

EPIDEMIOLOGY REPORT

2022 in review

Western Cape

Government

Aariculture

Surveillance/ field activities

In 2022, Animal Health field officials visited approximately 13 000 properties in order to do animal disease surveillance, animal census, farmer education, primary animal health care and disease control.

Rabies (Fig. 1)

Sporadic cases of wildlife rabies were seen in various parts of the province, though fewer cases were reported than in previous years: five versus the long-term average of 13. Three cases of canine rabies were also reported. One of them was imported from the Eastern Cape over the festive season. The other two dogs, in Strand (Cape Town) and Suurbraak, were long-term residents of the province and the origin of their rabies is not known. Given the currently high incidence of dog rabies in the Eastern Cape and KwaZulu-Natal, and the risk of introduction of rabies from these areas, Veterinary Services is prioritising rabies awareness and vaccinations.

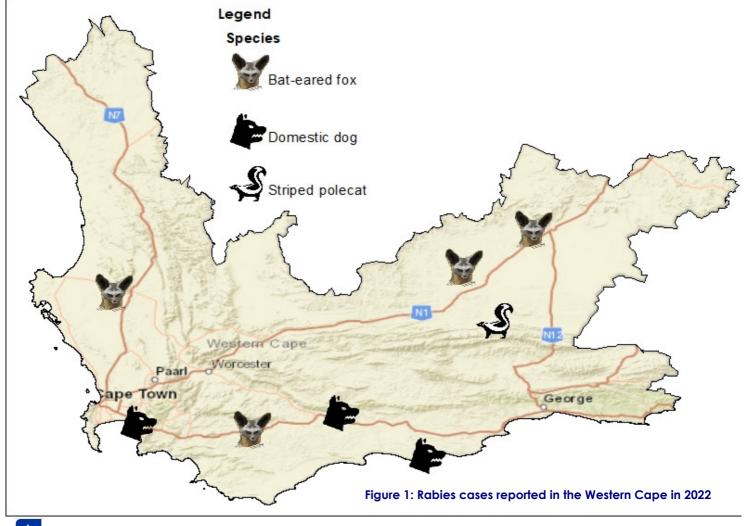
Approximately 143 000 pets were vaccinated with statesponsored vaccine in the province in 2022. An analysis of the 134 000 vaccinations for which metadata was recorded is shown in Figure 2. The majority of vaccinations were done in densely-populated areas.

Brucella canis

A dog that had been adopted from a welfare organisation in Cape Town presented with hindquarter lameness and signs of discospondylitis were subsequently seen on MRI. Serology, bacterial culture and isolation resulted in a diagnosis of canine brucellosis. The owners elected to quarantine and treat the dog.

Pig diseases (Fig. 3)

Outbreaks of African swine fever (ASF) continued to be



Rabies Vaccinations 2022

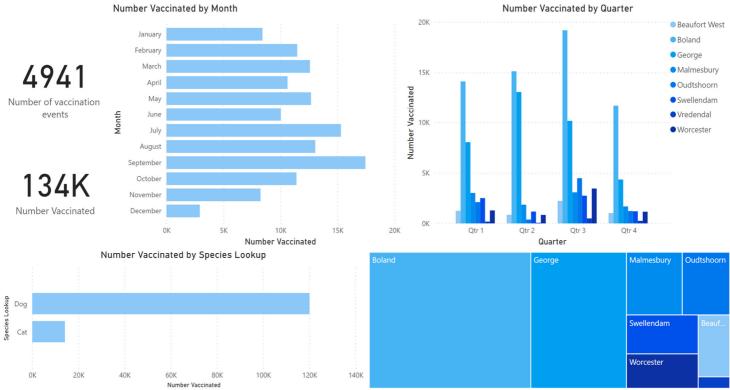
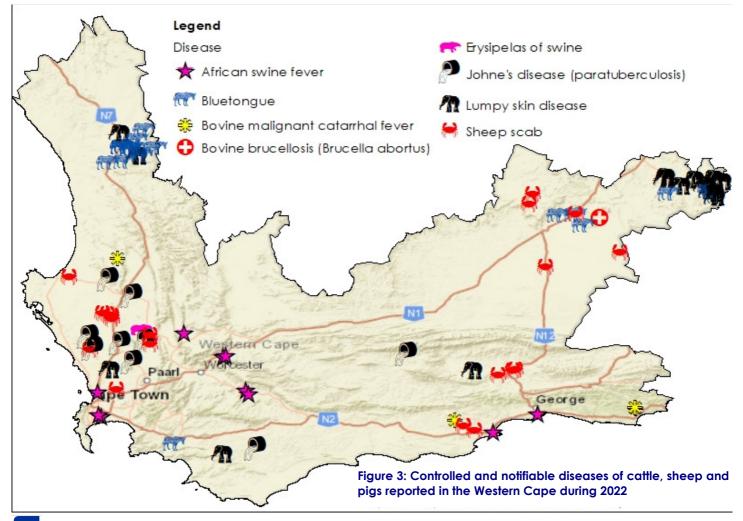


Figure 2: Rabies vaccinations done by Western Cape Veterinary Services during 2022



reported in areas where multiple small-scale farmers keep pigs in close proximity with few biosecurity measures in place. Control of these outbreaks remains a challenge and cases of ASF in these areas are almost certainly being under-reported. In 2022, outbreaks of ASF were reported at ten new locations in the province, while 17 outbreaks from 2021 remain unresolved. No new outbreaks have been reported since July 2022.

Small stock (Fig. 3)

Nineteen outbreaks of sheep scab were reported and treated under official supervision during 2022.

Johne's disease was confirmed on nine sheep farms, mainly in the Swartland area. These farms were placed under quarantine and the affected farmers were advised to consider a vaccination programme to reduce clinical disease in the future.

Bluetongue outbreaks were reported from 19 sheep flocks in the Western Cape. The majority occurred between February and April in the Karoo.

Cattle (Fig. 3)

Three newly-bought cattle on a farm near Beaufort West tested positive for brucellosis, after mixing with the rest of the herd. The farm was placed under quarantine and is implementing a test-and-slaughter strategy to become free of the disease.

Outbreaks of lumpy skin disease were reported from 16 farms in various parts of the province between January and June but no cases were reported from July to December.

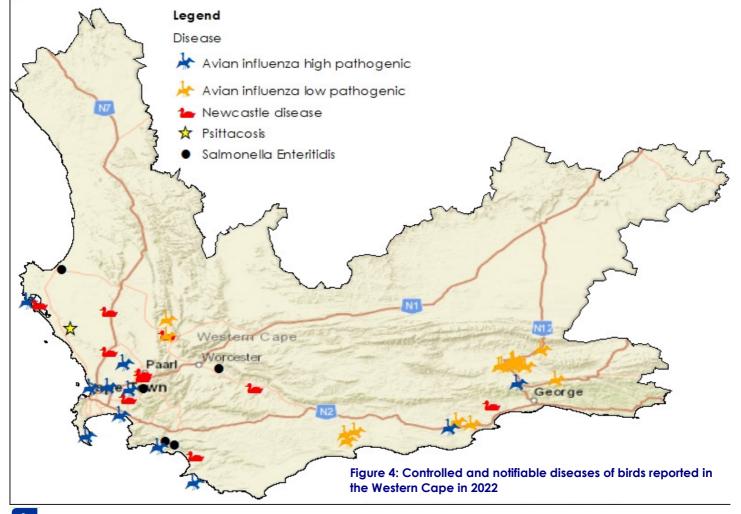
Despite outbreaks of foot and mouth disease in cattle in several other provinces of South Africa in 2022, the Western Cape remains free of the disease. A high level of vigilance is being maintained, with officials doing passive surveillance and awareness activities.

Equine diseases

A single case of African horse sickness was reported in an unvaccinated horse that died in a stable in Beaufort West. Despite a low level of vaccination in the area, no other equines were affected.

Avian diseases (Fig. 4)

At eight locations within a 100km radius of Cape Town, 147 seabirds were reported affected by highly pathogenic avian influenza (HPAI) (H5N1). The largest outbreaks occurred among African penguins in Simon's Town from September to November and in a rehabilitation centre in November. HPAI (H5N1) was also detected on a commercial layer chicken farm in February 2022. All the chickens were culled and the sites



disinfected.

One ostrich farm in the Mossel Bay area and another near Oudtshoorn were reported as affected by HPAI in February and July respectively. Avian influenza (AI) outbreaks were detected on another nineteen ostrich farms between August and November, but no specific subtype was identified. PCR detected AI virus on eight of the farms, but the H5 and H7 subtyping assays were negative, indicating absence of HPAI.

Outbreaks of Newcastle disease (NCD) occurred on two ostrich farms in the George and Worcester state vet areas and in chickens and turkeys on a smallholding near Robertson. PCR tests were also positive for NCD virus from four locations in the province where wild doves were found dead and three locations where deaths were seen in domestic pigeons. It is likely that these outbreaks were caused by pigeon paramyxovirus.

Psittacosis caused the deaths of galah chicks at a breeder near Darling. All birds at the facility were treated with doxycycline.

Salmonella Enteritidis (SE) was detected on five broiler chicken farms during routine testing. Clinical signs and deaths of chickens occurred on only one of the smaller farms, where SE was cultured from the carcasses.

Rabbit haemorrhagic disease (Fig. 5)

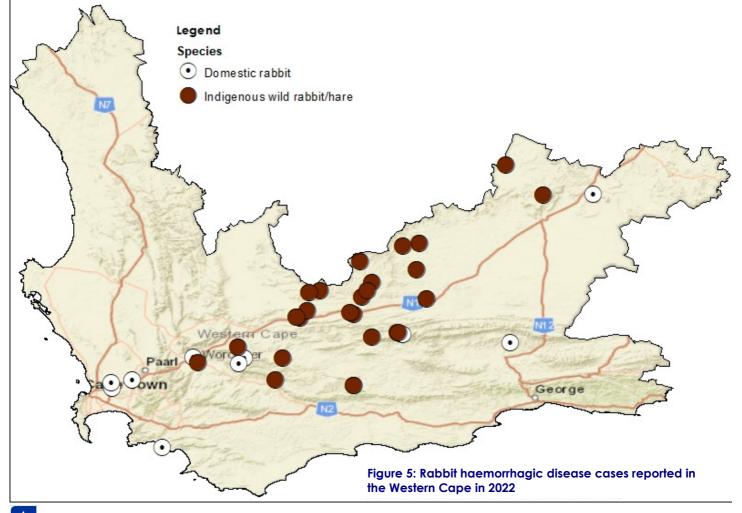
After deaths of domestic and wild rabbits and hares were reported in the Northern and Western Cape, rabbit haemorrhagic disease was confirmed for the first time in South Africa. Deaths of domestic rabbits occurred across the province, while deaths of wild hares were reported mainly from the Karoo. The impact of the disease on populations of indigenous rabbits and hares is currently unknown.

Salmonella Enteritidis in guinea pigs

After sudden deaths of 75% of a guinea pig herd kept at a wildlife sanctuary in Cape Town, *Salmonella* Enteritidis was diagnosed. The surviving animals were isolated and treated with antibiotics and their enclosures were thoroughly disinfected.

Acknowledgements

We would like to thank all of the animal health technicians and state vets who collect and report data from the field, as well as the members of the public and animal keepers who participate in reporting suspect outbreaks of animal diseases. Without your efforts this report would not be possible. A special word of thanks must also go to animal health technician, Werner Gouws, for his invaluable assistance with data management and analysis.



Outbreak events

An ill **dog**, in very poor condition, was brought from Jeffrey's Bay in the Eastern Cape to **Still Bay** by two residents of the Western Cape. The dog spent the night in Still Bay and was observed acting strangely: biting people and ripping up the carpet. The next morning the dog was taken to a private veterinarian, who euthanased it and contacted the state vet to collect brain samples. **Rabies** test results were positive. The Western Cape Department of Health followed up all human contacts to provide post-exposure prophylaxis.

Approximately 210 of 250 three-week-old **ostrich** chicks died at a chick raiser near **Mossel Bay**. The chicks showed diarrhoea, neurological signs and recumbency before death (Fig. 6). The chicks were treated with antibiotics in their water and, after no improvement was seen, the state vet was contacted. Necropsies were done in which inflammation and haemorrhage of the intestines was observed (Fig. 7). Organ swabs tested positive for virulent **Newcastle disease** virus. The farm was placed under quarantine and export suspended from all ostrich farms within 10km. Surrounding farms will also be sampled for Newcastle disease.

Outbreaks of **rabbit haemorrhagic disease** (RHD) continued to be reported in the month of December in both wild hares and domestic rabbits.

- ⇒ An orphaned wild hare and 4/12 domestic rabbits kept as pets died suddenly on a farm near **Barrydale**. Dead wild hares were also seen on the farm.
- \Rightarrow Deaths of 5/12 domestic rabbits kept on a farm in the **Worcester** area were reported.
- \Rightarrow Cape hares were found dead on two farms in the **Laingsburg** area.
- \Rightarrow A mortality rate of 57% was seen in domestic rabbits kept at a resort near **Montagu**. Over a short time period, 110/194 of the rabbits died. Samples were sent for testing and results are pending.

No samples were taken from the first three of these locations for confirmation of presence of the RHD virus, but a presumptive diagnosis of RHD was made based on clinical signs.



Figure 6: Ostrich chick showing recumbency and neurological signs (Photo: L. Janse van Rensburg)

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Figure 7: Haemorrhagic enteritis of ostrich chicks seen at necropsy (Photo: L. Janse van Rensburg)

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