Rift Valley Fever has been keeping the veterinary and medical professionals busy in the Western Cape since the first reported case came in from Beaufort West on the 26 March 2010. Since then 41 farms have reported losses of livestock with most of these having had RVF confirmed as present on the farm using either the RT-PCR(OVI) or the IMP staining technique (University of Pretoria). Almost all of the initial cases occurred in Beaufort West and Murraysburg, but then the infection spread to the seemingly random areas of Oudtshoorn, Paarl, Simondium, Bonnievale, Worcester, Heidelberg and Noordhoek. The latter areas didn’t seem to create a nidus for further spread, with the possible exceptions of Oudtshoorn and Bonnievale, where a number of events occurred, albeit few in the greater scheme of the outbreak.

**ANIMAL CONSIDERATIONS**

Table 1 gives an indication of the species of animals that were affected in the Western Cape. Bear in mind that the case definition used for this table was very lax, with some cases defined as a result of farmers reporting without backup diagnostic testing. The majority were however from confirmed farms. Sheep were definitely most affected and this can be attributed to the initial cases in Beaufort West and Murraysburg which are major sheep farming areas. The bovine population that has been affected were from mainly the “sporadic spread” affected farms and occurred in almost exclusively dairy cattle. The reasons for this have not yet been determined but it did seem as if late lactation and heavily pregnant animals were more susceptible, probably as a result of the high metabolic stress these animals are under. The wild species and the alpaca’s which were affected really made the outbreak more scientifically interesting, but it is unlikely that these species played a role in propagation of the outbreak as a whole.

The one subjective comment made by many farmers was the proportionally higher number of cases in their rams compared to ewes.

**SPATIAL CONSIDERATIONS**

The map on page 3 has not changed significantly since the July report. There is one event still ongoing with losses occurring as late as the latter stages of August. This is on a dairy farm in Heidelberg, but this event does seem to be on a downward trend. (Note: This late event should warn both veterinary and health practitioners that RVF may occur in the next season as overwintering may occur. We are fortunate in the Western Cape not to have as ideal an environment for RVF as other Provinces like FS and NC, but as we found out this season, RVF can extend down to us. Just as we recommend vaccination to farmers so must we recommend continued awareness by veterinary and medical professionals.)

**HUMAN CONSIDERATIONS**

The Western Cape did have confirmed cases of RVF in humans with approximately 7 cases occurring in the Province. Our province was one of the least affected in terms of confirmed human cases with provinces like the Free State and Northern Cape significantly more affected.
Please go to the following link for the latest NICD communiqué which focuses on the human side of the outbreak: [http://www.nicd.ac.za/pubs/communique/communique.htm#heading12](http://www.nicd.ac.za/pubs/communique/communique.htm#heading12). Although RVF is a notifiable disease its real importance is its potential to affect humans, and it is an example of a disease where the open communication between medical professionals and veterinarians is important during outbreaks.

**VACCINATIONS**

Prior to the outbreak beginning in the Western Cape the Dept. of Agriculture: Veterinary Services did attempt to create a buffer zone in the north easterly part of the Province. As news of the disease spread so did the reactive vaccination of stock. Unfortunately in most cases this remained reactive, making this vaccination ineffective in controlling individual disease events. As a result of a lack of inactivated vaccine many farmers vaccinated using the modified live vaccine, including in their pregnant animals, even though this creates a risk for vaccination induced abortion. Although no specific cases of abortion could be attributed to vaccination with the mod. live virus this practise ‘muddied’ the investigative waters when abortions occurred, particularly in the affected dairy herds. The map below gives an indication of vaccination spread in the Province logged by the State officials during the outbreak. This is however not accurate in terms of the actual numbers vaccinated as many vaccinations would not have been logged.

**CONCLUSIONS**

There are many questions regarding RVF which have arisen as a result of the 2010 outbreak which hopefully will be answered in the next few months by researchers. It is a disease which is elusive to understand even though its epidemiology is seemingly straightforward.
New outbreaks and cases within the Province August 2010

Species and Disease

Total vaccinations recorded within the Province: August 2010

Species and Disease

Avian Bovine Canine Caprine Equine Feline Ostrich Ovine
Reported animal diseases for August 2010
Western Cape Province

Legend: Star = outbreak; Square = outbreak follow up; Circle = Routine vaccination
- Ovine epididymitis
- Rift Valley Fever
- Sheep Scab
- African Horse Sickness
- Anthrax
- Bovine Brucellosis
- Newcastle Disease
- Rabies
- Enterohemorrhagic
- New Campylobacter
- hoof abnormalities
- Canine Distemper
- Newcastle Disease
- Rabies
- Canine Distemper

Map produced by:
Animal Disease Control; Epidemiology
Veterinary Services
Western Cape Department of Agriculture
REPUBLIC OF SOUTH AFRICA
Outbreak Events

- A number of outbreak events occurred during August 2010. The standard cysticercosis was logged from positive cases in the Malmesbury SV area while cases of Mastitis was also logged by SV George office. This should indicate to the AHT’s using the system that both these diseases are OIE listed diseases and should they come across them they can log them on the web based system.

- Another case of Rabies occurred in the Porterville area where a farmer noticed that one of the resident bat-eared foxes on his farm was behaving strangely by attacking the farm bakkie and not showing fear. The farmer destroyed the fox and rabies was confirmed by the lab in Allerton. Fortunately the dogs and cats in the immediate area had been vaccinated for rabies during a recent campaign.

- Sheep scab events occurred in Ceres and Riversdale, and it is safe to say that this controlled animal disease has occurred right throughout the winter in the Western Cape.

- A case of ovine epididymitis was reported in the Beaufort West region

- Three outbreaks of Newcastle disease were reported in chickens, 2 from the Malmesbury area and one from an informal settlement in George.

500 events logged !!

Congratulations to all AHT’s who between them logged 511 disease events and vaccinations on the OIE listed diseases system during August. This is the most ever recorded by the Western Cape for a single month.

The ‘logger’ of the month is Heidi Adendorff who logged 104 events!