

SPICe Briefing

Animal Disease Surveillance in Scotland

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Scotland's eight animal disease surveillance centres aim to provide early warning or prompt detection of new or re-emerging disease threats in animals. This surveillance is considered important as it can allow timely action to mitigate the impact of animal disease on public health, animal health and welfare, livestock productivity and wider society.

The disease surveillance centres are run on behalf of the Scottish Government by SAC Consulting, part of Scotland's Rural College (SRUC).

In response to recommendations made in a review of disease surveillance in Scotland, SRUC consulted on proposals to change the current system. There is strong stakeholder opposition to some of the options proposed, particularly the closure of the centre in Inverness.

This briefing summarises the background to the disease surveillance centres, sets out the options proposed and considers reaction to them. The aim of the briefing is to inform members of the Rural Affairs Climate Change and Environment Committee ahead of their session on the issue in September 2015.



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BACKGROUND

At a meeting of the Scottish Parliament [Rural Affairs and Environment Committee](#) on 30 September 2009 the future of the Thurso Disease Surveillance Centre was raised by Liam McArthur MSP (Orkney). He stated (Official Report, Rural Affairs and Environment Committee on 30 September 2009, col 1967) –

“...the service that it is able to provide has been reduced in an area where livestock farming remains pretty intensive and extremely important to the local economy. The strategic importance of that lab to veterinary surveillance in that part of the country is beyond question and perhaps exceeds the importance of labs elsewhere in the country.”

This comment was based on concern from farmers, crofters, veterinary surgeons and others about the lack of a full-time veterinary investigation officer based at Thurso and the future of the Thurso Disease Surveillance Centre.

On 26 January 2010 the Scottish Government [announced a review](#) (Scottish Government 2010) of the way Scotland gathers and monitors information on the spread of animal diseases, to ensure swift action in the event of an infectious outbreak, and to ensure that the Scottish Government was getting value for money. John Kinnaird, former President of NFU Scotland, was chair. In announcing the review Cabinet Secretary for Rural Affairs and the Environment Richard Lochhead said –

"Scotland's excellent reputation as a top quality producer boosts sales and profits and is due in no small part to the health of our livestock.”

The result of the review was published in the “[Kinnaird Report](#)” in November 2011 (Scottish Government 2011). It recommended a number of changes to the current system including that:

- A Strategic Management Board be established to set the strategy for the service
- Scottish Government continue financial support
- Fewer DSCs (disease surveillance centres) are operated and laboratory services are centralised
- Active and passive surveillance is managed together to obtain better value for money.

In response to the Kinnaird report SRUC (who deliver disease surveillance on behalf of the Scottish Government) presented the Scottish Government with a series of options for taking forward the recommendations. A [public consultation](#) (SRUC 2015b) on the options was carried out between 1 June and 10 July 2015, seeking the views of stakeholders.

WHAT IS DISEASE SURVEILLANCE?

The Scottish Government (2011) define veterinary (or disease) surveillance as “the package of activities which provides early warning or prompt detection of animal health and welfare problems, together with tracking and analysis of the way they spread.” In practical terms this means (Meah and Lewis, 2000):

- Detection of rapidly spreading outbreaks of diseases, infections and intoxications in animals
- Provision of an early warning system for new animal diseases, infections or intoxications
- Early identification of known diseases/infections currently not found in the country
- Estimation of the level of occurrence and identify emerging trends among diseases/infections currently present in the country both temporally and geographically
- Confirming the absence of specific diseases or infections from the country.

Disease surveillance is achieved by offering individual farmers and crofters and their vets access to a subsidised post mortem and diagnostic services. Information from such examinations is collated and analysed. The data gathered provides a picture of animal health in Scotland, and can form the basis for further action.

WHY IS DISEASE SURVEILLANCE NEEDED?

Animal diseases and associated effects may have public health implications (for example, diseases such as Bovine Spongiform Encephalopathy (BSE), Salmonella, and conditions such as antimicrobial resistance), economic implications such as for international trade (e.g. Foot and Mouth Disease, Aujeszky's Disease, Bovine Tuberculosis, Brucellosis, Enzootic Bovine Leukosis, Bluetongue), or implications for Scotland's reputation for producing good quality food and drink.

The benefits of disease surveillance are (Defra, 2011):

- To measure the effectiveness of the statutory disease control programmes, e.g. to reduce prevalence of BSE or Salmonella in poultry
- To protect public health. Some diseases can be transmitted from animals to people (such diseases are known as zoonoses). These diseases may have occupational health implications for farmers, abattoir workers, sewage workers and others, or may pose risks to pet owners, visitors to 'open farms' or pet shops, or cause food safety concerns
- Understanding and measuring the impact of animal disease on climate change. Infections reduce the efficiency with which animal feed is converted into meat, milk, or other animal products for human use. The component of an animal's 'carbon footprint' which is due to disease is therefore an environmental cost.
- Detection of new and re-emerging disease, infection or toxicity. New disease may come about because of climate change (Bluetongue), disturbance of remote ecological systems allowing disease agents to move into domestic species (Severe Acute Respiratory Syndrome - SARS) or agents became resistant to drugs (Salmonella) (Scottish Government, 2011)
- Providing assurance of freedom from specified diseases. Ongoing disease surveillance in livestock provides the evidence to confirm national or regional freedom from specified animal diseases.
- Detection of exotic disease which is not usually present. For some designated animal diseases there is a defined "contain and eradicate" policy, should they occur, such as Avian Influenza in poultry in the UK.

CURRENT DISEASE SURVEILLANCE IN SCOTLAND

In Scotland, the Scottish Government Veterinary Disease Surveillance programme is delivered by SAC Consulting: Veterinary Services (part of SRUC) from eight disease surveillance centres located in areas with most livestock: Aberdeen, Ayr, Dumfries, Edinburgh, Inverness, Perth, St Boswells and Thurso.

In total 144 people are employed, comprising 25 vets, 4 consultants, 57 scientists, 28 support staff and 30 admin staff (SRUC, 2015a). The DSCs:

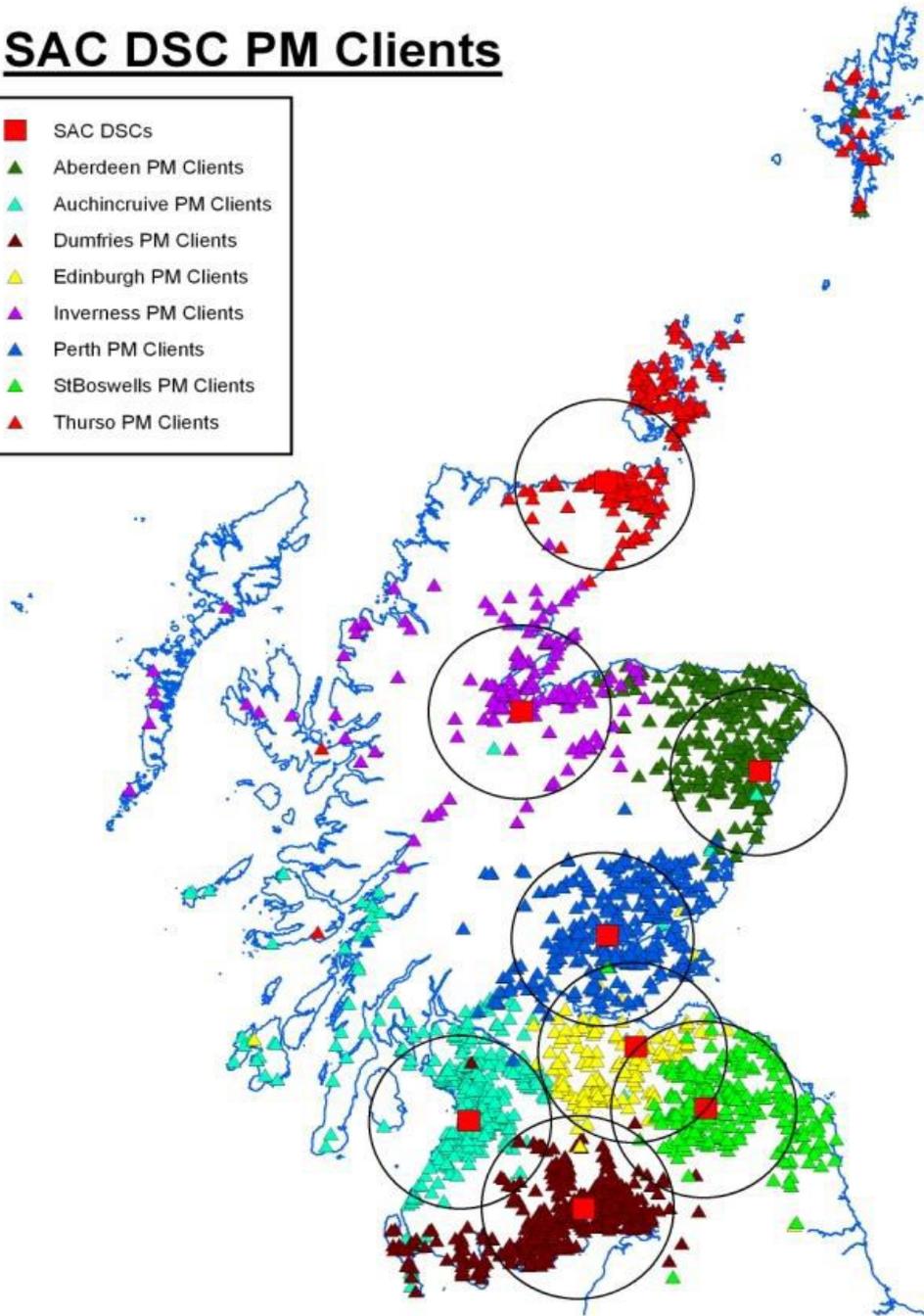
- Investigate via post mortems why animals have died and provide a report to the referring veterinary surgeon to enable future management and treatment decisions to be made
- Look for new or unusual diseases, infections and parasites
- Carry out diagnostic tests to investigate disease outbreaks
- Carry out testing in support of flock and herd health schemes and analytical testing of soils, plants and animal feedstuffs.

The SRUC (2015c) report [The Scottish Government's Veterinary & Advisory Services Programme 2014/15](#) (p4) says that during 2014/15 the DSCs “undertook diagnostic testing on some 5,000 carcasses of farmed animals and over 93,000 submissions of blood, faeces, swabs and other materials from veterinary surgeons in practice.” That information is used to monitor the current health and disease status of farmed livestock across Scotland. Interrogation of this information highlights changes in the occurrence of animal diseases, including liver fluke, clostridial enterotoxaemia in cattle and ovine caseous lymphadenitis in sheep and goats.

The map below shows the location of the current DSC and the post mortem clients that use each. The circle around each centre shows a 50 mile radius.

SAC DSC PM Clients

- SAC DSCs
- ▲ Aberdeen PM Clients
- ▲ Auchincruive PM Clients
- ▲ Dumfries PM Clients
- ▲ Edinburgh PM Clients
- ▲ Inverness PM Clients
- ▲ Perth PM Clients
- ▲ StBoswells PM Clients
- ▲ Thurso PM Clients



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Source: SRUC 2015a

SCOTTISH MARINE ANIMAL STRANDING SCHEME

In addition to animal surveillance, the Inverness DSC houses 3 staff who operate the [Scottish marine animal stranding scheme](#). This scheme collates, analyses and reports data for all cetacean, marine turtle and basking shark strandings around the coast of Scotland.

The SRUC have stated that they will discuss the most appropriate location for the team's base with the members of the marine strandings team.

FUNDING FOR ANIMAL DISEASE SURVEILLANCE IN SCOTLAND

Funding for animal disease surveillance comes from a mix of Scottish Government funding and income from fees paid by customers. Scottish Government funding comes from the veterinary surveillance and the animal health budget line (level 3) under environment and rural services budget (level 2) in the rural affairs, food and environment portfolio.

SRUC has provided SPICe with income and cost information on the disease surveillance centres in Scotland (copies available from the Scottish Government Animal Health and Welfare Division on request). The table shows income and costs associated with the Scottish Government funded Veterinary Advisory Service 2010-2015. In each of the years, SRUC have received additional income from Scottish Government to cover the deficit incurred in operating the service.

Table 1. Annual budgets from Scottish Government Funded Veterinary Advisory Service

	2010/11	2011/12	2012/13	2013/14	2014/15
	£ 000	£ 000	£ 000	£ 000	£ 000
Budgeted income from SG	4109	4073	3773	3773	3773
Additional income from SG	163	271	197	315	180
*Other income	1083	1187	1294	1255	1397
Total income	5355	5531	5264	5343	5350
Total costs	5678	6046	5248	5329	5357

*includes income from customer fees, income brought and carried forward, farmer and crofter discounts

PROPOSED CHANGES TO THE CURRENT SYSTEM

In response to the Kinnaird Review and particularly the recommendation that the number of DSCs be reduced, SRUC (2015a) [consulted](#) on the following possible changes to the current system.

Inverness Disease Surveillance Centre

The consultation proposed that the Inverness DSC could close in 2015. Alternative arrangements would be put in place to serve the Inverness region. These could include:

- that clients in the region be served from other DSCs
- that training and support would be provided for vets to carry out their own post mortems
- that a carcass transport service would be offered to take carcasses to an alternative DSC
- that a new post-mortem only facility could be built

SRUC (2015a) explained the proposed closure of the Inverness centre in meetings with stakeholders. They stated that:

1. the Inverness DSC has the lowest throughput of livestock post mortems of all DSCs
2. 25% of Scottish holdings are in the Inverness DSC area, but only 7.4% of the post mortems are carried out there
3. there has been a significant fall in the region's cattle and sheep populations.

Ayr Disease Surveillance Centre

A second possible change consulted on was that the Ayr DSC could, by 2017:

- remain at Auchincruive,
- move to a new site in Ayrshire or
- relocate to the University of Glasgow School of Veterinary Medicine.

Aberdeen Disease Surveillance Centre

A third change was that the Aberdeen DSC could relocate to Thainstone or another site in Aberdeenshire in 2017.

Edinburgh Disease Surveillance Centre

The consultation proposed that the Edinburgh DSC relocate to Easter Bush in 2017 alongside a new central laboratory facility shared with the University of Edinburgh's Royal (Dick) School of Veterinary Studies. This new facility would will act as a central facility for the whole of Scotland and accommodate the full range of laboratory services (Biochemistry, Chemistry, Haematology, Microbiology, Molecular biology, Parasitology, Pathology, Serology). This new facility would also house the Edinburgh post-mortem facility.

Perth, Dumfries, St Boswells and Thurso Disease Surveillance Centres

The consultation proposed that the Perth, Dumfries, St Boswells and Thurso DSCs remain in place.

RESPONSES TO THE SRUC CONSULTATION

In August, the responses to SRUC consultation were placed online and a summary report published ([SRUC, 2015d](#)). The report states that most of responses related specifically to Inverness, and almost all of these supported the continued operation of the Inverness DSC. In addition there were emails received in support of retaining the status quo and one vet practice submitted pre-printed letters signed by 205 individuals requesting the retention of the

Auchincruive DSC. Another Ayrshire practice presented a petition signed by 24 farmer clients. David Stewart MSP organised an on-line petition seeking to retain the Inverness DSC that attracted 1,100 signatories, while the Scottish Farmer hosted an on-line opinion poll on the future of the DSCs.

The SRUC report states that there was “strong opposition to the closure of the Inverness DSC”, and a widespread view that loss of the service would have a damaging impact on the viability of livestock farming in the region.

One of the proposed alternatives set out in the consultation was that private veterinary surgeons (PVS) might be able to carry out some of the activity currently carried out by the Inverness DSCs, such as post mortems. The report points out that PVS “were united in their opposition to ... providing post mortem services to their clients....based on concerns regarding accurate diagnosis, lack of competence and experience, cost to the client, inadequate facilities, health and safety issues and professional indemnity.”

Another of the proposed changes in the consultation was that a carcass collection service might be set up for the Inverness area. However, respondents were opposed to this because of the distances involved and the potential high costs.

On the proposed changes to the Ayrshire DSC, “the overwhelming consensus was for the retention of the existing DSC at Auchincruive in order to provide a flexible, accessible post mortem service to the local livestock farmers.”

STAKEHOLDERS VIEWS ON THE PROPOSED CHANGES

There has been considerable comment in the press and social media about the proposed changes. The majority of concerns relate to the proposed closure of the Inverness DSC. The following issues can be found in the public comment made in the Scottish Farmer (27 June 2015, 4 July 2015, 11 July 2015), [press release](#) from the NFUS (02 July 2015), and the Press and Journal (26 June 2015).

- The practicalities of transporting a carcass to alternative DSC if Inverness is closed are difficult
- Inverness staff have developed local knowledge of farms, estates and coastline that would be a loss to the Highlands
- Highlands is famed for the quality and high health of our livestock, loss of the DSC puts that at risk
- Closure of the Inverness DSC could lead to authorities missing the early signs of a disease outbreak since animal carcasses will not be tested
- The chance of spreading disease throughout the Highlands would increase as farmers would be forced to transport carcasses long distances to access the nearest DSC
- The Outbreak Committee of NHS Highland is reliant on receiving good information from disease surveillance centres to be able to control potential outbreaks of e-coli, salmonella and other health threats. The closure of Inverness could compromise the information available.

NEXT STEPS

The SRUC consultation closed on 10 July 2015. In a meeting of the Strategic Management Board held on 23 July the results of the consultation were discussed. There is no fixed timetable for the next steps, but the steps include providing the Cabinet Secretary with an update on the consultation responses and an evaluation of the options, together with the views of the Strategic Management Board. The Cabinet Secretary will then make the decision about the future of disease surveillance centres in Scotland.

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