



## African swine fever update Lesley van Helden

African swine fever (ASF) was detected at four more locations in July, bringing the total areas with active outbreaks in the Western Cape to eight. The majority of the affected areas are on the outskirts of the City of Cape Town, where smallholder farmers keep pigs informally, often free-roaming and in close contact with pigs belonging to other owners. Swill feeding and illegal slaughter is common. The source of the outbreaks is difficult to determine as many farmers either do not know or are not willing to divulge the origin of pigs they buy.

Affected areas include:

Khayelitsha (Mfuleni): outbreak started in early February 2021. Sporadic deaths of pigs are still occurring in the area. After biosecurity training by the Khayelitsha AHTs and seeing the example set by another farmer, several farmers whose pigs were culled have joined together to form a biosecure, enclosed area in which to farm in the future.

Saldanha: outbreak began in mid-April 2021. Most pigs in the area died but no deaths have been reported for a while. The Malmesbury state vet office has been monitoring the situation and hopes to be able to lift quarantine soon.

Strand: outbreak began in early May 2021.

Kraaifontein (Wallacedene): outbreak began in late June 2021.

Klapmuts: outbreak began in mid-July 2021.

Fisantekraal: outbreak began in mid-July 2021.

Khayelitsha (Wetlands): outbreak began in mid-July 2021.

Khayelitsha (Makhaza): outbreak began in late July 2021.

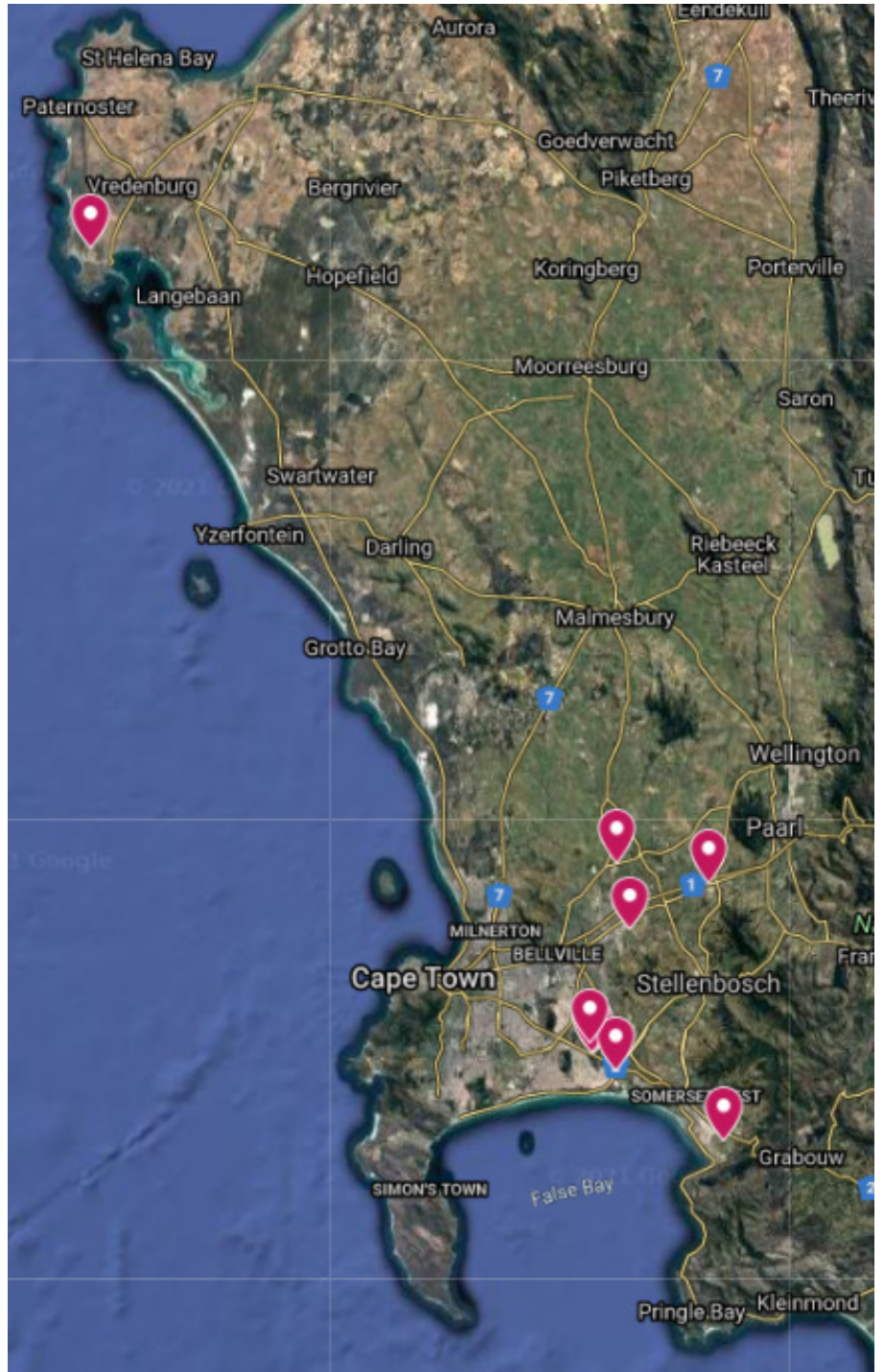


Figure 1: Locations of outbreaks of confirmed African swine fever in the Western Cape as of the end of July 2021. Outbreaks are indicated by magenta pins.

# African horse sickness movements 2020 report

Adapted from the African horse sickness control: Movement report 2020 by J.D. Grewar<sup>1</sup> and C.T. Weyer<sup>1</sup>

<sup>1</sup> South African Equine Health and Protocols NPC

## Introduction

This is the third detailed report on equid movements in South Africa with respect to controls implemented to mitigate the risk of African horse sickness virus (AHSV) entering the AHS controlled area of the country. The period evaluated is the 2020 calendar year. We differentiate between movements from the infected part of South Africa and those that occur within the AHS controlled area, the latter only where movements occur to a zone of higher control. Wild equid movements are also evaluated, as well as those stepwise movements that required a stopover quarantine period prior to entry into the AHS controlled area.

## Permit based movements – infected zone to AHS controlled area

This section deals with any equid moving from the AHS infected part of South Africa directly into the AHS controlled area in the Western Cape Province. Movements from the infected zone require an AHS risk status classification which is reported by the State veterinarian (SV) of origin in the form of an area status declaration (ASD).

## Domestic equids

A total of 1323 movement events consisting of 2692 domestic equids, all horses except for two donkeys, occurred in 2020, with an average of two equids moving per movement application. 53.8% of horses moved were Thoroughbreds. The remaining movements were evenly spread across breeds with the only other pure breeds moving relatively frequently being the American Saddlebred (7.5%), SA Warmbloods (6.8%), Hackneys (5.3%) and Arabians (4.5%).

Figure 2 shows the time series analysis of domestic equids moved. The impact of the national COVID-19 lockdown is clear with a standstill on movement for the whole of April and a recovery to 2019 levels only by November. Most equids moved between September and December 2020, although the February peak of over 400 animals was the highest monthly total for the year. The AHS surveillance zone (SZ) remained the most common destination (63.3%) for equids moved. Year-on-year there was a 34% and 39% decrease in the number of movement applications and total domestic equids moved, respectively.

Figure 3 gives an indication of the primary origin of equids moving into the AHS controlled area. In this case, the movement has been categorized by the state veterinary area of origin. These areas are specifically labelled if 100 or more equids moved from that region during the year. The main province of origin was the Western Cape Province, with the George, Beaufort West,

and Swellendam state veterinary areas most represented. These three areas of origin accounted for 44% of all equids moved from the infected area during the year. The racing/training jurisdictions in the Free State (Kimberley), Kwa-Zulu Natal (Umgungundlovu and Ethekwini), Gauteng (Germiston) and Eastern Cape (Port Elizabeth) were most represented outside of the Western Cape. The eight labelled areas in Figure 3 accounted for a total of 81% of all domestic equids moved during the year. Like the temporal trend, the spatial point of origin of equids entering the controlled area did not differ much from previous analysis, although the numbers originating in each area were substantially lower.

## Stop-over quarantine (SOQ) movements

A total of eight SOQ facilities were used during 2020, two of which are in the AHS controlled area itself. These two, along with the Gauteng facilities, are vector protected facilities. 110 horses moved under this protocol, compared to 319 for 2019, a 65% decrease. Seven (6.3% compared to 11% in 2019) horses travelled through the two facilities that were in the controlled area. All stop-over facilities used in 2020 were within the Western Cape except for the Gauteng vector proof facilities. The primary destination of these movements is the surveillance zone, mirroring the general movement trend.

## Wild equids

A total of 34 zebra were moved within or from the AHS controlled area during 2020, compared to 26 in 2019. All were Burchell's zebra (*Equus burchelli*). All movements were either in the same AHS controlled zone or into a zone of less control. No animals moved from the infected zone into the AHS controlled area.

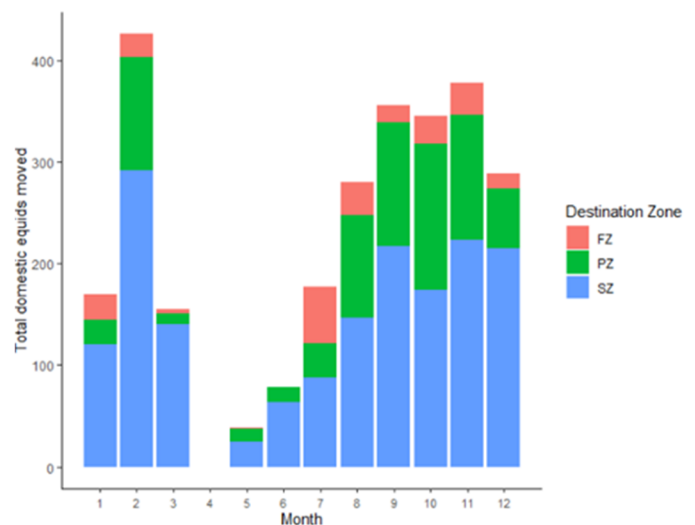


Figure 2: Time series plot of total domestic equids moved and their destination within the AHS controlled area during 2020



As in the previous analyses zebra generally move during the colder winter months.

**Pre-notification only based movements - within controlled area**

Within AHS control area movements to a zone of higher control requires that notification of movement occurs within 72 hours of movement. A total of 2860 equids moved in this fashion during the year, down from 3939 in 2019, an 27% decrease. Most equids that moved within the controlled area were Thoroughbreds (80.1%). Most (74%) moved from the AHS protection zone (PZ) to the AHS surveillance zone.

An important consideration for these movements is that there are a considerable number of horses that move from the AHS surveillance zone into the AHS free zone (FZ) on the multiple movement permit system, which is a same day return movement licensing system allowing horses to move in this fashion without pre-notification of movement. The information reported here refers to movements where horses would generally not be returning on the same day.

The movement pattern over time is quite like that of infected area origin movements. The movements from the protection zone into the free zone in January 2020 were again primarily associated with a Thoroughbred sale which was held at the CTICC. Generally, the

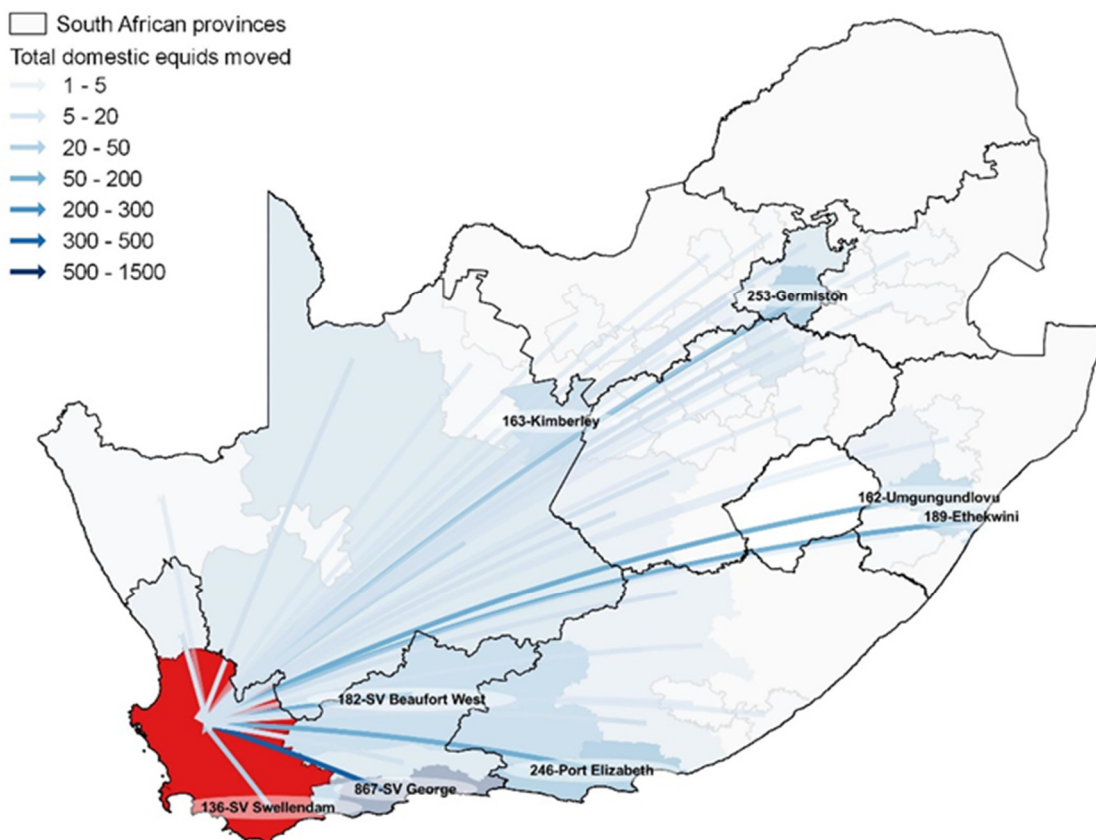
movements between the surveillance and free zone throughout the year will either be equids moving to one of the two veterinary practices that have their premises within the free zone or thoroughbreds in training that move from feeder farms in the controlled area to the training yards in Milnerton.

**Discussion**

A total of 5552 equids moved into a zone of higher control during the year, a 33% decrease from 2019 – this almost certainly because of COVID restrictions implemented in early 2020. Once again it is clear that most movements into a zone of higher control consisted of domestic equids and, while it is important to understand wild equid movements, the risk mitigation of AHS spread into the AHS controlled area through domestic equid control remains crucial. The AHS surveillance zone remains the most common zone of destination, both for infected area origin and controlled area origin movements. Most movements are associated with Thoroughbred horses, and this breed drives the high areas of origin of the various racing centers in the country and the use of stop-over facilities in the Karoo.

Movement regulation requires close communication and interaction between various regulatory and State authorities. Movements originated from 47 of the 126 State vet areas in the country; although only 20 SV areas had more than 10 equids move from them during the year.

Stop-over quarantine movements have assisted in facilitating the movement of 110 horses that would otherwise not have moved or would have required a 40-day residency in an AHS low risk area prior to direct movement. While this system is expensive and intensive it promotes the movement of high value horses or critical movements (such as high-level competition) and allows control and an acceptable system for the public needing to move horses.



**Figure 3: The total number of equids per State veterinary (SV) area of origin that moved into the AHS controlled area in 2020. Areas are labelled if 100 or more equids moved from the region during the year. Note the Swellendam SV area intersects the AHS controlled area – movements in this case are only from the AHS infected area of that SV area.**

# AHS outbreak resolved

As of 6 July 2021, no cases of African horse sickness had been reported from within the protection zone for more than 40 days. The outbreak in the Cederberg Local Municipality near Clanwilliam that began in April 2021 was therefore declared resolved and movement controls put in place as a result of the outbreak were lifted.

## Outbreak events

Outbreaks of **African swine fever** were detected in four more areas in the City of **Cape Town** in July. More details are provided on page 1 of this report.

**Highly pathogenic avian influenza (HPAI) H5** was reported in **ostriches** from the **de Rust** area. **HPAI H5N1** was also detected in a dead **great white pelican** from False Bay Nature Reserve, **Cape Town** at the beginning of July. The bird had a secondary bacterial pneumonia. Two **kelp gulls**, from Camp's bay (H5 negative) and Bloubergstrand (H5 positive) were AI positive near the end of the month. Both showed neurological signs.

Exposure to **LPAI H5N2**, based on serology, is suspected in **ostriches** in the **Riversdale** area. They are 12 and 9km, respectively, from a farm where LPAI H5N2 was sequenced in May.

**Undefined avian influenza** was reported from an **ostrich** farm near **Witsand**. Inconsistent serology in only one bird makes the diagnosis difficult. Similar situations have been experienced on two farms in the Riversdale area with only one bird seropositive at each test and no evidence of disease spread.

**Johne's disease** was confirmed in two **sheep** flocks near **Moorreesburg and Darling** after the owners noticed a small number of sheep losing weight over a long period of time.

**Erysipelas of swine** was diagnosed after slaughter on pig carcasses from two farms from the **Swellendam** area.

On a property near **Oudtshoorn**, **domestic show pigeons** bought from Roodepoort started showing nervous signs, depression and a high mortality rate a few days after arrival. Test results were PCR positive for Newcastle disease, but further typing results are not yet available. The cause of the outbreak is suspected to be **pigeon paramyxovirus**. The owner has vaccinated all pigeons and poultry on the property in response to the outbreak.

Wild **rock pigeons** and **laughing doves** were found dead in **Swellendam, Porterville** and on a farm near **Piketberg**. Birds from all three locations tested positive for **pigeon paramyxovirus**.

Approximately 300 five-day-old **broiler chicks** died shortly after arrival on a chicken farm near **Paarl**. An **avirulent strain of Newcastle disease** was identified in samples taken.

A smallholder farmer near **Malmesbury** lost 25% of her **chickens** after they began showing nervous signs. The birds were found to be infected with **avirulent Newcastle disease**.

A batch of **sheep**, later discovered to be infested with sheep scab, were bought and divided amongst four farms belonging to the same owner in the **Heidelberg** area. All sheep flocks on the farms were treated twice under official supervision.

A **heifer** near **Groot Brakrivier** became blind, stopped eating and died shortly thereafter. The neighbouring farm keeps wildebeest, and the cause of death was found to be wildebeest-associated **bovine malignant catarrhal fever**.

**Lumpy skin disease** was reported in **cattle** herds near **Ceres, Touws River and Villiersdorp**. Characteristic bumps were seen under the skin of unvaccinated animals.

Cases of **bluetongue in sheep** were reported by a farmer near **Klaarstroom**. Affected sheep were treated with antibiotics and anti-inflammatories.

**Pneumonia** was seen in a **lamb** that died in the **Murraysburg** area.

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](http://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