

C o n t e n t s

Foot and mouth disease in Japan: follow-up report	61
Varroosis in New Zealand: follow-up report	61
Foot and mouth disease in Russia	63
Newcastle disease in Australia: follow-up report	64

FOOT AND MOUTH DISEASE IN JAPAN
Follow-up report

FOLLOW-UP REPORT No. 2

Text of a fax received on 14 April 2000 from Dr Kenichi Matsubara, Director of Animal Health Division, Ministry of Agriculture, Forestry and Fisheries, Tokyo:

End of previous report period: 4 April 2000.

End of this report period: 14 April 2000.

As of 13 April 2000, serum samples from 21,993 animals in movement control and surveillance areas and outside these areas had been tested, resulting in three positive animals: one on 3 April (see *Disease Information*, **13** [13], 52, dated 7 April 2000) and two on 9 April 2000 (see below).

As a result of this surveillance, two bovines kept on a cow-calf operation with 16 animals located about 2 km west of the primary outbreak gave a positive result by ELISA for antibody detection. The farm was revisited by a veterinary officer and serum samples from 10 of the 16 bovine were taken and retested. All of these 10 samples gave positive results by ELISA on 9 April. None of the 16 animals showed clinical signs. All 16 bovines in the farm were destroyed and buried and the farm was disinfected on 10 April.

*
* *

VARROOSIS IN NEW ZEALAND
Follow-up report

FOLLOW-UP REPORT No. 1

Text of an e-mail received on 14 April 2000 from Dr Barry O'Neil, Director, Animal Biosecurity, Ministry of Agriculture and Forestry (MAF), Wellington:

End of previous report period: 12 April 2000 (see *Disease Information*, **13** [14], 57, dated 14 April 2000).

End of this report period: 14 April 2000.

Number of outbreaks: the outbreak is still considered to have resulted from a single event, and a pattern of clusters is emerging.

Location of the outbreak: the location of the apiaries first identified as infested was the suburb of Otahuhu in south Auckland. Subsequently infested apiaries have been detected in the suburbs of Manuwera, Mangere, Otahuhu, Papatoetoe, Lynfield, Glendowie, Pukekohe and Waiuku. A cluster of infested apiaries has been identified on the Hauraki Plains to the south-east of Auckland.

Total number of hives: a preliminary examination of data from the National Beekeepers Association register indicates there are approximately 2,365 apiaries (comprising 26,908 hives) within the controlled area⁽¹⁾.

Number of hives infested: within the immediate vicinity of the outbreak, 78 apiaries (599 hives) had been visually inspected and infestation had been found in 16 apiaries (163 hives) as of 13 April 2000. The cluster of infested apiaries in the Hauraki Plains is located near the south-eastern boundary of the controlled area.

Number of hives destroyed: MAF has not ordered compulsory destructions at this stage, although some apiarists are acting on a recommendation from the National Beekeepers Association to destroy infested hives.

Diagnosis:

- On premises within the immediate vicinity of the known infested premises, diagnosis is by visual inspection of hives and uncapping of the brood to examine brood cells, and submission of bee samples to the laboratory.
- From 14 April 2000 the diagnostic protocol to be used when maximum sensitivity is required will be fluvalinate-impregnated strips hung in hives, with laboratory identification of any mites via collection on sticky bottom boards.

Epidemiology:

A. Source of agent / origin of infection: unknown.

B. Mode of spread: natural dispersal through bee movements (abandoning and robbing of crashed hives) is still considered to have been the most likely means of dissemination amongst the infested hives identified to date.

C. Other epidemiological details:

- Sampling since the outbreak was first detected has not as yet established a clear southern boundary to the infested area. Fifteen field teams are engaged in inspections of hives around known infested premises, on the basis of the clustering pattern of infested apiaries that is emerging.
 - The strategy being employed is that, after all apiaries in the vicinity of known infested apiaries have been inspected, field teams are being directed to apiary districts approximately 20 km further away from the centre of the outbreak. Apiary districts are being sampled at a level to provide 95% confidence of detecting at least one infested hive assuming a prevalence of 25% (the approximate prevalence being found in infested clusters).
 - It is intended that once hive inspection and bee sampling fail to detect further infestations, the diagnostic protocol employing fluvalinate-impregnated strips will be applied to provide the necessary confidence that the southern boundary has been reached.
- Tracing forwards and backwards from the known infested premises is occurring, in particular identifying high risk movements such as bees, hives and equipment.

To date, three high risk traces lead to premises outside the controlled area. These premises have been made 'restricted places' subject to movement control. No *Varroa* mites have been seen on samples of bees submitted to the laboratory from two of these premises. However, the diagnostic protocol employing fluvalinate-impregnated strips is to be used on all three premises prior to considering lifting movement control. Hives will be sampled at a rate sufficient to provide 95% confidence of detecting at least one infested hive assuming 5% prevalence.

Tracing from known infested premises within the controlled area is continuing.

(1) The controlled area comprises the territorial boundaries of those districts within a 50-km radius of infested properties identified on 12 April 2000.

FOOT AND MOUTH DISEASE IN RUSSIA

(*Date of last previously reported outbreak:* June 1995).

EMERGENCY REPORT

Translation of a fax received on 17 April 2000 from Dr Viacheslav M. Avilov, Chief of the Main Veterinary Department, Ministry of Agriculture, Moscow:

Report date: 17 April 2000.

Nature of diagnosis: clinical and laboratory.

Date of initial detection of animal health incident: 15 April 2000.

Estimated date of first infection: 10 April 2000.

Outbreaks:

Location	No. of outbreaks
Elitnoye village, Ussuriysk district, Primorskiy territory (approx. 44° N - 132° E)	1

Description of affected population: breeding sows, boars, fattening pigs, piglets (from 1 to 3 months).

Total number of animals in the outbreak:

species	susceptible	cases	deaths	destroyed	slaughtered
sui	965	625	111	0	0

Diagnosis: .

A. Diagnostic tests used: serology, PCR⁽¹⁾ and inoculation tests.

B. Causal agent: FMD virus type O.

Source of agent / origin of infection: investigations under way. Proximity to FMD-infected East Asian countries.

Control measures during reporting period:

- cattle in the littoral territory are vaccinated against FMD according to the schedule;
- emergency ring vaccination of pigs;
- control of wildlife reservoirs;
- quarantine and movement control inside the country.

(1) PCR: polymerase chain reaction.

NEWCASTLE DISEASE IN AUSTRALIA Follow-up report

FOLLOW-UP REPORT No. 2

Text of a fax received on 18 April 2000 from Dr Gardner Murray, Chief Veterinary Officer, Department of Primary Industries and Energy, Canberra:

End of previous report period: 21 February 2000 (see *Disease Information*, **13** [7], 24, dated 25 February 2000).

End of this report period: 18 April 2000.

There is no evidence of further spread of the disease to date.

A total of five farms are now in quarantine in the western Sydney area following the detection of a second infected farm in the suburb of Rossmore. A small number of clinical cases appeared in birds in a controlled environment shed of 20,000 twenty-week-old layers located about 100 metres from another infected farm at Rossmore. Australian Animal Health Laboratory (AAHL) isolated Newcastle disease virus with a virulence sequence of RRQRRF at the cleavage site of the F protein. The farm has been quarantined and its eggs are required to be sanitised before sale and consumption in Sydney.

Two suspected cases of Newcastle disease have occurred in the 3-km surveillance area around the infected farm at Moonbi, near Tamworth:

- on 29 February 2000, a company veterinarian reported suspicious signs in a flock due for processing;
- a similar situation developed in a nearby broiler flock under the same ownership.

Healthy poultry from both flocks were permitted to be processed with subsequent cooking. Samples were sent to AAHL, but no virus was isolated. The farms were quarantined and classified as suspect infected on the basis of clinical signs and histopathological examination of sections of brain. After depopulation by processing, both farms were cleaned and disinfected under standard procedures.

The chief veterinary officers of the Commonwealth and States, and the AAHL, have concluded that Newcastle disease due to virulent virus of Australian origin is not eradicable in affected areas of New South Wales in the short to medium term. State and Commonwealth Ministers of Agriculture, meeting as the Agricultural and Resource Management Council of Australia and New Zealand (ARMCANZ), supported an amended approach to managing incidents of the disease on 3 March 2000.

A national management plan, jointly managed by governments and industry, is being developed and will include refinements in the areas of:

- zoning;
- vaccination within specified zones; and
- movement controls on poultry and products from specified zones in New South Wales.

ARMCANZ acknowledged that the national management plan, and the zones on which it is based, may need to be amended after consideration of the outcomes of the national survey of Newcastle disease virus. This survey has now commenced but final results are not expected for another four months.

Australia remains committed to a stamping-out programme response to any incursion of virulent Newcastle disease of exotic origin.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever by the Central Bureau of the Office International des Epizooties concerning the legal status of any country or territory mentioned, or its authorities, or concerning the delineation of its frontiers or boundaries.

Unless otherwise stated, material published is derived from declarations made to the Central Bureau by the Veterinary Administrations of the countries and territories mentioned.