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## Rabbit haemorrhagic disease outbreaks in the Western Cape

*Laura Roberts and Lesley van Helden*

Dying rabbits and hares started to be reported from the Northern Cape Karoo in early October 2022 and shortly afterwards in the Western Cape. In November, rabbit haemorrhagic disease virus (RHDV) was confirmed in the Karoo Hoogland Local Municipality. In October and November, suspected outbreaks have been reported in the Western Cape from approximately 30 properties across the province (Fig. 5). Five outbreaks have been confirmed as RHD by PCR (Fig. 6) and two of these have been sequenced and identified as RHDV2.

Identified affected species include domestic rabbits (*Oryctolagus cuniculus*), Cape hare (*Lepus capensis*) and scrub hare (*Lepus saxatilis*; Fig. 1).

Mortality rates in domestic rabbits varied from 27-100%. Usually only acute death was described but a vet reported collapse and hypoglycaemia, one owner saw blood around the tail and another noticed inactivity, slow breathing, diarrhoea and droopy ears. Two owners reported having fed lucerne that came from the Northern Cape.

Carcasses of scrub hares from two farms in the Laingsburg area and from domestic rabbits in Nelspoort were received for sampling and testing. Photographs taken at necropsy are included as Figures 1-4. RHDV was detected in all three cases.

**Figure 1: Scrub hares found dead** (Photo: J. Pienaar)

**Figure 2: Domestic rabbit with petechiae on internal organs** (Photo: J. Pienaar)

**Figure 3: Splenomegaly** (Photo: J. Pienaar)

**Figure 4: Haemorrhagic enteritis** (Photo: J. Pienaar)

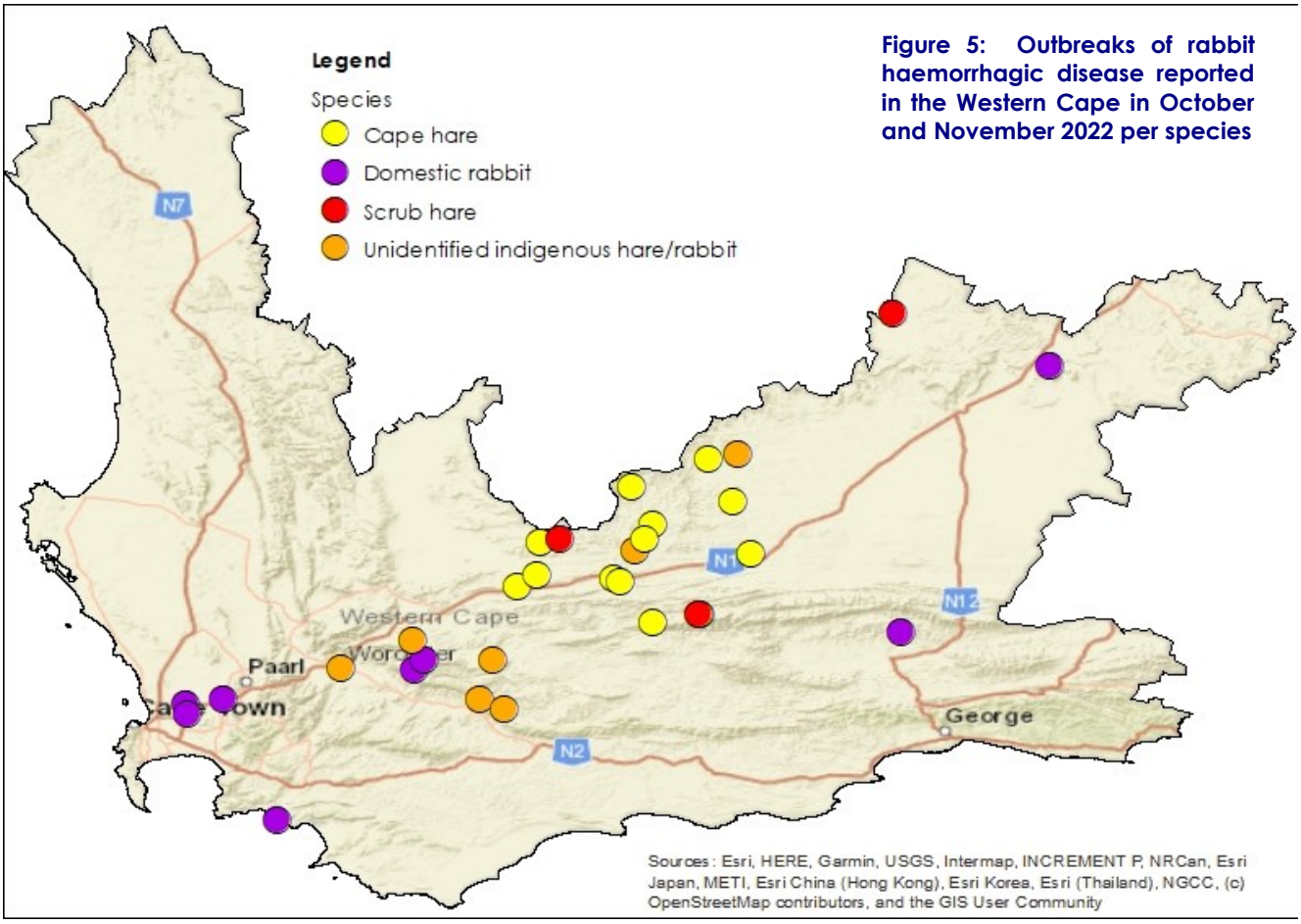


**Figure 5: Outbreaks of rabbit haemorrhagic disease reported in the Western Cape in October and November 2022 per species**

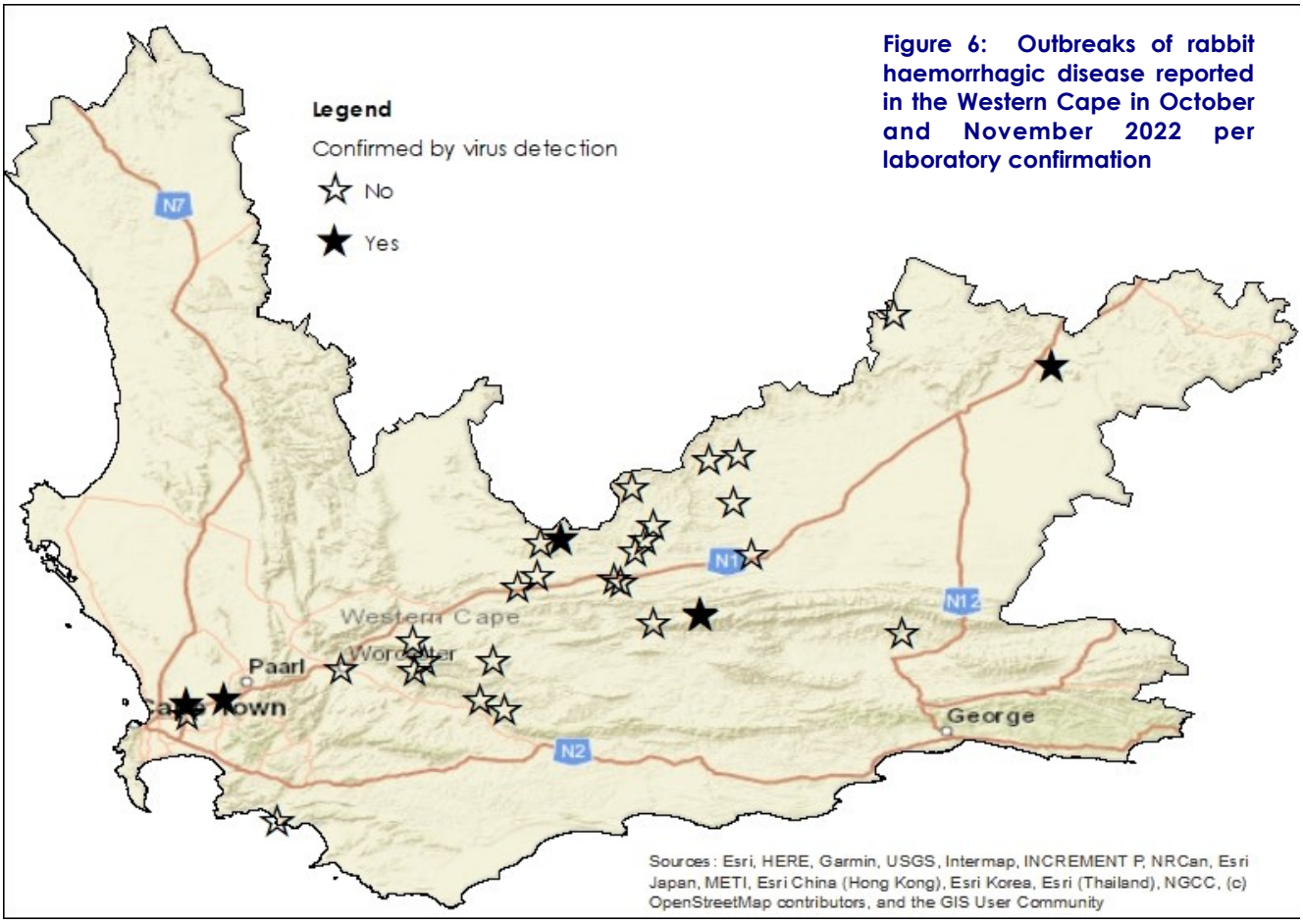


**Figure 6: Outbreaks of rabbit haemorrhagic disease reported in the Western Cape in October and November 2022 per laboratory confirmation**

# Outbreak events

*See details of **rabbit haemorrhagic disease** cases above.*

A **bat-eared fox** was seen near **Piketberg** lying under a bush and showing no fear of people. It was found dead the next day. Near **Beaufort West,** another apparently tame bat-eared fox entered a farmyard and was shot by the farmer. Both bat-eared foxes subsequently tested positive for **rabies**. No human or animal contact had occurred with either fox, and dogs and cats in the surrounding areas were vaccinated in response.

**Highly pathogenic avian influenza** was detected in wild seabirds. 32 cases were reported from **African penguins** from **Simon's Town** and in a penguin from **Betty's Bay**, as well as in penguins at a rehabilitation centre in Cape Town. The virus was also detected in **Cape cormorants** from **Cape Point** and **Velddrif**, and in a **Cape gannet** from **Malgas Island** (West Coast National Park).

An outbreak of unidentified **low pathogenic avian influenza** was detected on an **ostrich** farm near **Oudtshoorn**.

Wool disturbance was seen in sheep on a farm near **Beaufort West** and live **sheep scab** mites (*Psoroptes ovis*) were seen when wool samples were examined under the microscope. The farmer has several farms in the area and has experienced recurring outbreaks of sheep scab since March 2022. The farms remain under quarantine and the sheep are being treated under official supervision.

In the **Piketberg** area, a heifer was seen with aggression and mucopurulent nasal discharge before death. The **cattle** herd was grazing together with black wildebeest and the dead heifer tested positive for wildebeest-associated **bovine malignant catarrhal fever**. The farmer was advised to separate the species by at least 1km in future.

**Sheep** on two properties near **Vanrhynsdorp** suffered from **acidosis** after being put on leftover grain fields to graze.

Four free-range layer **chickens** belonging to small-scale farmers near **Malmesbury** were seen with swollen eyelids and difficulty breathing. **Mycoplasmosis** was suspected and the farmer was advised to treat the chickens with antibiotics.

Two **piglets** died of suspected **oedema disease** caused by *E. coli* infection near **Malmesbury**.

Deaths of four **lambs** and one goat **kid** in the **Beaufort West** state vet area were caused by **enterotoxaemia**, diagnosed on post-mortem. The dams were all vaccinated, but it is suspected that the lambs and kid that succumbed to the disease did not receive enough colostrum, as most of the lambs were one of a pair of twins.

In a feedlot in the **Beaufort West** area, acute deaths of **sheep** occurred, with a few sheep showing signs of colic and not wanting to get up. On post mortem examination, marked oedema was seen in the small and large intestines and intestinal lymph nodes (Fig. 7). As the cases were seen shortly after a starter ration containing salinomycin was given, ionophore toxicity was suspected. However, histopathology and feed analysis were negative for ionophore toxicity. A diagnosis of **salmonellosis** was made on exclusion of all other differential diagnoses (acidosis, clostridial diseases, urea poisoning, adaptation and other feedlot diseases).

**Figure 7**: **Oedema of mesenteric lymph nodes as a result of ovine salmonellosis** (Photo: J. Pienaar)

**Epidemiology Report edited by State Veterinarians Epidemiology:**

**Dr Lesley van Helden (Lesley.vanHelden@westerncape.gov.za)**

**Dr Laura Roberts (Laura.Roberts@westerncape.gov.za)**

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