



## 2023 in review

### Surveillance/ field activities

In 2023, the 36 animal health technicians working in the field for Western Cape Veterinary Services made approximately 12000 visits to properties where animals are kept in order to do animal disease surveillance, animal census, farmer education, primary animal health care and disease control.

### Rabies (Fig. 1)

Nine sporadic cases of wildlife rabies were seen in various parts of the province. The only domestic animal affected was a goat in the Beaufort West area, likely as a result of contact with a rabid wild animal. Thankfully, no cases of dog rabies were reported in the Western Cape this year.

Approximately 129 000 pets were vaccinated with state-sponsored vaccine in the province in 2023. This took

place in the form of rabies vaccination campaigns, routine vaccinations during farm visits and provision of vaccines to animal welfare organisations.

### Small stock (Fig. 2)

Eight outbreaks of sheep scab were reported and the infested flocks were treated at least twice under official supervision.

Johne's disease was confirmed on six sheep farms. 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 14 sheep flocks in the Western Cape. All the outbreaks occurred in the high-risk season for vector-borne diseases, between late January and early May.

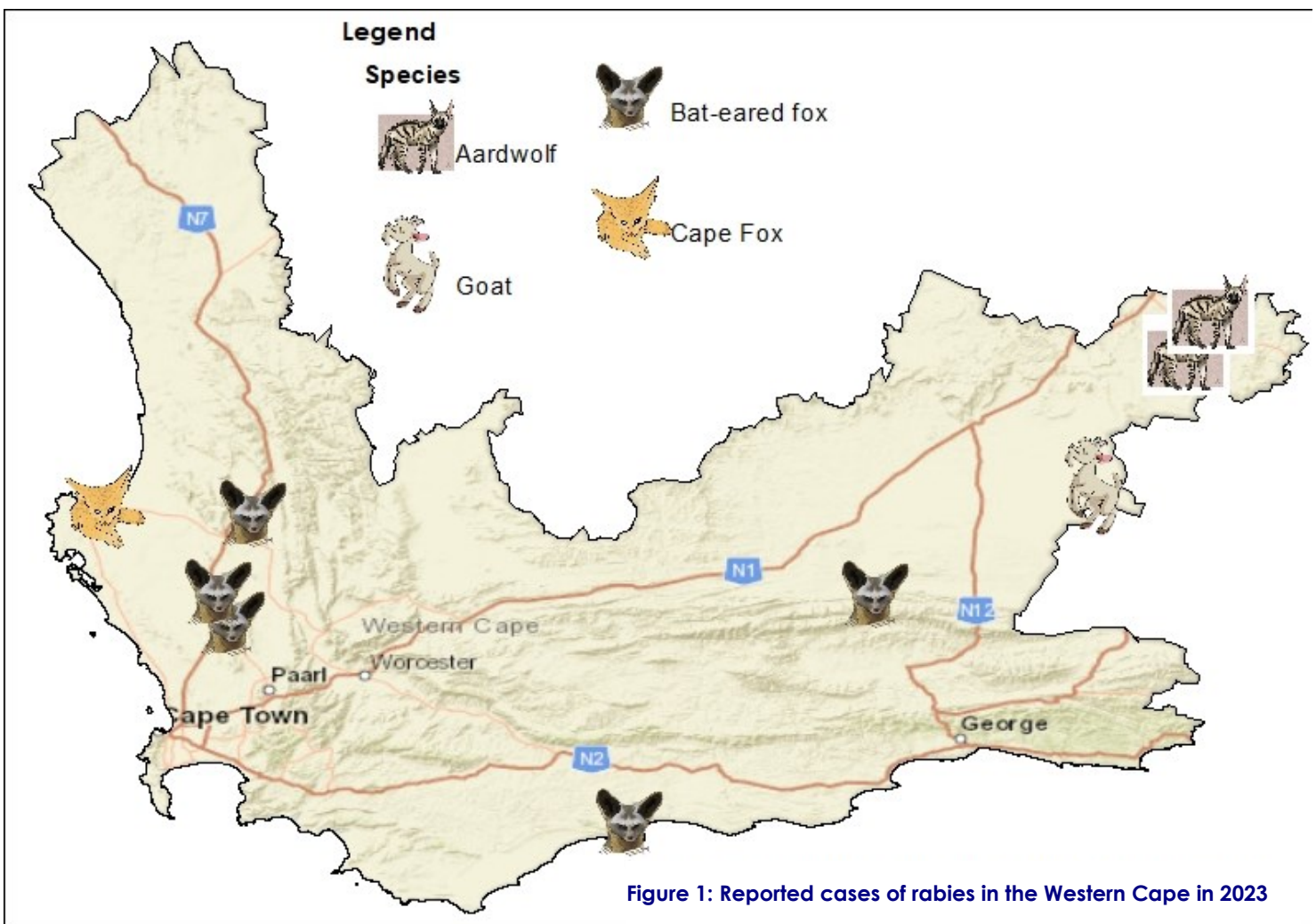


Figure 1: Reported cases of rabies in the Western Cape in 2023

### Cattle (Fig. 2)

A cattle herd in the Darling area tested positive for bovine brucellosis in June. After forward and backward tracing were done, another positive herd was detected. The cattle had grazed together two years prior to the detection of infection.

Three cases of lumpy skin disease were reported between January and March.

One animal, in a herd of 32 cattle tested for export purposes, was PCR positive for bluetongue virus. The animal showed no clinical signs of disease and had not been vaccinated previously against bluetongue.

Cases of bovine malignant catarrhal fever (BMCF) were reported from two properties close to each other in the Stellenbosch area. However, the cases were not related, as one property was found to be infected by wildebeest-associated BMCF, from wildebeest kept on a neighbouring farm, while the other was infected by sheep-associated BMCF from sheep kept on the premises.

### Pigs (Fig. 3)

Two new outbreaks of African swine fever were detected in Du Noon, Cape Town and Kwanonqaba, Mossel Bay. Both outbreaks were resolved and

quarantine was lifted in 2023.

Sporadic cases of erysipelas of swine were reported from 12 different locations in the Western Cape. Lesions were detected most commonly on pig carcasses after slaughter.

### Equines

Two cases of African horse sickness were reported this year, both in the infected zone of the province. The first was a horse with clinical signs, confirmed positive with a laboratory test, from the Plettenberg Bay area. Clinical surveillance was conducted surrounding the case and in horses that moved from the area, but no further cases occurred. The second case was diagnosed on clinical signs after a horse died in the Loxton area with swelling of the head and eyes and frothy fluid coming out of the nostrils.

### Avian diseases (Fig. 4)

Eight outbreaks of high pathogenicity avian influenza (HPAI) occurred in commercial poultry in 2023, involving seven farms.

Five commercial layer chicken farms in the Paardeberg area, northwest of Paarl, were confirmed infected with H5N1 HPAI in April 2023. The farms all fall within a small area of 6km in diameter and there were only two other

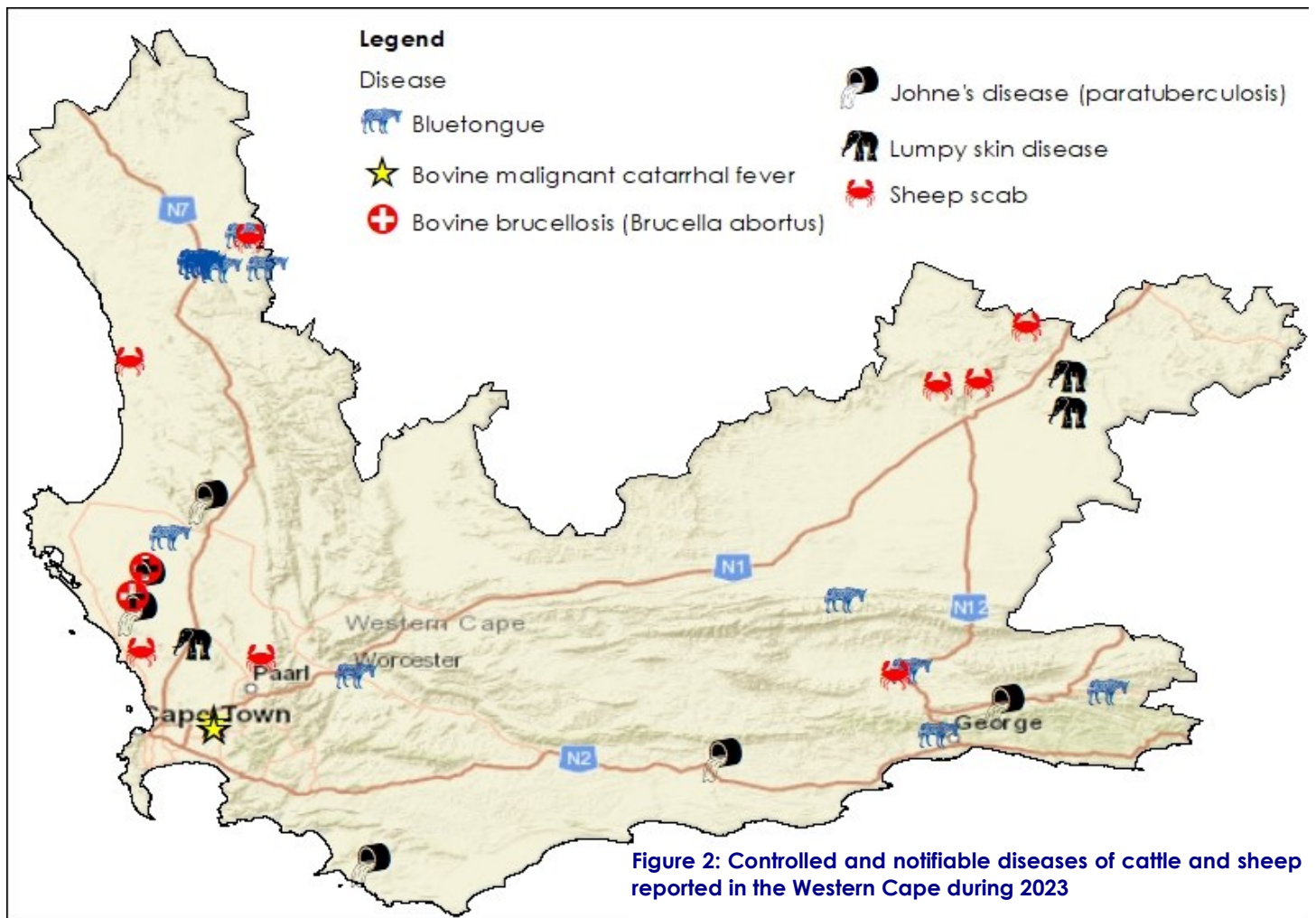
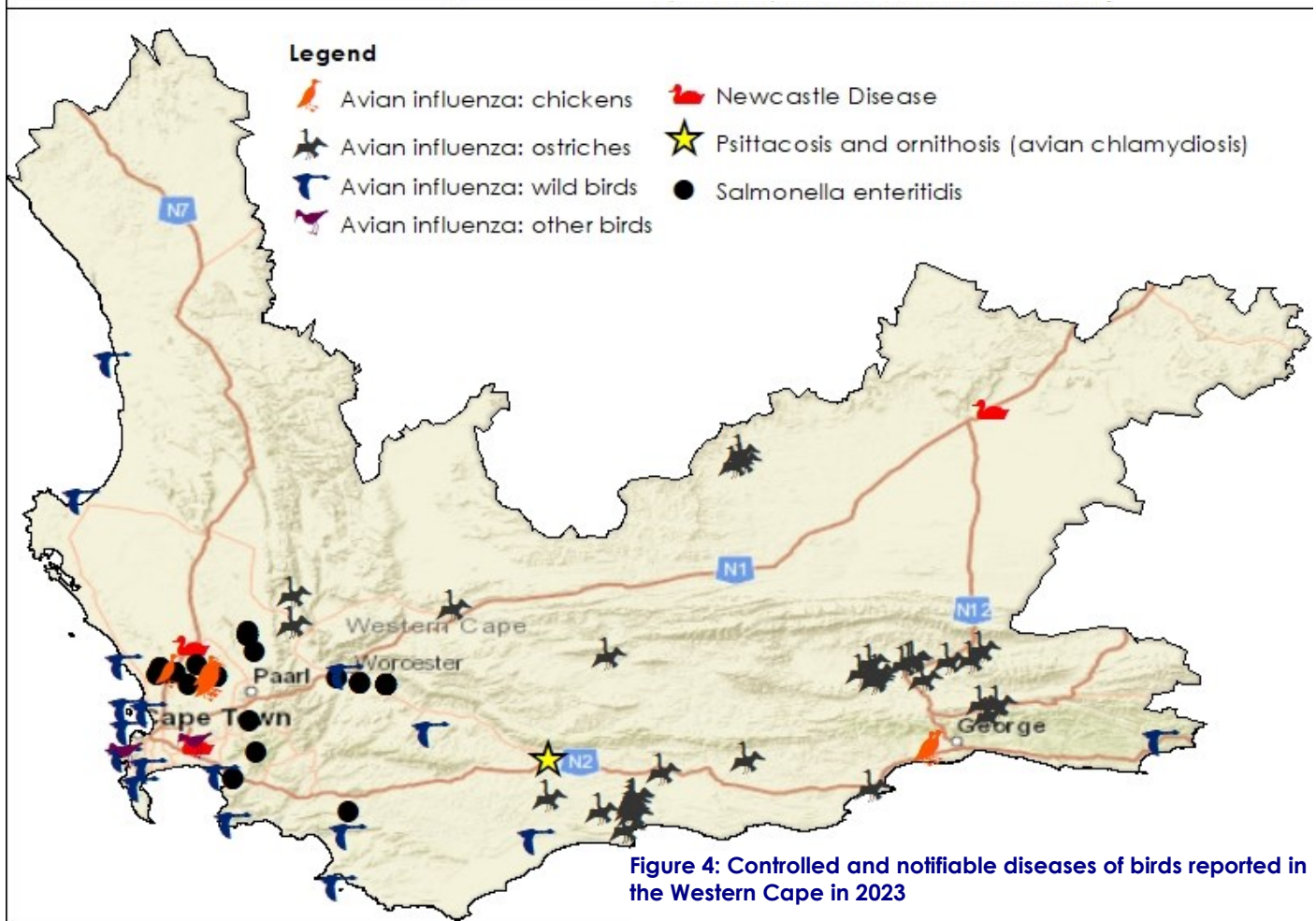
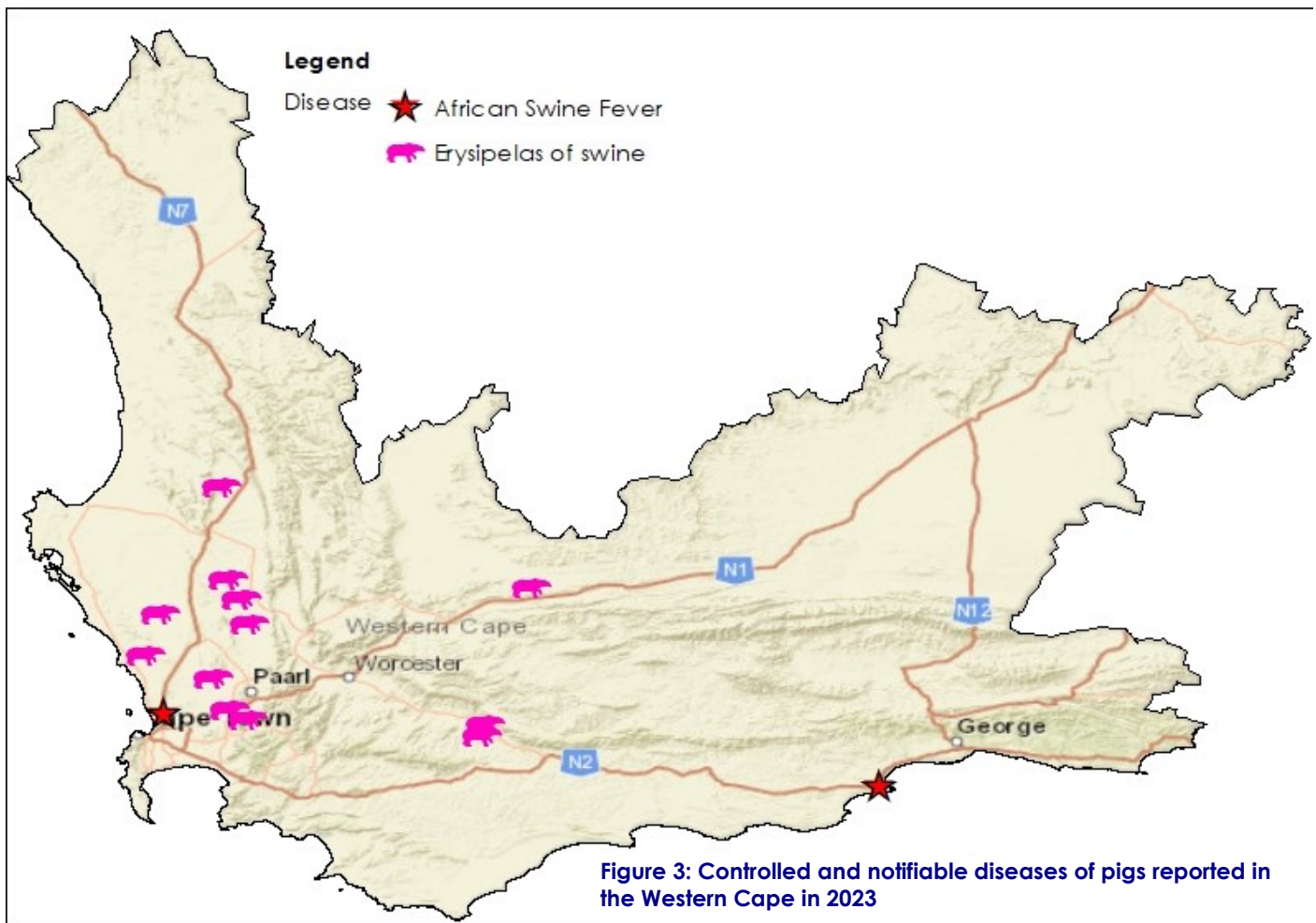


Figure 2: Controlled and notifiable diseases of cattle and sheep reported in the Western Cape during 2023





poultry farms in the area that were not affected. Genetic sequencing of viruses from four of the five farms was done at the University of Pretoria and preliminary results indicate that most farms were individually infected by wild birds, some more than once, and that there was little spread of virus between farms. The infection on one farm could be linked to a virus detected in a wild goose that was sampled by veterinary officials near McGregor. The viruses are related to those that caused outbreaks in 2021 and 2022 but were introduced to the country more recently.

H5N1 HPAI infection was detected on two more layer farms near George in late May and early June. The first was confirmed to be another introduction by wild birds. Both these farms were also affected by the 2021 outbreak, so appear to have characteristics that predispose them to infection.

The affected farms chose to cull all chickens in the affected houses. Approximately 1.5 million chickens died from HPAI infection or as a result of the culling operations: about 30% of the layer chickens in the province.

One of the layer chicken farms near George restocked with pullets sourced from a farm in the North West Province in September and October. HPAI (H7N6) was diagnosed in pullets on the farm of origin in early

October and then in the flock in the Western Cape. To prevent virus spread, all chickens on the farm were culled and destroyed, along with all potentially infectious material. No further H7 virus has been detected in poultry in the Western Cape.

Two of six backyard chickens died on a property near Malmesbury in September. An H5 PCR test was positive but no further subtyping results are available and the remaining chickens remained healthy.

A racing pigeon loft near Cape Town experienced approximately 30% mortality in June and organ swabs tested positive for both pigeon paramyxovirus and H5 avian influenza virus.

Thirty-six ostrich farms were confirmed as avian influenza seropositive in the Western Cape in 2023. For fifteen, the virus subtype could not be determined and eleven appeared to have had an H6 infection, according to serological tests. Two of these farms were also reported to the WOA as having had HPAI (H5N1) outbreaks and one an H7 infection, based on detections of H5 virus fragments on sequencing, serology and an H7-positive PCR test respectively. A second ostrich farm was reported as having had an H7 outbreak, based on serology, though a low pathogenicity virus exposure is also possible. Eleven ostrich farms in total were reported as exposed to H5N1 viruses, most based on serology,

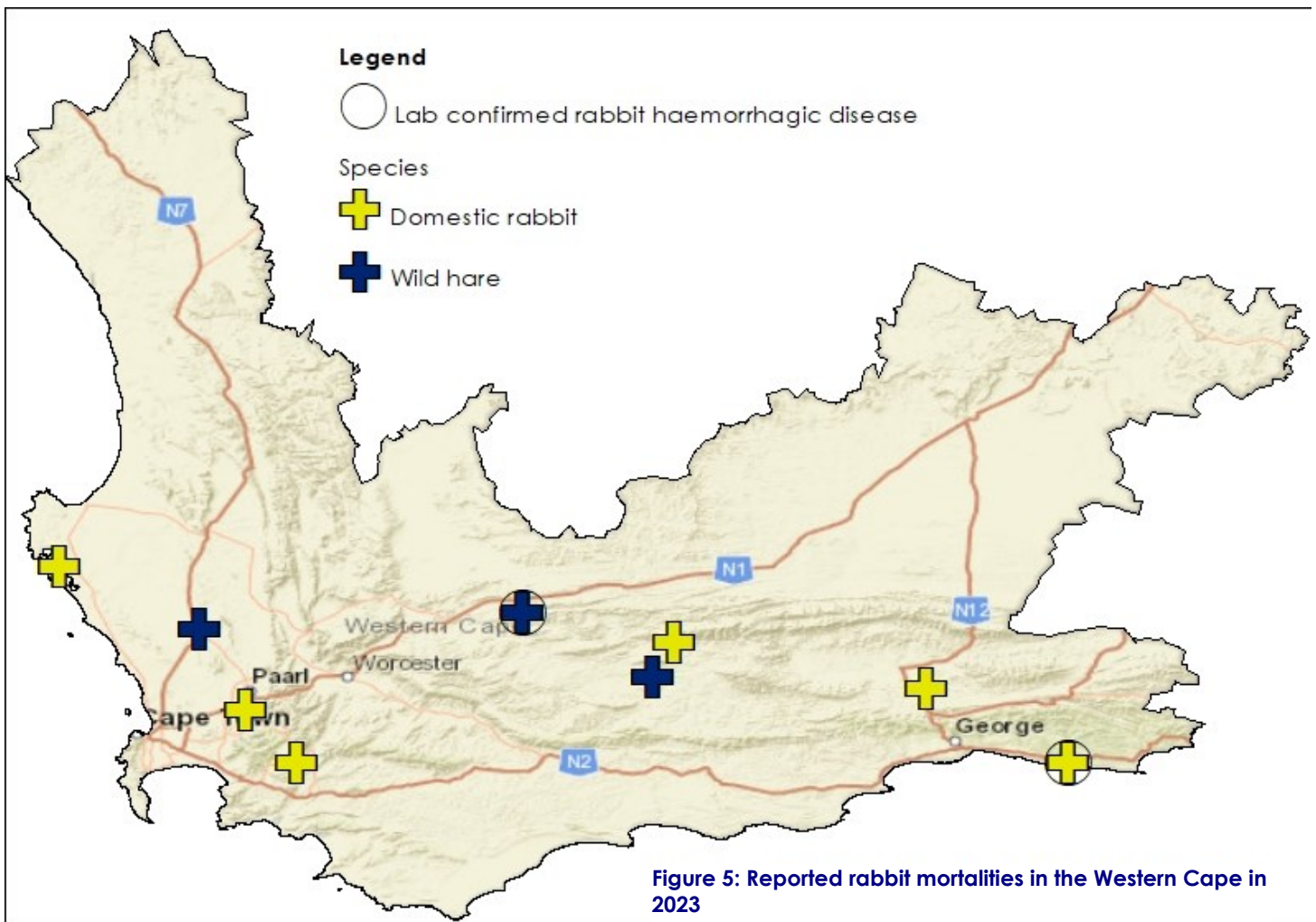


Figure 5: Reported rabbit mortalities in the Western Cape in 2023



though HPAI H5 was detected via PCR on one farm and H5 on a second.

AIV antibody detections peaked in ostriches over winter and early spring, with a third of the detections (12) made in September. The farms with positive H6 serology clustered around Oudtshoorn, though two farms were in the Langkloof. The Heidelberg area was overrepresented, though most infections were of an undefined subtype. Farms with possible H5 infections were relatively widely distributed.

HPAI (H5N1) was detected in wild birds at fifteen locations in 2023, and in seven species: six coastal species and an Egyptian goose. Thirty-nine birds tested positive and most detections were in African penguins (13), swift terns (12) and common terns (7), with an additional 70 suspected swift tern cases, mostly from Simon's Town, and another seven suspected penguin cases from three different colonies. The total observed confirmed and suspected cases is approximately 130.

Outbreaks of Newcastle disease (NCD) caused mortalities in wild guinea fowl near Robertson and backyard chickens in the Beaufort West area.

Psittacosis caused the deaths of pet rock pebbles in Swellendam. All birds at the property were treated with doxycycline.

*Salmonella* Enteritidis (SE) was detected 53 times on 19 broiler chicken farms during routine testing. The source of the high number of repeat detections is likely an infected parent flock.

#### Rabbit diseases (Fig. 5)

Nine cases of sudden or extensive rabbit mortalities were reported in the province, raising suspicion for rabbit haemorrhagic disease (RHD). In two of these cases: a wild Hewitt's red rock hare near Matjiesfontein and feral rabbits in Brenton on Lake, the diagnosis of RHD was confirmed by laboratory testing.

#### 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.

## Outbreak events

Itching, wool loss and skin lesions were seen in two sheep flocks near **Oudtshoorn** and **Three Sisters**. A diagnosis of **sheep scab** was confirmed when live sheep scab mites were seen in wool and skin samples taken from both flocks. The sheep were treated twice under official supervision.

Approximately 200 **domestic rabbits** kept as pets died suddenly near **Theewaterskloof** dam. No samples were taken to determine the cause of death, but an outbreak of **rabbit haemorrhagic disease** is a possibility.

**Swine erysipelas** was diagnosed in pigs belonging to a small-scale farmer in **Mamre**, when a photo of a pig showing characteristic skin lesions was sent to the animal health technician.

**Salmonella Enteritidis** was cultured from routine chick crate swabs taken on a broiler **chicken** farm near **Worcester**.

A **goat** near **Philadelphia** died overnight without showing any clinical signs. A necropsy revealed that the stomach was full of Port Jackson willow (*Acacia saligna*, Fig. 6) leaves, while the rest of the gastro-intestinal tract was empty. **Tannin poisoning** from the leaves is suspected.



Figure 6: *Acacia saligna* leaves and flowers (Photo: Chesna)

Epidemiology Report edited by State Veterinarians Epidemiology:

Dr Lesley van Helden (lesley.vanhelden@westerncape.gov.za)

Dr Laura Roberts (laura.roberts@westerncape.gov.za)

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