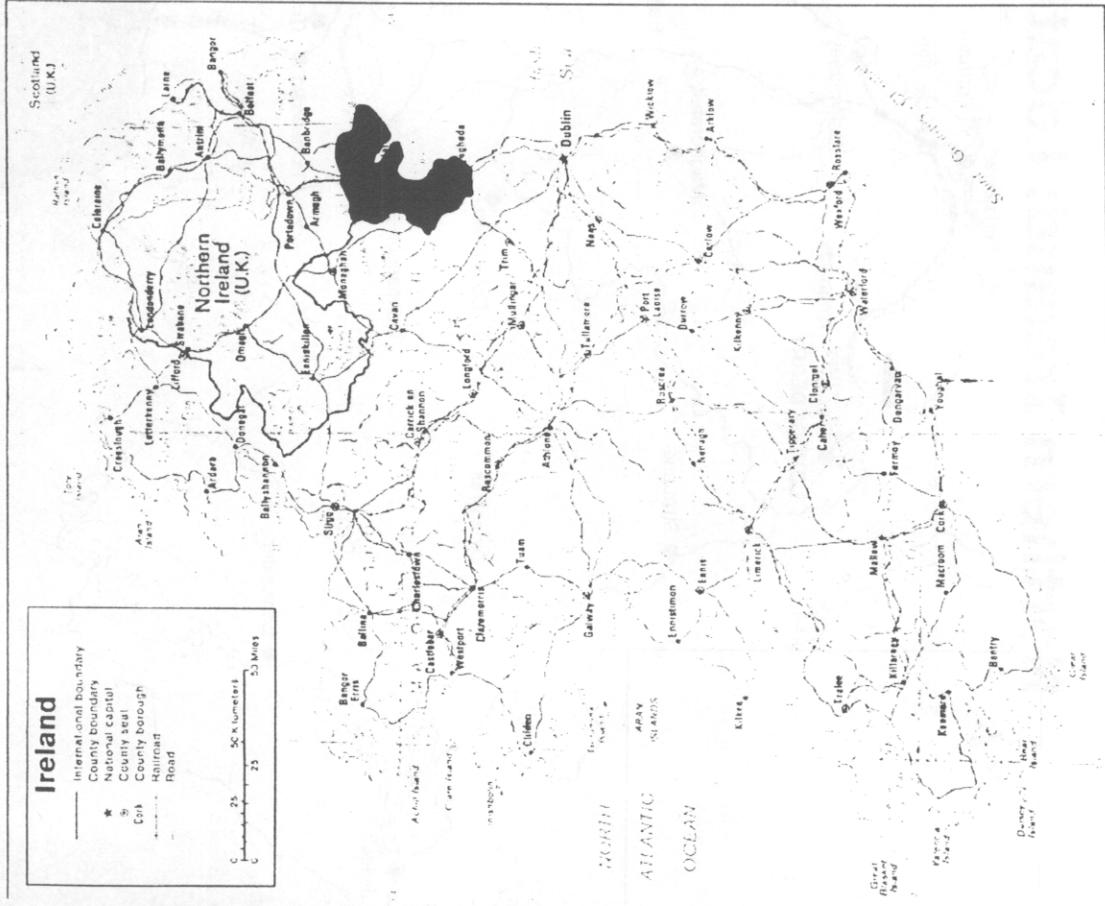


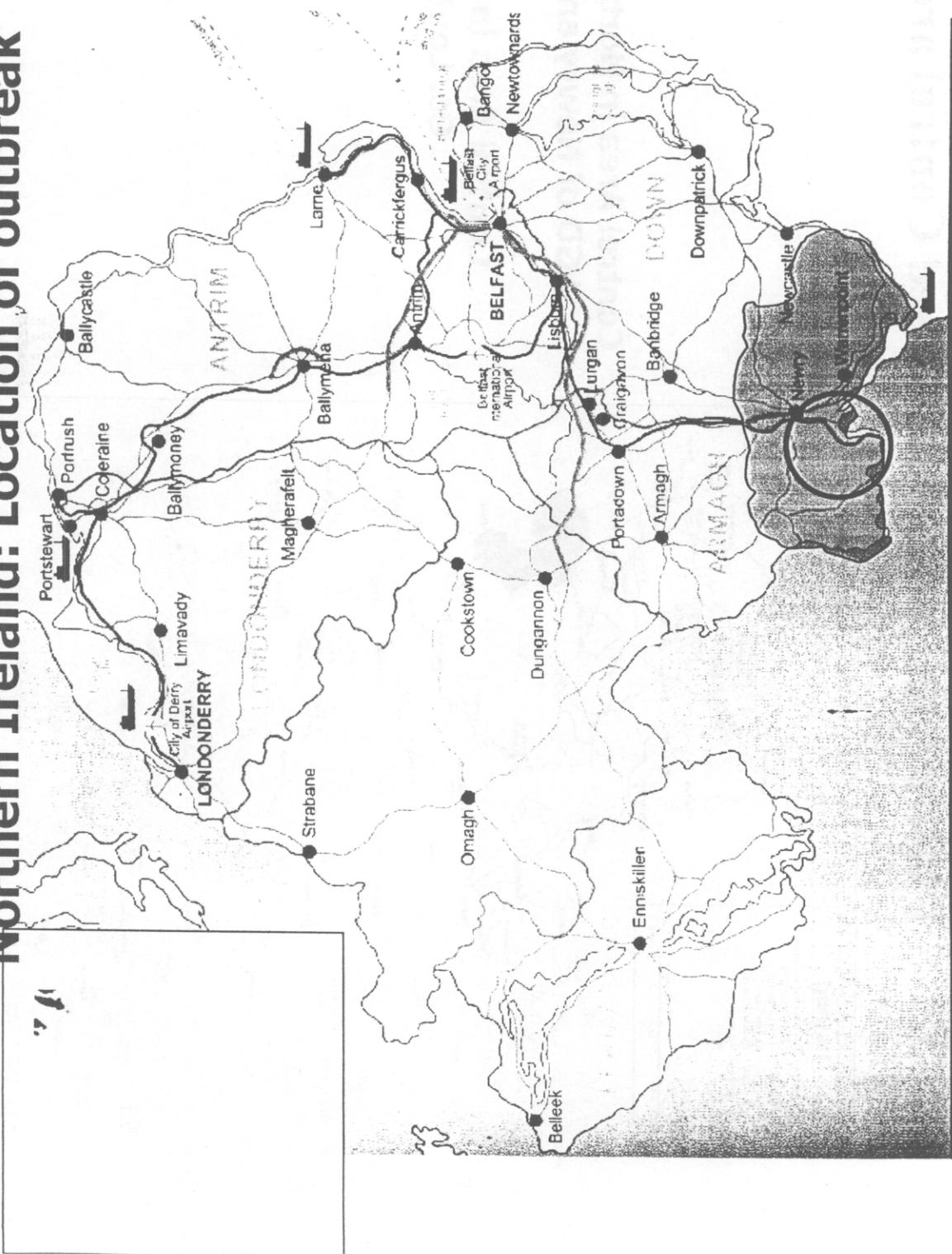
FMD Permitted and Proposed Control Areas



**Control Area in Northern Ireland:
LGD of Newry and Mourne**

**Control Area in Ireland:
Co. Louth**

Northern Ireland: Location of outbreak



Overview

One case detected quickly in imported sheep from GB

Slaughtered on 28 Feb 2001

Confirmed on 1 March 2001

Disease now eliminated & PZ lifted

SZ due to be lifted on 5 April 2001

No further cases in Northern Ireland

Import controls on GB equivalent to those of other Member States

Precautionary slaughter

All susceptible livestock within 1km of the outbreak

Two haulier contact premises

Total of 532 cattle, 1076 sheep, 992 pigs, 3 goats.

All sheep between the two outbreaks in Ireland and Northern Ireland

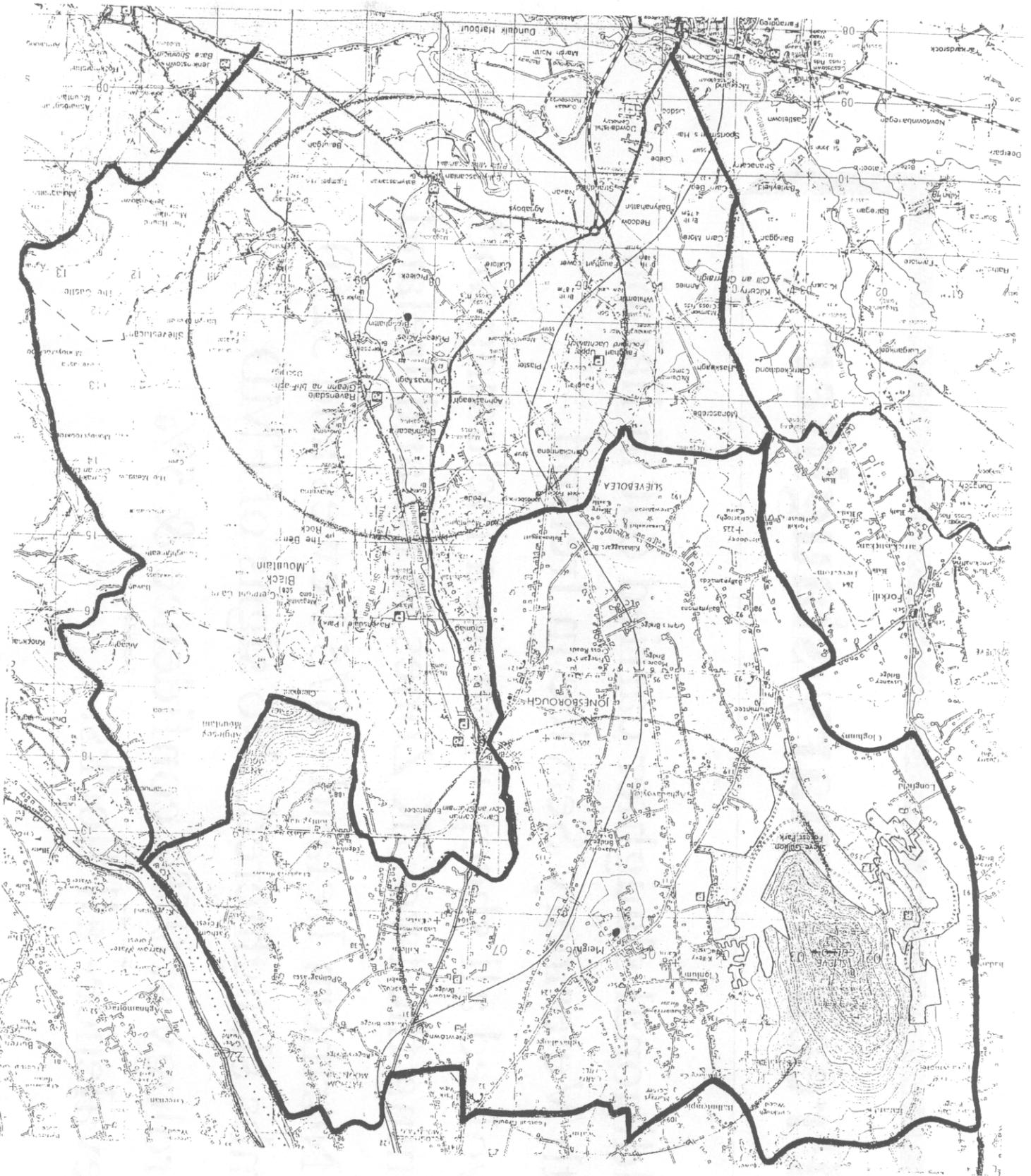
Precautionary slaughter

Additional slaughter carried out in liaison with Veterinary Service in Ireland.

Involved all sheep in an area including and joining the two 3K Zones in NI and Ireland.

In Northern Ireland - 6752 ewes and 3250 lambs slaughtered. No signs of FMD.

Serology at 95% confidence & 5% prevalence- all flocks.



ANNEX 2

Summary

Only one case in Northern Ireland
Detected quickly as a result of tracing of all
GB imports
1km ring slaughter around the outbreak
Haulier contacts slaughtered out
Precautionary slaughter of all sheep
between the two outbreaks in NI & Ireland
Now 34 days since infected animals
slaughtered.

Foot and Mouth Disease

Northern Ireland 3rd April 2001

Update report

1. Current Position with respect to outbreak

There have been no further outbreaks of FMD in Northern Ireland.

2. Surveillance Zone around Meigh outbreak

The surveillance zone around this outbreak is due to be lifted on 5th April.

3. Precautionary slaughter

Three kilometre culling of sheep in conjunction with Ireland

Following the outbreak of FMD at Proleek in Ireland on 21 March discussions took place between veterinary epidemiologists from both jurisdictions. They were unable to determine an obvious link between the Meigh outbreak and the Proleek outbreak.

However, the community in the area is close knit with many day-to-day contacts at cross border level. The greatest concern was that FMD could have been circulating as inapparent infection in sheep. It was agreed that a cull of sheep in an area including and joining both the 3k protection zone of the Meigh outbreak in Northern Ireland and the Proleek outbreak in Ireland. (See map at Annex1)

In Northern Ireland 6752 adult sheep and 3250 lambs in the area have been slaughtered.

The sheep were visited on farm and clinically examined for signs of FMD. Lambs were euthanased, on farm, by lethal injection and adult sheep were transported to a central point for slaughter. Blood samples were taken from each flock for subsequent testing for FMD antibodies (95% confident at 5% prevalence). Carcasses were transported to a rendering plant in sealed container wagons.

No clinical evidence of FMD has been detected in any of the sheep slaughtered.

**CURRENT SITUATION IN
NORTHERN IRELAND AND PROPOSAL
FOR REGIONALISATION**

11



**Dr McCracken CVO
Department of Agriculture
& Rural Development**

Overview

- ★ One case detected quickly in imported sheep from GB
- ★ Slaughtered on 28 Feb 2001
- ★ Confirmed on 1 March 2001
- ★ Disease now eliminated & PZ lifted
- ★ No further cases in Northern Ireland
- ★ Import controls on GB equivalent to those of other Member States

Import Controls

- ◆ First outbreak confirmed in GB on 21 Feb 2001
- ◆ EU ban on UK 21 Feb 2001
- ◆ Identical NI ban on imports from GB 1730 hrs on 21 Feb 2001
- ◆ Enforced at Ports (Sea and Air) C&D of vehicles and people at Ports
- ◆ Also a ban on export of livestock to GB on 23 Feb 2001

Investigation of Imports from

GB

- ★ All GB imports since 23 Jan 2001 traced, restricted and clinically examined
- ★ All animals imported were restricted and visited daily
- ★ One case of Foot and Mouth Disease detected

Standstill on animal movements in GB

Put in place 23 Feb 2001

- ↓ Licensed moves only to slaughter and for extreme welfare reasons
- ↓ All susceptible species & horses
- ↓ Enforced by DARD Officials and Police
- ↓ Closure of marts, rural shows & events.

Details of the outbreak

- ◆ Illegal movement of sheep consigned to direct slaughter
- ◆ Detected quickly by tracing of Great Britain imports exercise
- ◆ All flocks with GB imports or contact with GB imports already restricted
- ◆ Sheep slaughtered prior to confirmation
- ◆ Total of 21 sheep involved

Precautionary slaughter

- ◆ All susceptible livestock within 1km of the outbreak
- ◆ Two haulier contact premises
- ◆ Total of 532 cattle, 1076 sheep, 992 pigs, 3 goats.

Summary

- ◆ Only one case in Northern Ireland
- ◆ Detected quickly as a result of tracing of all GB imports
- ◆ 1km ring slaughter around the outbreak
- ◆ Haulier contacts slaughtered out
- ◆ Now 27 days since infected animals slaughtered!

PROPOSED REGIONALISATION FOR NI

11

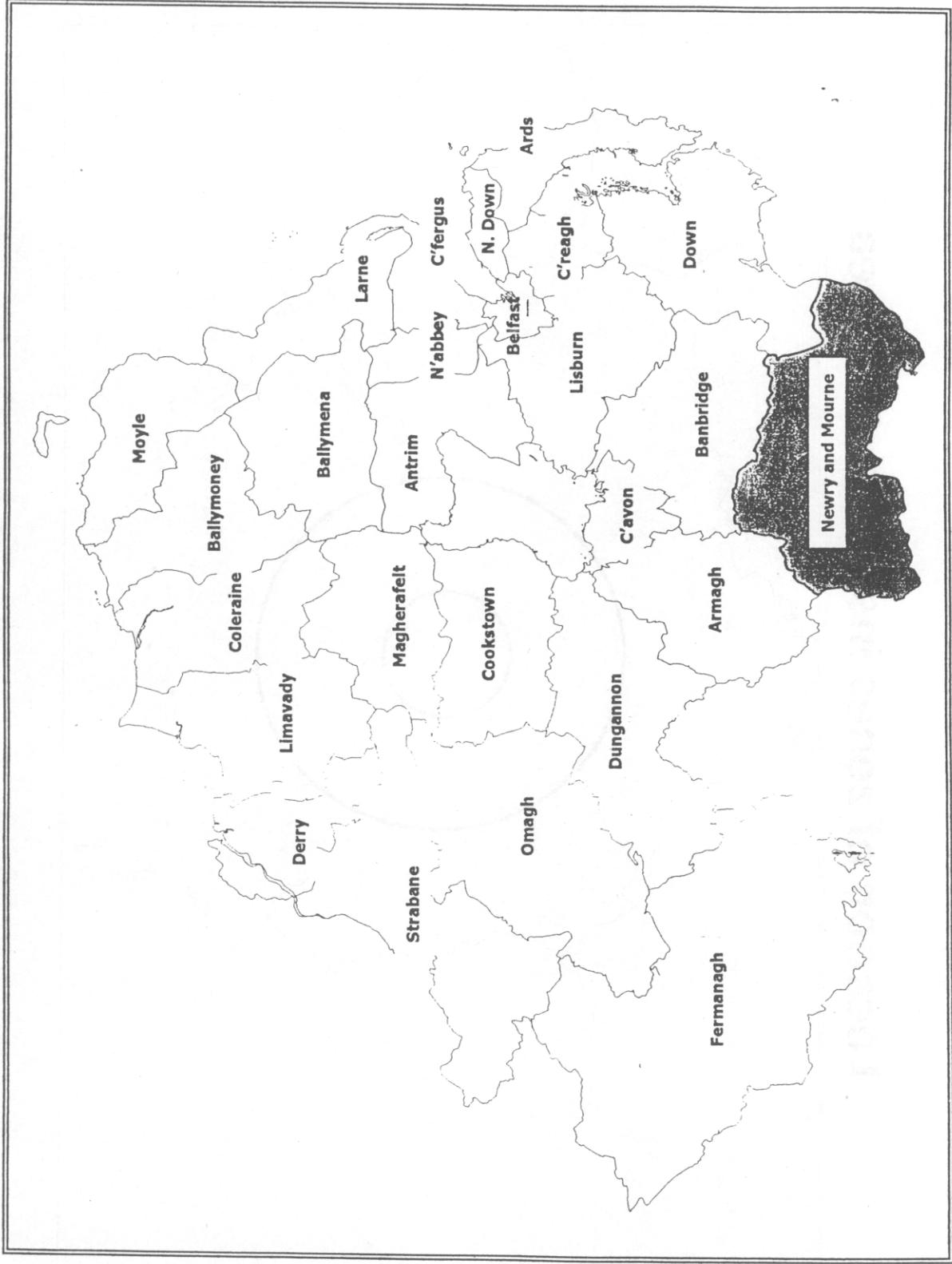


GB imports

- Detected quickly as a result of tracing of all
- Only one case in Northern Ireland

2011/12

Northern Ireland: Local Government Districts



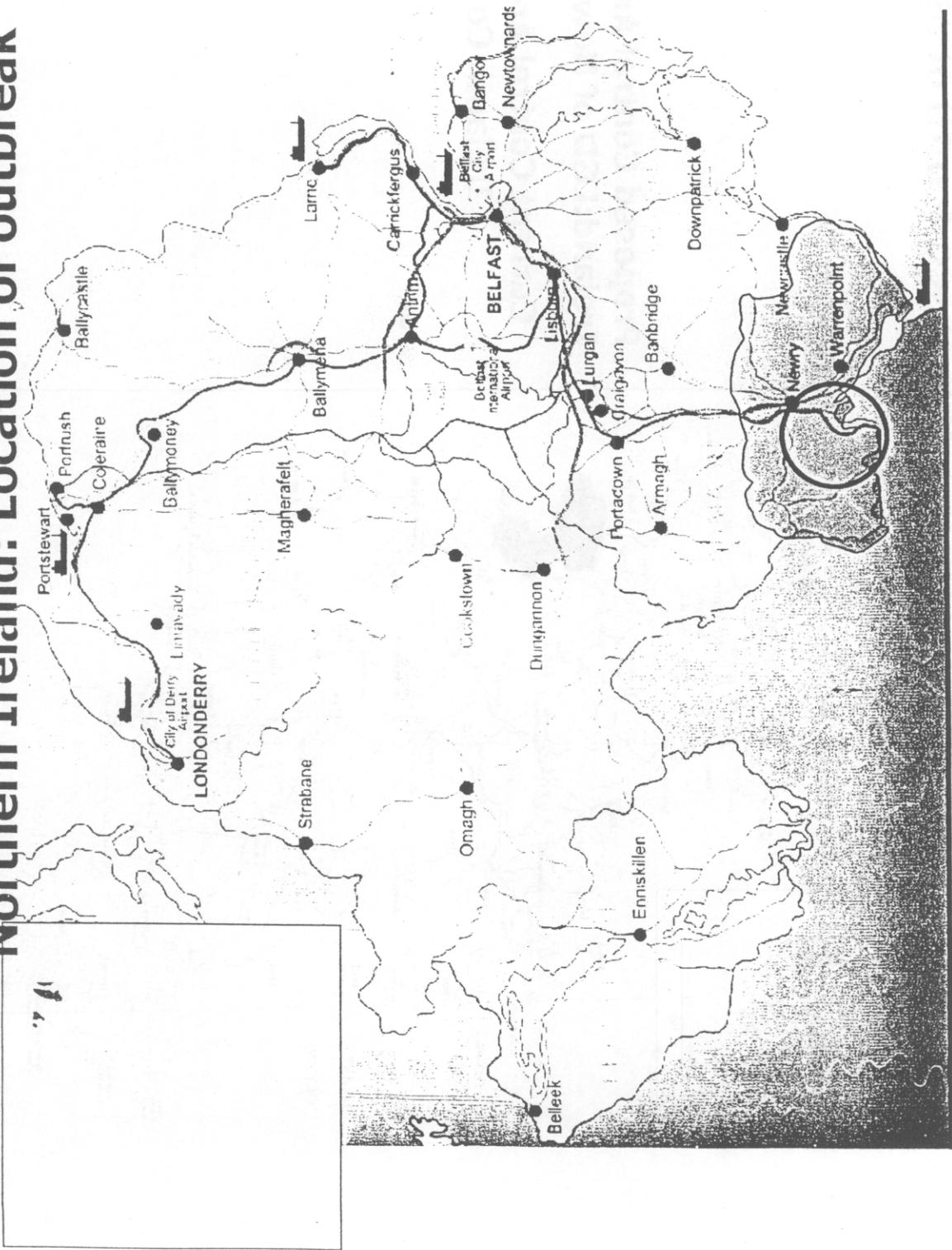
Veterinary Service, Department of Agriculture and Rural Development, Northern Ireland.

Location of zones inside control area



Veterinary Service, Department of Agriculture and Rural Development, Northern Ireland.

Northern Ireland: Location of outbreak



Foot and Mouth Disease

Northern Ireland February-March 2001

The case for regionalisation

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1. Summary

There has been only one case of Foot and Mouth Disease (FMD) in Northern Ireland (NI) in sheep imported from Great Britain (GB) in an illegal manner. This case was quickly slaughtered out and animals were incinerated on farm.

Pre-emptive slaughter of animals in the 1k zone and other herds/flocks considered to be dangerous contacts took place. There has been major press coverage and the CVO has promoted increased vigilance from the Farming industry. FMD has not been identified in any other reported suspects. Samples from 4 of these suspect cases have been sent to Pirbright for virology – all proved to be negative.

Extensive tracings of all livestock imported from GB since 23 January have been carried out and the animals have been regularly visited and clinically examined. No further cases of FMD have been identified.

A ban was imposed on (21/2/01) on the import of all cattle, sheep, goats and pigs and all associated animal products from GB in line with the EU Decision 2001/172 as amended. Additionally, a ban on import of horses from GB was imposed on Friday, 2 March 2001. This has been enforced at airports and ports.

Cleansing and disinfection measures have been put in place at ports and airports and advice on prevention of spread of FMD is issued to everyone entering the Province through ports.

There has been a ban on internal movement of susceptible animals and horses since 25/2/01.

Daily meteorological data is obtained from the local Met. office using weather station data for GB and NI. This data is correlated with outbreak data obtained from GB to assess any potential windborne spread risk to NI.

The measures in place have been effective in controlling FMD. If another incursion of FMD into NI takes place the standstill on animal movements will ensure that it can be quickly contained.

NI should be regionalised for FMD purposes in a similar manner to other Member States.

2. Controls at Ports

2.1 Ban on importation of livestock/products

As a protection measure for Northern Ireland, the Minister **banned imports of animals and animal products from Great Britain to Northern Ireland at 17.30 hours on 21 February**. She required that equivalent controls be put in place for all commodities covered by Commission Decision of that day, 2001/145/EC as for export from the United Kingdom. Controls were immediately put in place from the evening of 21 February at all Northern Ireland ports of entry from GB and resulted in a number of consignments of GB produce being refused entry to Northern Ireland.

These controls were possible as the movement of livestock and livestock products between Northern Ireland (NI) and Great Britain (GB) is controlled under GB and NI legislation. Conditions are agreed between the Chief Veterinary Officers of the Veterinary Service of the Department of Agriculture and Rural Development in Northern Ireland and the State Veterinary Service of the Ministry of Agriculture, Fisheries and Food in Great Britain.

In respect of the importation of livestock from Great Britain, there are general import licences in place. These licences are made under the Diseases of Animals Order (Northern Ireland) 1981 as the primary legislation and the Importation of Animals (Northern Ireland) Order 1986 as the secondary legislation. The conditions contained within these licences are informed by the requirements of relevant Animal Health Council Directives on trade in livestock. Specific conditions are included by negotiation to reflect the animal health status of the respective territories.

An ANIMO message is generated for each livestock consignment to be imported from Great Britain. These messages are received at local Divisional Veterinary Offices in NI.

On arrival at the Northern Ireland ports of entry (Larne Harbour or Belfast Port), consignments of livestock are intercepted by officers of the Portal Inspectorate within Veterinary Service. Accompanying documentation is verified, and full details of imported livestock are recorded. The consignment is permitted to travel to the destination as declared on the accompanying certification if the outcome of checks is satisfactory. Details of the consignment are forwarded electronically to the relevant Divisional Veterinary Office.

Using the existing Portal Section of the NI Veterinary Service it has been possible to effectively enforce the livestock and commodities ban put in place on 21/2/01.

- Portal Controls were enhanced with 24 hour manning of all ports through which livestock or livestock vehicles could enter Northern Ireland, , to ensure compliance.
- All goods vehicles are stopped and the paperwork examined. All foodstuff must be in compliance with the EC Decisions, currently 2001/172 as amended. If a consignment is not in compliance it is re-exported.

On Friday 2nd March these controls were extended to horses and horse vehicles

2.2 Cleansing and Disinfection

2.2.1 Vehicles

All empty livestock vehicles entering from Great Britain are examined to ensure that they have been cleansed and disinfected and must be accompanied by a cleansing and disinfection certificate from the Competent Authority in GB. Any dirty vehicles are re-exported to Great Britain and all clean wagons are re-disinfected by DARD staff. Portal staff police the ban on the importation of hay and straw both in bulk and accompanying horses. All second hand machinery is also required to have a cleansing & disinfection certificate from the Competent Authority in Great Britain and if it has one it is subjected to a disinfection wash on arrival. If machinery does not have such a certificate or if it arrived dirty it is re-exported. We are currently disinfecting the wheels of all vehicular traffic entering through Ports.

2.2.2 Passengers

There are on board disinfectant soaked mats in place for drivers going to their vehicles and foot passengers. Similar mats are in place at both the ferry terminals and Airports, (Belfast International, Belfast City, City of Derry, and St Angelo), for foot passengers. Announcements are made on both planes and ships for persons who have been in contact with animals to contact DARD staff on arrival. The latter are advising travellers of the risks of bringing foot and mouth disease into Northern Ireland.

Passengers are being asked to surrender all personal importations of Meat and Dairy products to DARD Staff. Such materials are confiscated and incinerated. DARD Staff are meeting all arrivals and handing out advice leaflets and offering disinfectant spraying to those

who are regarded as a risk, i.e. people who have come from or who intend to travel to a farm.

3. Imports from GB prior to ban of 21/2/01

All consignments of susceptible livestock that had been imported from GB since 23 January 2001 were identified from ANIMO messages, Portal Records and shipping manifests. The livestock were visited on their farms of destination and subjected to periodic clinical examinations. Cattle were periodically examined until they had been present in NI for at least 2 weeks. Sheep were periodically examined until they had been present in NI for at least 4 weeks. During these periods all livestock present on the destination farms were specifically restricted. In a view instances lesions suggestive of FMD were detected. In all such cases, samples were taken and sent to Pirbright. All proved to be negative. These livestock are still restricted by virtue of the complete standstill on livestock movements that is currently in place (see section 4. below). Neither pigs nor goats were imported.

Consignments of livestock that had been certified for direct slaughter were thoroughly checked to ensure that they had, indeed, been slaughtered. One such consignment of sheep was identified as having moved to a farm in NI, rather than to the slaughterhouse indicated on the veterinary certificate. This consignment was, subsequently, the only outbreak of FMD in Northern Ireland (see section 5. below).

4. Standstill on animal movement

On 23 February 2001 the Minister asked for a closure of livestock markets and a standstill on animal movements within Northern Ireland. This was implemented by the Foot and Mouth Disease (Infected Area) Order (Northern Ireland) 2001. This national legislation provided the basis for defining an infected area and published the details sufficiently to bring the notice to the attention of the relevant people likely to be affected by it.

All the provisions of the Foot and Mouth Disease Order (Northern Ireland) 1962 could then be applied to the entire territory of Northern Ireland. The following measures were put in place:

- A ban on all movements of susceptible species (other than to slaughter under terms of a specific licence)
- A ban on farm to farm collection of animals for slaughter
- A ban on the holding of livestock auctions and markets

- A ban on the movement of horses to, from, or within Northern Ireland was imposed.

These measures are still in place and the only moves that are permitted to take place are moves to slaughter under the authority of a specific licence or moves necessary on extreme welfare grounds. The latter moves have to be specifically approved at CVO/DCVO level and take place under rigorously enforced conditions.

The measures are enforced by the DARD officials and the Police throughout the territory of NI.

5. Details of the NI outbreak

5.1 Initial discovery of the outbreak

During the tracing exercise outlined above, it was discovered that a consignment of sheep, imported on 19 February for immediate slaughter, had not been confirmed at the listed destination. The driver of the vehicle was interviewed on 26 February and he disclosed that the sheep had been temporarily held at a premises in Meigh, Northern Ireland, before being taken to the Republic of Ireland (ROI).

Veterinary Service officers visited the premises on 26 February, interviewed the flock owner, served a restriction notice and visually inspected 21 sheep that were present. 2 lame animals were examined but no evidence of FMD was detected. The flock owner originally denied involvement in irregular importation of any sheep, asserting that the sheep on the premises had been obtained locally. However, late on the following day, he advised the local veterinary office that some were part of the load originally imported from GB. A Veterinary Officer returned with the flockowner to his premises and examined all the sheep. Lesions suggestive of FMD were detected in 4 sheep.

Samples were taken early the next day, on 28 February, at which time pathognomonic signs were noted in 10 sheep. All the animals were immediately slaughtered and incinerated on site and immediate restrictions placed on the movement of people and equipment as per the Directive. Confirmation of FMD was received from Pirbright Laboratory in GB on 1 March 2001.

5.2 Clinical Signs and Incubation Period

The sheep were examined on 26 and 27 February. On 27 February lameness was observed in some, associated with non-FMD conditions such as overgrown hooves and footrot. Some ulceration was detected

on the dental pads of 4 animals. The lesions were small, and no indication of healing. There was no discernible depression, no elevated temperatures or presence of any lesions at/around the feet.

The flock was re-examined again early the next day and similar dental lesions were detected in a further 6 sheep. Ruptured vesicles were observed at this time on the coronary band and under the top lip in 4 sheep. Teeth grinding was evident and some sheep were reluctant to rise after lying down.

The fresh nature of the lesions and rapid increase in clinical signs over the 24 hour period indicated that the disease was detected at an early stage in the flock. Backward tracing revealed that infection was introduced on 19 February, indicating an incubation period of at least 7 days. The clinical picture supports the hypothesis that the flock was likely to have been most infectious for only a short period, possibly 2 to 3 days, before the disease was detected.

5.3 Origin of Outbreak – see Annex 1

It has been determined that the outbreak was due to contact with sheep purchased in Longtown Market, Cumbria, on 15 February 2001. Several outbreaks in England and Scotland have been traced to purchases from that day, ostensibly linked to sheep movements from an outbreak in Tyne and Wear, England.

The consignment of sheep taken illegally to the infected premises on 19 February comprised three groups of sheep:

- 215 sheep purchased at Longtown on, or before, 15 February;
- 87 sheep from premises in Penrith, Scotland that was rented by the purchaser of the 215 sheep;
- 71 sheep purchased by another agent at Longtown on 15 February and held at premises in Lockerbie, Scotland.

FMD has since been diagnosed at both the Penrith and Lockerbie premises.

Two of the groups (215 + 87 = 302 sheep) were collected by the driver from market premises in Carlisle, Scotland. They were inspected there by a veterinary inspector who issued a health certificate allowing 291 sheep to be transported to slaughter in Northern Ireland. The driver then collected the 71 sheep from the premises in Lockerbie, en route to the ferry terminal. No certificate was obtained for this latter group.

On arrival in Northern Ireland the vehicle proceeded to premises at Killeen where the 71 sheep were offloaded. Thereafter the remaining sheep were left at Collin's premises a short distance away.

Detailed epidemiology investigations of all sheep believed to be imported with this consignment indicated that:

- 21 were slaughtered on the infected premises;
- An additional 2 sheep that had died were exhumed and incinerated;
- 248 were exported to Ireland and were slaughtered in a slaughterhouse;
- 63 were exported to Ireland and were slaughtered by Government officials;
- 8 sheep believed to be part of the consignment were examined and whilst they showed no evidence of FMD they were slaughtered and incinerated on the infected premises;
- Investigations by DARD Investigation Unit Enforcement Officers and equivalent Enforcement Officers in ROI have indicated that the remaining sheep in the consignment were exported to the ROI and subsequently slaughtered.

5.4 Disease Control on the IP

The sheep were slaughtered by lethal injection on 28th February 2001. Blood spillage from the slaughter fell onto straw bedding which was incinerated along with the carcasses by on-farm pyre on 28/02/01

Preliminary cleansing and disinfection was completed on 2/3/01.

Slurry was treated by adding sodium hydroxide to raise the pH to 11. It was left for one week and then disposed of by land fill. Contaminated pasture was treated by spraying with 4% soda solution.

The premises and the periphery of the PZ were guarded by VS staff from 28/2/01 until 15/3/01. Personnel and vehicles were only allowed to move on and off after complying with strict bio-security conditions.

6. Precautionary slaughter – see Annex 2

Following detection of FMD, the following steps were undertaken to determine the possible spread of disease:

- Data was supplied to the Meteorological Office in Bracknell, England, to determine the extent of airborne spread, using an FMD "plume" model. The model detected no spread over the risk period, even when it was extrapolated to cattle or pigs. This was almost certainly due to the small

flock size (less than 30), species (sheep), age of the lesions and limited amount of intra-flock spread during the period. The output data is provided below:

Genetic epidemiology investigations of all sheep believed to be imported with this confirmed infection that...

21 was diagnosed on the island (see Annex 2). An additional 2 sheep that had been exported and returned to the island were also diagnosed in a slaughterhouse. 63 were exported to other islands and diagnosed by 16 veterinarians.

5 sheep delivered to the port of the consignment were examined and while they showed no evidence of FMD they were subsequently re-examined on the island (see Annex 2).

Investigations by OIAI (Veterinary Investigation Unit) and OIAI (Official Veterinarian) confirmed that the remaining sheep in the consignment were exported to the ROI and subsequently slaughtered.

3.2 Disease Control on the IS

The sheep were slaughtered on the island on 26 February 2001. Food spillage from the slaughter and any bedding which was contaminated along with the carcasses by on-farm power 280V/50Hz. Hygiene, cleaning and disinfection was completed on 27/02/01.

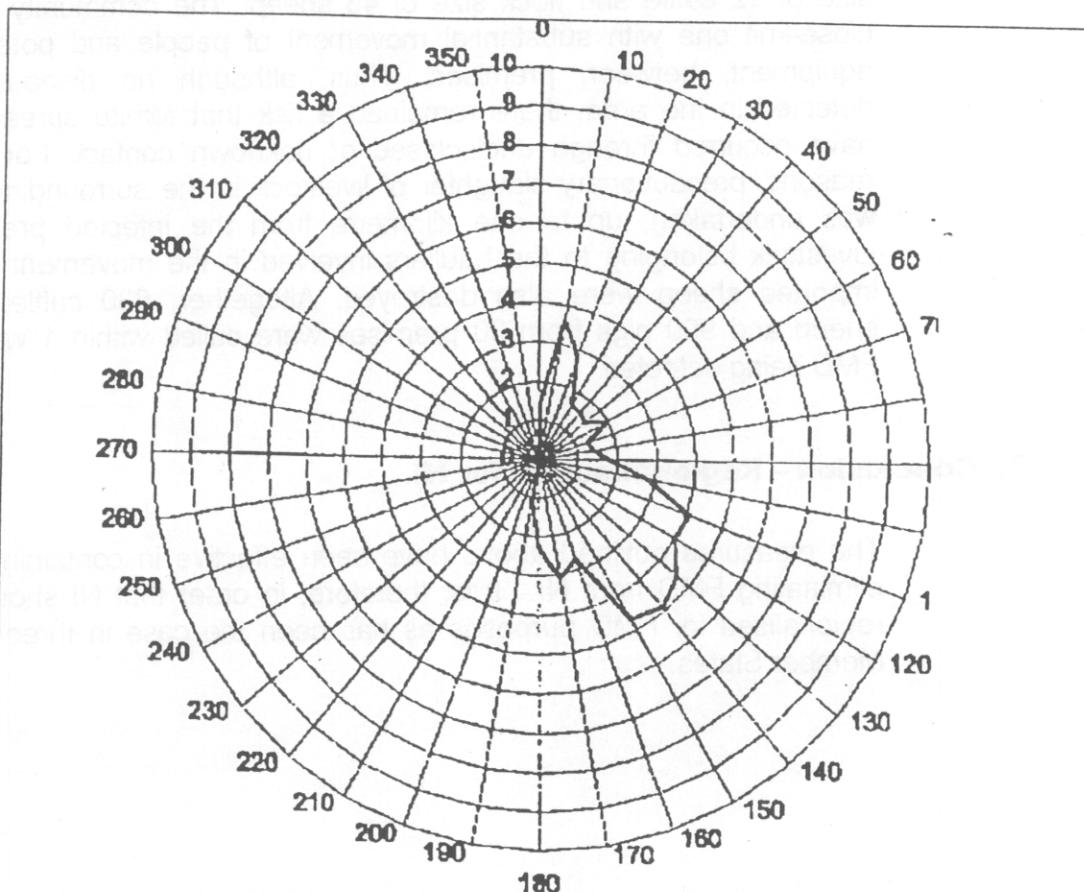
Shed was treated by adding sodium hypochlorite to raise the pH to 12. It was left for one week and then disinfected by first fill. Contaminated pasture was treated by spraying with 4% soda solution.

The premises and the vicinity of the IS were disinfected by VS staff from 23/02/01 until 15/03/01. Personnel and vehicles were only allowed to move on and off after consulting with the relevant authorities.

3.3 Precautionary slaughter - see Annex 2

Following detection of FMD, the following steps were undertaken to determine the possible spread of disease:

This was supplied to the Metabolic Office in B. Ash Hill, Edinburgh, to determine the extent of disease spread from an FMD virus model. The model detected no spread over the risk period even when it was exported to cattle or pigs. This was almost certainly due to the early



Accumulated Virus Dosage not using topography. The model calculates the potential extent of airborne virus spread, using a prescribed range of virus concentration rates (50, 25, 10, 1, 0.5, 0.1, 0.01). For cattle and sheep this is taken as 25 Infection Units but no spread was detected at this concentration and the model had to be run repeatedly, at progressively lower thresholds before any output was obtained. The output indicated is for a concentration of 0.01 Units.

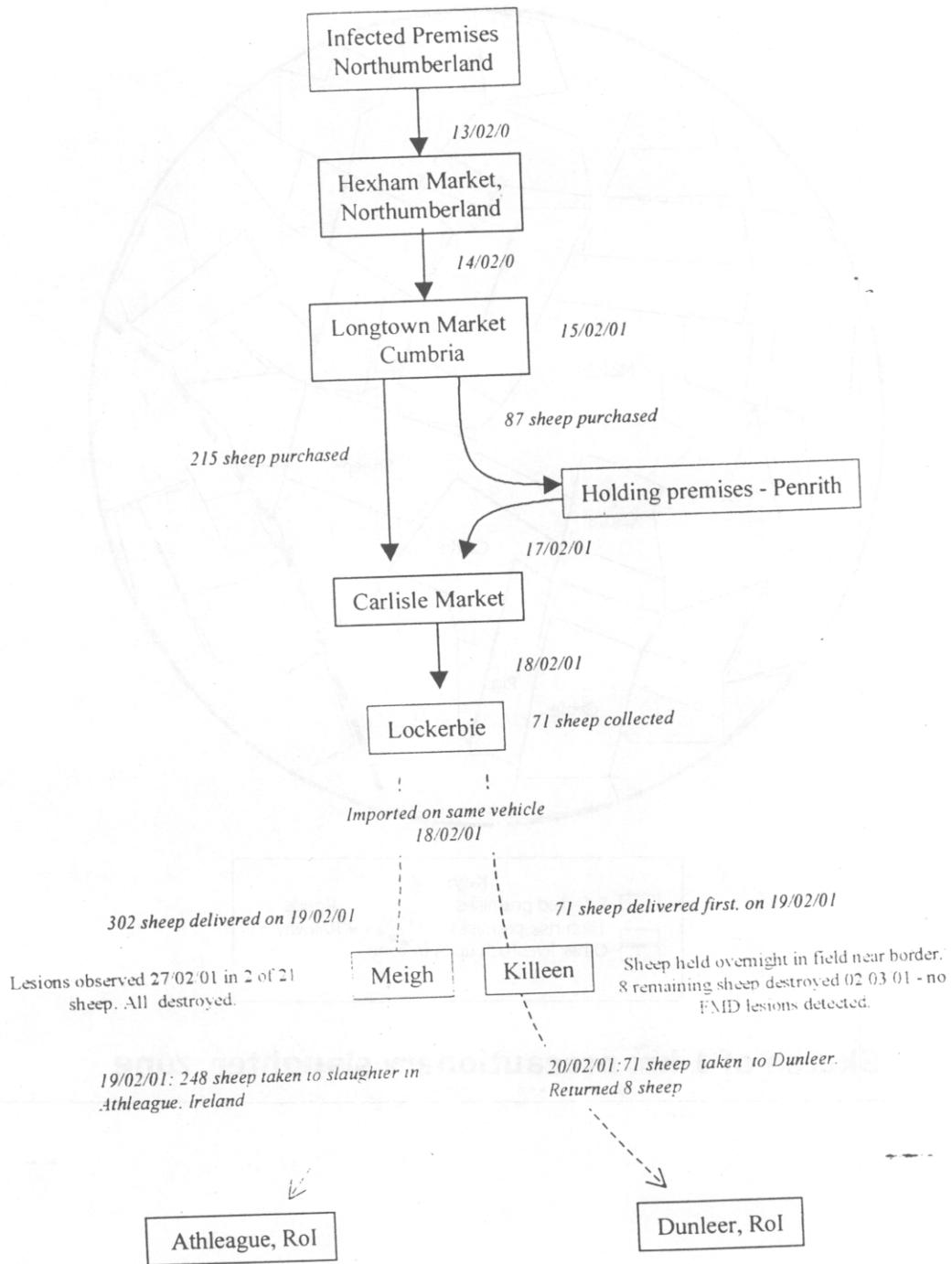
- Clinical examination of susceptible livestock in the area commenced immediately. Those most at risk to the infected flock were 5 adjoining holdings with a total of 100 sheep, 1,000 pigs and 340 cattle. No symptoms of FMD were detected. Similarly, no suspicious symptoms were detected on any other premises in the control and surveillance zones.
- Forward and backward tracing of all personnel, vehicles, livestock and equipment that might have had contact with the sheep or premises from 19 February, were immediately undertaken. Livestock identified through these tracings were restricted and subject to daily clinical examination for prolonged periods.

No evidence of FMD was detected in the subsequent investigations.

Holdings in the area of Meigh tended to be small with an average herd size of 12 cattle and flock size of 43 sheep. The community was a close-knit one with substantial movement of people and potentially, equipment, between premises. Thus, although no disease was detected in the area, there remained a risk that fomite spread may have occurred through undisclosed or unknown contact. For these reasons, precautionary slaughter of livestock in the surrounding area was undertaken, up to one kilometre from the infected premises. Livestock belonging to the hauliers involved in the movement of the imported sheep were also destroyed. Altogether, 530 cattle, 1100 sheep and 990 pigs from 30 premises were culled within 1 week of FMD being detected.

7. Conclusion – Regionalisation for NI.

The measures outlined above have been effective in containing and eliminating FMD from NI. It is, therefore, in order that NI should be regionalised for FMD purposes as has been the case in three other Member States.





Key:

-  Infected premises
-  High risk premises
-  Other livestock units in zone
-  Roads
-  Railway

Sketch of 1 km precautionary slaughter zone