



Foot and mouth disease shuts down livestock sales

Lesley van Helden

Cases of foot and mouth disease (FMD) were detected on 1 November 2019 in the Molemole local municipality of the Capricorn district of Limpopo Province. The affected farm consisted of a cattle feedlot, breeding cattle herd and a flock of sheep, and lies within the FMD free zone. The disease-free status of this zone is currently suspended since the outbreak of FMD that occurred further east in Limpopo between May 2018 and January 2019.

Animals in the feedlot had been sourced from auctions in four different provinces, and the stage of the observed lesions indicated that the disease had been present for more than a week. Trace-back operations therefore began and, as of 11 December 2019, twelve additional infected properties had been detected in Limpopo Province (fig 1), including commercial and communal farms as well as associated abattoirs. All properties are linked by movement of animals from other infected properties. Clinical signs observed vary from almost none at all, to foot lesions and severe oral lesions.

The associated virus has been identified as SAT 2, and appears to be a close relative of the virus that caused the latest outbreaks of FMD, also in Limpopo Province. The exact origin of the outbreaks remains unknown.

A notice published in the Government Gazette on 4 December 2019 prohibited the congregation of cloven-hoofed animals from multiple locations for the purposes of distribution to more than one other property. This means that all livestock auctions, shows and similar events are prohibited in the whole of South Africa until further notice. Exemption from this prohibition applies to those who keep animals on their property for 28 days after arrival with no new introductions in this time period, and that keep auditable

records to prove this. The prohibition could be lifted once the extent of the outbreak is determined and no further cases have been reported for at least 28 days.

The national Department of Land Reform and Rural Development (DALRRD) and the National Animal Health Forum (NAHF) urge all producers of cloven-hoofed animals to develop and implement a biosecurity plan for their properties in order to minimise the risk of transmission of diseases, including FMD, onto and from their properties. Vigilance and active surveillance by all producers and those in the animal industry for clinical signs of FMD is also encouraged. Please see the March 2019 Epidemiology Report (http://www.elsenburg.com/vetepi/epireport_pdf/March2019.pdf) for a list of clinical signs and differential diagnoses for FMD.

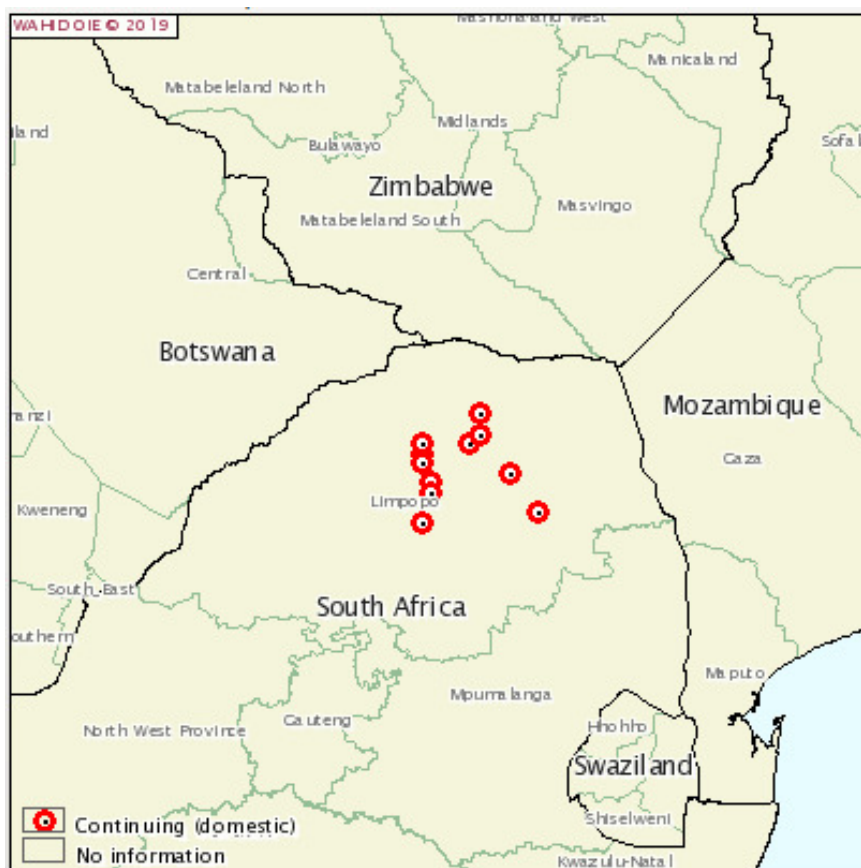













Figure 1: The locations of properties in Limpopo Province reported to the OIE as infected with foot and mouth disease since 1 November 2019, indicated by red circles (OIE, 2019)

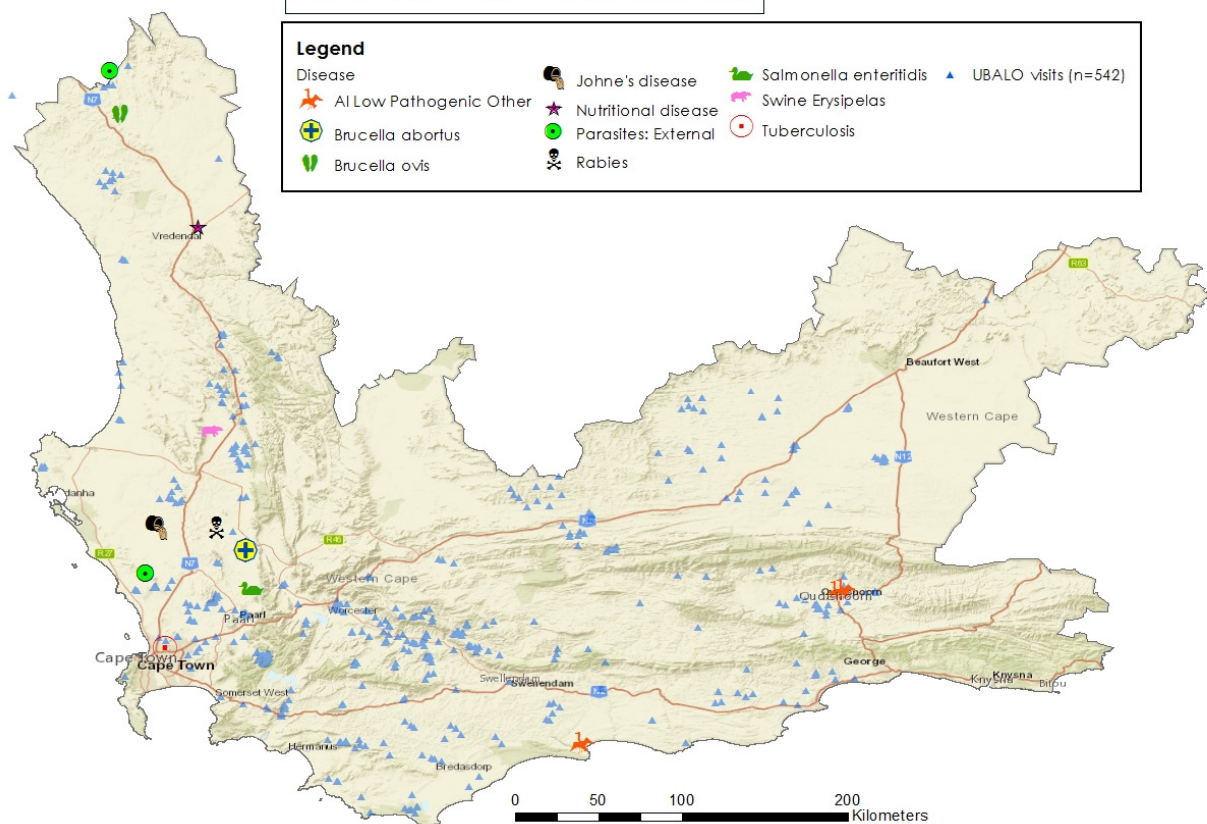
Disease and surveillance

Disease and Census - November 2019

Legend








Disease

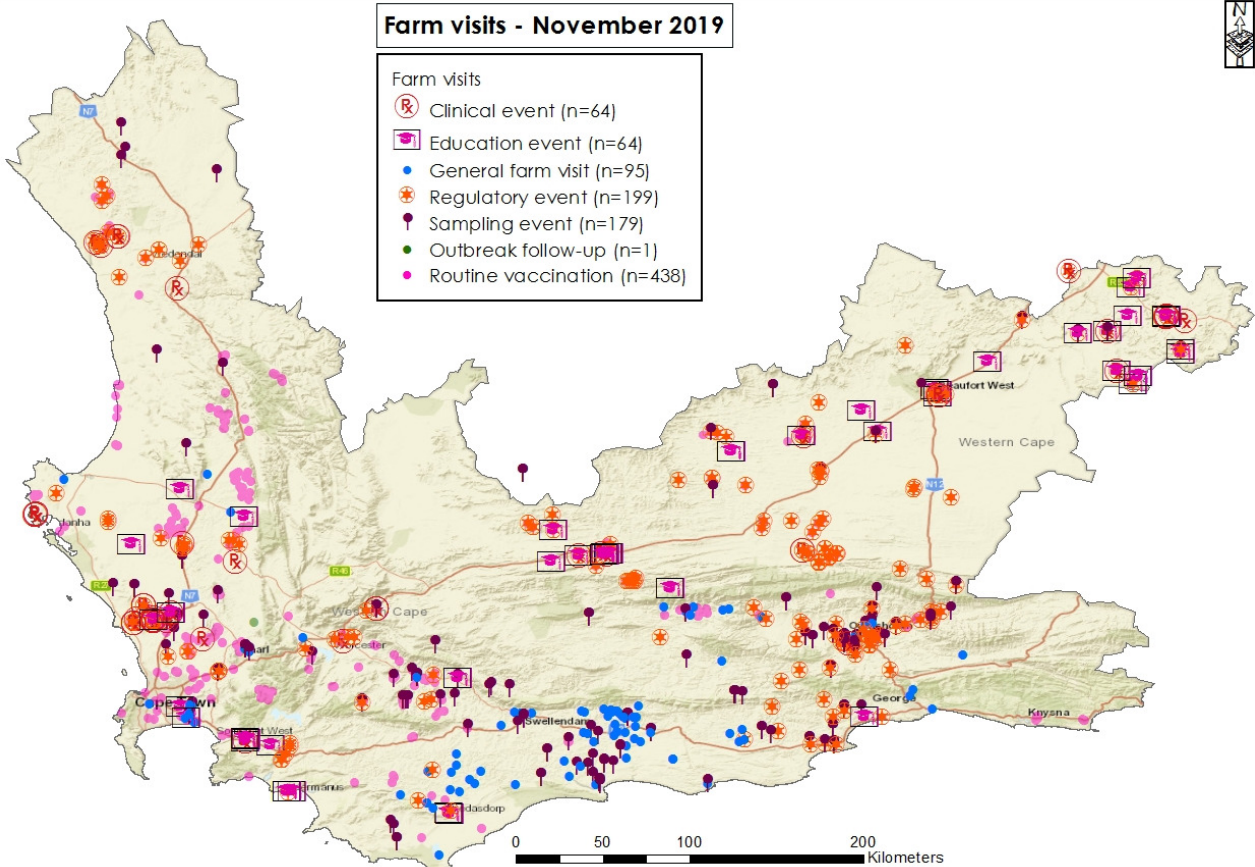
-  AI Low Pathogenic Other
-  Brucella abortus
-  Brucella ovis
-  Johne's disease
-  Nutritional disease
-  Parasites: External
-  Rabies
-  Salmonella enteritidis
-  Swine Erysipelas
-  Tuberculosis
-  UBALO visits (n=542)



Farm visits - November 2019

Farm visits

-  Clinical event (n=64)
-  Education event (n=64)
-  General farm visit (n=95)
-  Regulatory event (n=199)
-  Sampling event (n=179)
-  Outbreak follow-up (n=1)
-  Routine vaccination (n=438)



Outbreak events

A **bat-eared fox** near **Moorreesburg** approached a tractor on a farm and attacked the tyres. The tractor driver drove over the fox to kill it and the local animal health technician was contacted to collect the carcass, which subsequently tested positive for **rabies**. There were no dogs on the farm, but 13 cats were vaccinated against rabies.

A group of **cattle** grazing communally on land near **Gouda** was tested for **brucellosis**, as a result of forward tracing from the outbreak of brucellosis near Paarl in September. Two cattle tested positive. The cattle belong to five different owners who lease the grazing land from the local municipality, and have been doing so for the past ten years. The herd was placed under quarantine.

A chronically ill **dog** in **Cape Town** had biopsies taken from nodules detected in its liver. Histopathology revealed these nodules to be granulomatous, containing acid-fast bacilli. Mycobacterial culture is currently underway to identify the organism, but **tuberculosis** is suspected. The dog had recently been adopted from a welfare organisation as an adult and its history is unknown.

Two **ostrich** farms northeast of **Oudtshoorn**, close together and with the same owner and manager, were found to be **avian influenza** seropositive on post-movement tests at the end of October. Back-tracing found no evidence of infection on the farms of origin and follow-up testing provided evidence against infection with highly pathogenic AI. Virus material was detected on one of the farms, in live ostriches, from mortalities among poor-doers and from faecal swabs of wild geese, but was found to be H5 and H7 negative on PCR and serology was also H5 and H7 negative. Both farms are near a canal and other water bodies and hundreds of Egyptian geese (fig 2) frequent the ostrich camps. Given detection of virus in the faecal swabs from geese, infection is likely to have originated in these wild birds.

Avian influenza antibodies were detected on a fifth **ostrich** farm in the **Heidelberg** area. No evidence of virus or of antibodies to H5 or H7 AI were detected.

Next generation sequencing of RNA obtained from swab samples taken in September on an **ostrich** farm in the **De Rust** area indicated infection with **H9N2 avian influenza**.

A **sheep** farmer near **Moorreesburg** noticed ewes losing condition and not responding to treatment for internal parasites. A private veterinarian came to do an investigation and diagnosed **Johne's disease** in the flock.

A broiler **chicken** farm near **Wellington** cultured **Salmonella enteritidis** from chick box liners supplying two different houses on the site. All chicks are routinely treated with enrofloxacin on days 1-3, and the pH of the drinking water was reduced to 3. Follow-up cloacal swabs taken from the chicks on day 11 were negative for *Salmonella*. Parent flocks of origin also all tested *Salmonella* negative.

Skin lesions indicating **erysipelas** of swine were seen on a **pig** carcass originating from the **Eendekuil** area after slaughter at an abattoir.

Brucella ovis was detected in **rams** near **Bitterfontein**.

Unspecified **nutritional disease** was reported in small farmers' sheep near **Vanrhynsdorp**.

Sarcoptic mange of **pigs** was seen near **Mamre**.

Goats were dipped for **external parasites** in the far north of the province.



Figure 2: Egyptian geese (Photo: L Roberts)

Epidemiology Report edited by State Veterinarians Epidemiology:

Dr Lesley van Helden (lesleyvh@elsenburg.com)

Dr Laura Roberts (laurar@elsenburg.com)

Previous reports are available at www.elsenburg.com/vetepi

Disclaimer: This report is published on a monthly basis for the purpose of providing up-to-date information regarding epidemiology of animal diseases in the Western Cape Province. Much of the information is therefore preliminary and should not be cited/utilised for publication