it suits us, as custodians of the countryside. With Common Agricultural Policy reform on us now we might just have to live up to the hype. How hard will it be?

Like most farmers I am not a member of any wildlife organisation such as RSPB or even the Farming and Wildlife Advisory Group. I just jolly along with an amateur interest. I enjoy seeing wild birds and mammals going about. They often add interesting viewing to an otherwise monotonous day on the tractor but it is not always what you expect.

I was ploughing the other day in the company of no less than four buzzards. That seems a bit excessive. The traditional plough followers, the gulls, were all huddled up at one end of the field looking pretty disgruntled while the buzzards gorged themselves. The surprising thing is that up until about eight years ago I had never seen a buzzard. Nothing has changed in the farming system to encourage them but they like it here.

In truth the gulls have nothing much to fear. They are too big but song bird chicks and other ground-nesters are not. Might the buzzards and other raptors be more to blame than anything we are doing on the farm for an undoubted reduction in these species? The easy way for me as a land manager to find out would be to take the shotgun along next time I go ploughing but of course I won't because I would be breaking about six laws at once and after all the buzzards do have a certain soaring majesty.

The one species I hardly ever see now from my cab is the brown hare. Now in my youth I used to beat at hare shoots when we could often have bags of more than 100 with plenty left to breed. Now I doubt if we have more than a hare to every 200acres in this area.

Much of that is down to farming change. When we had plenty of grass, turnips and some sugar beet we were providing them with everything that they needed. Without these crops they struggle. I daresay when we change cropping mix, as I am sure we will, then the hare will quickly re-establish. Maybe we need to grow sugar beet for bio-ethanol production.

Mind you there is more to it than that. The anti-hunting-with-dogs brigade picked the soft target when they chose fox hunting. They could have protected the gentle hare if they had been prepared to tackle the hare-coursing gangs but they know well enough these are not people susceptible to logical argument. Disrupting their activities would most likely give a new meaning to blood sports.

It is not all bad news, though. Nature abhors a vacuum and the space vacated by the hare seems to have been taken up by the roe deer. I must admit that I like to see them. They are graceful and attractive and in modest numbers they don't seem to do much damage. I certainly never saw them in this relatively open arable ground in my youth.

I am sure their appearance is linked to the uptake in the 80s of the oilseed rape crop. It gives them a winter fodder on which they thrive and then come spring and summer a perfect impenetrable crop canopy in which to rear their young. We should get a medal for encouraging wildlife in such a creative way but I doubt if we will.

We might get money, though. In fact we almost certainly will through the tortuous route of cross compliance. Encouraging wildlife will surely be part of our land management contracts with the Government but who is to say what the balance will be?

From my experience and the examples above on just one farm there is no doubt the balance of nature can be manipulated surprisingly quickly. It wouldn't surprise me if in a decade or two we see the much fussed over red kite or hen harrier following the plough and badgers, which I have never seen, running around like rabbits. But something else will be suppressed. Maybe the skylark and the partridge will be on the endangered list.

If we are to be as much land managers as farmers we are going to need a bit of guidance. Incidentally, bird lovers will be glad to know that one species population thrives here as vigorously as ever. Whatever happens the pigeon lives on regardless.