

Monthly report on livestock disease trends as informally reported by veterinarians belonging to the Ruminant Veterinary Association of South Africa (RuVASA), a group of the South African Veterinary Association

February 2017

Previous disease reports can be seen on the RuVASA website www.ruvasa.co.za

Click on Disease Reports

The following practices and laboratories (129) submitted reports during February 2016:

Mpumalanga (14)

Balfour – Dr. Louis van Jaarsveld
Bethal – Dr. Hardus Pieters
Delmas – Drs. Du Plessis and Ferreira
Ermelo – Drs. Potgieter and Steinberg
Grootvlei – Dr. Neels van Wyk
Karino – Dr. Silke Pfitzer
Lydenburg – Drs. Trümpelmann and Steyn
Nelspruit – Dr. André Beytell
Malalane – Van Sittert and Van Sittert
Middelburg – Malan, Erasmus and Bernitz
Nelspruit – Dr. André Beytell
Piet Retief – Drs. Niebuhr and Weber
Standerton – Dr. Kobie Kroon
Volksrust – Drs. Watson, Solomon and Scheepers

Gauteng (8)

Bapsfontein – Drs. Engelbrecht, Olivier and Ribbens
Bronkhorstspuit – Drs. De Bruin, De Bruin, Rudolph and Slabber
Magaliesburg – Dr. Ryan Jeffery
Nigel – Dr. Cindy van der Westhuizen
Onderstepoort Veterinary Academic Hospital - Proff. Annandale, Prozesky, Shakespear, Holm and Esposito, Gratwick, Hamman, Harmse and O'Dell
Pretoria – Dr. Hanneke Pienaar
Vanderbijlpark – Dr. Kobus Kok

Limpopo (10)

Bela-Bela – Dr. Nele Sabbe
Bela-Bela – Drs. Du Toit, Hansen, Bester and Herbst

Lephalale (Ellisras) – Dr. Brigitte Luck
Makhado (Louis Trichardt) – Drs. Harris, Klopper and Jacobs
Modimolle (Nylstroom) – Drs. Bredell, Barnard and Slabbert
Mokopane (Potgietersrus) - Dr. Henk Visser
Polokwane (Pietersburg) – Drs. Watson, Viljoen, Jansen Van Vuuren, Van Rooyen, Snyman and Cremona
Tzaneen – Drs. Cordier and Van der Berg
Vaalwater – Dr. Hampie van Staden
Vaalwater – Dr. Annemieke van der Goot

North West (9)

Brits – Drs. Boshoff and Coertze
Christiana - Dr. Pieter Nel
Klerksdorp – Drs. Theron, Van den Berg, Van den Berg and Geral
Leeudoringstad – Dr. Ian Jonker
Lichtenburg – Dr. Nelmarie Krüger-Rall
Rustenburg – Drs. Grobler, Sparks, Van Egdome, Van Rooyen, Goosen and Van Rensburg
Stella - Dr. Magdaleen Vossler
Ventersdorp/ Koster – Drs. Marais and Benadé
Vryburg – Drs. De Jager and Rautenbach.

Free State (24)

Bethlehem – Drs. Strydom and Strydom
Bethlehem – Dr. J. C. Du Plessis
Bloemfontein – Dr. Stephan Wessels
Bothaville – Dr. Johan Blaauw
Bultfontein – Dr. Santjie Pieterse
Clocolan – Drs. Wasserman and Basson
Dewetsdorp – Dr. Marike Badenhorst
Ficksburg – Drs. Kotze and Coetzer
Frankfort - Drs. Lessing, Cilliers and Janse van Rensburg
Gariiep Dam – Dr. Marni Strauss
Harrismith – Drs. Pretorius, Bester and Nel
Hertzogville - Dr. Nico Hendrikz
Hoopstad – Dr. Kobus Pretorius
Kroonstad – Drs. Daffue, Eksteen, Van Zyl and Van der Walt
Ladybrand/Excelsior - Drs. De Vos and Nel
Memel – Drs. Nixon and Nixon
Reitz - Dr. Murray Smith
Smithfield – Dr. Nienke van Hasselt
Viljoenskroon - Dr. Johan Kahts
Villiers – Drs. Hattingh and Hauptfleisch
Vrede – Drs. Bester-Cloete and Fourie
Wesselsbron – Dr. Johan Jacobs
Winburg – Drs. Albertyn and Albertyn

Zastron – Drs. Troskie and Strauss

KwaZulu-Natal (16)

Bergville - Dr. Ariena Shepherd

Bergville – Dr. Jubie Muller

Camperdown – Dr. Anthony van Tonder

Dundee – Drs. Marais and Fynn

Eshowe – Drs. Pryk and Hoffman

Estcourt – Drs. Turner, Tedder, Taylor, Tratschler, Van Rooyen and Alwar

Howick – Drs. Hughes, Lund, Gordon, Allison and Taylor

Kokstad - Drs. Clowes and Shrives

Mtubatuba – Dr. Trever Viljoen

Newcastle – Dr. Barry Rafferty

Pietermaritzburg – Dr. Phillip Kretzmann

Pietermaritzburg – Dr. Rick Mapham

Pongola – Dr. Heinz Kohrs

Underberg - Drs. Collins, King and Delaney

Underberg – Drs. Dommett and Dommett

Vryheid – Drs. Theron and Theron

Eastern Cape (13)

Alexandria - Drs. Olivier and Dreyer

Aliwal North/Zastron – Drs. Troskie and Strauss

Bathurst – Dr. Jane Pistorius

Cradock – Dr. Frans Erasmus

Graaff- Reinet - Dr. Roland Larson

Graaff-Reinet – Hobson, Strydom and Hennesy

Humansdorp – Drs. Van Niekerk and Janse Van Vuuren

Kareedouw- Dr. Marten Bootsma

Middelburg/Steynsburg – Drs. Van Rooyen and Viljoen

Queenstown – Drs. Du Preez, Godley, Klopper, Jansen van Vuuren, De Klerk and Catherine

Stutterheim - Dr. Dave Waterman

Uitenhage – Drs. Mulder and Krüger

Witelsbos – Dr. Bernadine van den Berg

Western Cape (19)

Beaufort West - Drs. Pienaar and Grobler

Caledon – Drs. Retief, Coetzer, Conradie and Woudstra

Caledon – Drs. Louw and Viljoen

Darling – Drs. Van der Merwe, Adam and Senekal

George - Drs. Strydom, Truter and Pettifer

George (Hoekwil) – Dr. Riaan Putter

Heidelberg – Dr. Albert van Zyl

Malmesbury – Dr. Otto Kriek

Malmesbury – Dr. Markus Fourie

Montagu – Dr. Trudie Prinsloo
Oudtshoorn – Dr. Glen Carlisle
Oudtshoorn – Dr. Adriaan Olivier
Piketberg – Dr. André van der Merwe
Plettenberg Bay – Dr. André Reitz
Plettenberg Bay – Drs. Nell and Tindall
Stellenbosch – Dr. Alfred Kidd
Swellendam – Drs. Malan and Venter
Vredenburg – Dr. Izak Rust
Wellington – Dr. William van Zyl

Northern Cape (7)

De Aar – Dr. Donald Anderson
Calvinia – Dr. Bertus Nel
Kathu – Dr. Jan Vorster
Kimberley – Drs Van Heerden and Swart
Kuruman – Dr Gerhard van der Westhuizen
Philipstown – Dr. Stephan Van Niekerk
Upington – Drs. Vorster and Visser

Feedlots (2)

Drs. Morris and Du Preez
Dr. Andy Hentzen

Laboratory reports (7)

Dr. Annelie Cloete – Provincial Vet Lab Stellenbosch
Dr. Marijke Henton - Vetdiagnostix, Johannesburg
Dr. Liza du Plessis – Idexx SA Onderstepoort
Dr. Lucy Lange – Pathcare, Cape Town
Dr. Alan Fisher – Queenstown Provincial laboratory
Dr. Rick Last – Vetdiagnostix, Pietermaritzburg
Dr. Emily Lane – National Zoological Gardens

Key Message

An increase in insect and tick transmitted diseases are reported in comparison to the previous months from numerous areas where good rainfall figures were recorded.

Many outbreaks of lumpy skin disease, three day stiff sickness, blue tongue, African red water, Asiatic red water, heartwater and anaplasmosis were recorded. There are good vaccines available and **THIS SHOULD NOT HAPPEN!**

Plan now already to vaccinate animals before the next rainy season start.

Reports of an increase in mosquito numbers were received. Rift Valley Fever should always be kept in mind . Report incidences of abortions and mortalities immediately to your veterinarian!

CONTROL OF BLUE TONGUE IN SHEEP THROUGH VACCINATION

Baltus Erasmus

(Former Head : Onderstepoort Biological Products)

Most farmers in Southern Africa are reasonably familiar with bluetongue in sheep. But it is not generally known that cattle and almost all indigenous game are also susceptible to blue tongue virus although these animals seldom show any clinical signs of infection. On the other hand exotic animals such as deer and desert sheep as well as a few other animal species such as alpacas are very susceptible to bluetongue virus with high mortalities in certain cases.

Although cattle and African antelopes show no clinical signs of infection, they however do play an important role in the multiplication and maintenance of bluetongue viruses.

Bluetongue in sheep is known since Merino sheep were brought to South Africa in 1789. Dr. Duncan Hutcheon described the disease for the first time in 1880 but the first reasonably complete description of the disease and the post mortem lesions were described by Dr. Spreull here in South Africa. It is however highly probable that bluetongue virus circulated unseen in game for many centuries and that the imported Merino sheep merely served as indicator of the disease.

Various sheep breeds vary in clinical susceptibility to bluetongue. Indigenous sheep breeds can be infected with bluetongue virus, but as with the African antelopes they show no signs of the disease. Foreign sheep breeds however, especially British mutton breeds are exceptionally sensitive to bluetongue. Cross-breeds between indigenous and foreign breeds (eg. the Dorper) have a reasonable resistance against the disease and mortalities are not so common.

Bluetongue is caused by viruses belonging to the genus *Orbivirus*. At least 24 different bluetongue virus serotypes exist of which 21 serotypes are prevalent in South Africa. All the viruses in a specific serotype afford complete cross protection against each other, but antibodies against one serotype will not completely neutralise viruses of other serotypes. A sheep that has recovered from bluetongue will therefore be immune only against the serotype it contracted and not against the other 23 serotypes.

Bluetongue does not spread through contact and the virus is biologically transmitted by blood sucking midges of the genus *Culicoides*. Biological transmission means the virus, after being ingested from the blood of an infected animal into the intestine of the midge, multiplies and spreads to the

salivary glands of the midge where further multiplication takes place. When this midge takes another blood meal 7-10 days later it injects the virus with the saliva into the animal.

The most important vector (transmitter) of bluetongue in Africa is *Culicoides imicola* but other species such as *C. variipennis* in the USA and *C. obsoletus* as well as *C. pulicaris* in Europe can also act as vectors.

The fact that bluetongue is an insect-transmitted disease explains why the prevalence of the disease is much higher in areas and circumstances that are favourable for the hatching of large numbers of insects. Bluetongue is a seasonal disease that is abundant during the months of summer and autumn, especially after good summer rains. In very cold areas the disease usually disappears approximately two weeks after the first frost but in areas with mild winters the disease may occur throughout the year although with a peak during summer and autumn.

Clinical signs and lesions of bluetongue in sheep

The primary lesion of blue tongue infection is the damage to endothelial cells especially of the small blood vessels. This leads to the leaking of serum into tissue and body cavities as well as a tendency to petechial (pin point) haemorrhages on the mucous membranes and in tissues.

Clinical signs of this tissue damage includes fever as well as swelling of the lips and other parts of the face (sometimes even the ears). Other distinctive lesions include bleeding in the papillae of the lips, the muzzle and the ocular mucous membranes. Erosions of the superficial epithelium are visible on the muzzle, edges of the nostrils and the oral mucous membranes (especially opposite the incisor and the molar teeth). The tongue may also enlarge due to the swelling and may even protrude from the mouth. **Due to the poor blood circulation the tongue appears bluish purple, hence the name bluetongue.** (But only a small percentage of sheep display a definite blue tongue!)

Deep and very painful sores develop where the swollen tongue comes into contact with the sharp molars. The tissues of the lower jaw and throat may also be swollen. The mouth lesions are very painful and the sheep will not be able to graze normally, resulting in serious weight loss.

Another very important sign of blue tongue is coronitis. It is observed as a purple red band where the hoof joins the skin of the leg. Often only the heel is affected but sometimes the band extends around the hoof. This is caused by extremely painful bleeding of the horn channels of the hoof. Affected sheep may be lame or remain recumbent. This painful condition may last for 3-7 days during which the affected sheep is unable to reach feed or water resulting in serious emaciation. A break in the hoof is formed and the damaged hoof is sloughed by the new hoof tissue after 3-4 months.

The skeletal muscles may also be seriously affected with literally melting away of larger muscles. This muscle degeneration contributes greatly to the dramatic weight loss observed in some sheep. These sheep usually take as much as six months to regain lost mass, in spite of good nutrition. A small percentage of sheep may also develop torticollis (wry) resulting in sheep not being able to keep their balance. In the end they have to be slaughtered or fall prey to predators.

During the acute stage of blue tongue the skin may be very red (dermatitis). As a result of the inflammation of the wool follicles the wool fibre formed during the disease is thinner and weaker than normal wool fibre. When this weaker part of the fibre grows out of the follicles approximately 3-4 weeks later, parts of the fleece or the entire fleece may be lost due to the break in the wool. Even in cases where the break is not severe enough to lose the whole fleece, the fleece will still be inferior and should not be mixed with the rest of the shearings.

Mortality due to bluetongue may vary (0-20%) and depends on the sheep breed, the virus strain but especially also environmental conditions. Sunlight (ultra violet rays) aggravates the disease. When sick animals are exposed to cold and very wet conditions a high percentage may die due to pneumonia.

The post mortem lesions of bluetongue include the signs already seen in the live animal as well as internal lesions. The latter usually includes liquid fluid in the thoracic cavity and pericardial sac, possible pulmonary oedema (with froth in the air ways) or even signs of pneumonia (dark collapsed areas resembling liver tissue). A very characteristic lesion of bluetongue is bleeding in the wall of the artery leading to the lungs (pulmonary artery). Skeletal muscles usually are pale and watery and may display greyish white areas of necrosis, sometimes with calcification.

Treatment

The best treatment for sheep with bluetongue is good nursing with feed, water and shade. Sick sheep must be taken from the flock as soon as possible and placed in a small enclosure with shelter against the sun and fresh water. Soft green feed must be available but sometimes their mouths are so painful that they cannot even chew soft feed. The best solution is to feed them high quality feed cubes.

The sick sheep will often take the cube into its mouth and wait for the cube to be softened by saliva before it swallows the cube without chewing. In this manner the animal will ingest enough food to survive.

Where there is a great risk of contracting pneumonia a broad spectrum antibiotic may be administered.

Control

The only practical and effective measure in preventing bluetongue in sheep is preventive immunisation that should be administered correctly and in time before the onset of the bluetongue season.

Due to the huge economical impact of bluetongue on successful sheep farming it was already realised early in the nineteenth century that immunisation should offer the only real solution against bluetongue.

Sir Arnold Theiler made several efforts to develop a vaccine but it was only in 1946 after bluetongue virus was successfully cultivated and attenuated in embryonated eggs that the first reasonably successful bluetongue vaccine was developed.

By 1948 the existence of numerous bluetongue virus serotypes was proven. This explained why the existing vaccine sometimes was effective but sometimes failed.

During the fifties bluetongue virus was successfully cultivated in cell cultures. This made it possible to serotype bluetongue viruses through neutralisation. By 1960 12 different serotypes were described. As new serotypes were discovered the viruses could be weakened (attenuated) by repeated passage into embryonated eggs and then to be included in the multiple strain (polyvalent) bluetongue vaccine.

By 1963 the vaccine already contained 14 live attenuated virus strains. It soon became clear that sheep cannot react to so many different serotypes in a vaccine. A live attenuated virus strain must be able to replicate in order to establish effective immunity. With 14 strains in one vaccine you have competition and the sheep only develop antibodies against the two or three most dominant strains.

To further complicate the situation widespread outbreaks of bluetongue occurred in 1976, also in sheep that were vaccinated regularly. It was suspected that a new serotype was involved and this was confirmed when two new serotypes (BT18 and BT19) were isolated. Type 19 had a widespread occurrence and was unrelated to any of bluetongue virus strains in the vaccine – that explains the numerous cases of bluetongue that occurred in vaccinated sheep.

It was clear that Type 19 should also be included in the vaccine that already contained 14 strains. Research work showed in the meantime that sheep develop antibodies against only three of the strains, irrespective of how many strains in the vaccine. It can be compared to a race in which many athletes take part, but only the first three receive prizes. Because it would be absurd to include 15 strains in one vaccine it was decided to construct three penta-valent vaccines (each containing five strains). The logic behind this decision may again be demonstrated by competing athletes. Should 15 athletes take part in separate groups of five each in three different races, nine prizes would be awarded instead of only three had they all been in one race.

The three penta-valent vaccines (marked A, B and C) contain the following bluetongue virus strains: Bottle A: Types 1, 4, 6, 12 and 14; bottle B: Types 3, 8, 9, 10 and 11 and bottle C: Types 2, 5, 7, 13 and 19. The three vaccines should be administered with a minimum of three week intervals although intervals of four weeks or more yielded better results.

It is admitted that five live bluetongue strains in one vaccine is still too many. The ideal would be to prepare five vaccines each containing only three strains but this would be totally unacceptable to sheep farmers, even if better results could be achieved.

It was very disappointing that farmers who demanded a better vaccine after the losses they suffered in 1976, immediately after the launching of the more effective threefold vaccine displayed great resistance to the three vaccines, claiming it is too much effort to immunise sheep three times.

The result was that farmers did not follow instructions when using the vaccine. Some simply mixed the three vaccines knowing full well that the single vaccine with 14 strains available before 1979 was not effective. Another general practice was to mix bottle A and B and dispose of bottle C. The

rumour was spread that the strains in bottle C do not occur in South Africa – this while bottle C contained Type 2, the most prevalent serotype in South Africa over many years.

The central idea is that the three vaccines form a unit and that is why they are supplied together. Broad protective immunity depends on the correct administration of all three combinations. It is particularly important that young sheep be correctly vaccinated as soon as they are six months old. Vaccination at this age is still not complicated by breeding programmes and young sheep are in any case handled more often to treat worm infestation and administering other vaccines. To save labour bluetongue vaccinations can be combined with these other activities. Bluetongue vaccines may be administered together with any inactivated vaccine but not together with a live virus vaccine.

Vaccination of pregnant ewes is only problematic when giving the first bluetongue vaccinations. If young ewes receive the three separate vaccines before breeding they can in following years safely be vaccinated even if they are pregnant. If farmers for whatever reason do not want to vaccinate three times, A, B and C may be mixed as a single combination provided the ewes received the three separate vaccines previously. The ideal is still the separate administration of each bottle.

Fortunately there are farmers who administer the threefold vaccine strictly as prescribed and they literally have no problems with bluetongue in their flocks. This serves as proof that the disease can be successfully controlled by using the present vaccine correctly.

What to do during a red water outbreak

Numerous reports were received of cattle dying due to Asiatic red water.

It is important to contact your veterinarian as soon as possible to take blood smears to confirm the diagnosis and prevent further losses and to put preventative measures in place!

The Asiatic blue tick (*Rhipicephalus microplus*) which transmits Asiatic red water, is spreading into areas which previously had been free of this deadly disease. We should thus be aware that Asiatic red water can cause sudden deaths in areas of our country where this disease never occurred previously.

The disease can also be spread with the sale and transport of animals and hay containing infected larvae from areas where Asiatic red water occur to previously free heart water areas,

Dr Fourie who wrote this article practised in the Highveld area of Mpumalanga and the situation might be quite different from the area where you are farming. The strategy he followed was as follows:

1. Stop any further deaths by treating all animals in the group with 1 ml per 100 kg body weight with imidicarb dipropionate (eg Forray 65 or Imizol) or diminazene (e.g. Berenil, Dizene or Veriben) at a dosage rate of 3,5 mg per kg. It is important to give the full dose of the drug and not at a reduced dosage rate).
2. Reduce further exposure to infected larvae of the Asiatic blue tick by dipping or spraying animals with an acaricide containing amitraz or cymiazol if there is not tick resistance to these actives.
3. This treatment should stop the outbreak.

This is just an emergency measure and now must be planned to prevent this situation occurring in future. Experience in South Africa and Australia showed that it cannot be relied on the tick to transmit red water to the calves so as to stimulate immunity developing against red water and to establish a resistant herd.

It is thus of great importance that calves should be vaccinated between the ages of 4 to 6 months with the Asiatic red water vaccine as calves have an innate immunity against red water.

Onderstepoort, Biological Products (OBP) distributing the vaccine recommend a once off injection with the vaccine. Experience in my practice shows that this is not sufficient. We vaccinate calves the first time between 4 to 6 months and heifers again before the breeding season. Thereafter adult animals are vaccinated every 3 years

To return to the present crisis of an outbreak. The treatment with imidocarb or diminazene is just a temporary measure to stop animals from dying. These drugs should protect animals for about 4 weeks against red water but once the protection has elapsed, animals are again susceptible.

Keep animals clean of ticks until the first severe frost. A weekly spray application containing amitraz is probably the most effective way controlling ticks, the exception is when tick resistance to amitraz is present.

After the first severe frost occurred and the drugs used to stop the outbreak are not active in the animals, adult animals can be vaccinated with the red water vaccines (Africa and Asiatic) from OBP. It takes 6 weeks for animals to build up immunity after vaccination. Unfortunately there is no data available to establish how many animals develop resistance after a once off injection with the vaccine. The writer's opinion is that the vaccine should be repeated after 2 months to ensure that most animals develop an immunity against Asiatic red water.

Adult animals that are vaccinated, are not treated with any drugs after vaccination. Doing this will destroy the vaccine. Although we have not experienced any side effects after administering the vaccine to thousands of adult and pregnant animals, one should remember that it is a live vaccine that was developed for use in calves. The handling of the vaccine is important and therefore the user information on the packet insert should be followed precisely.

The reason why adult animals are vaccinated in winter as this is the time when the incidence of red water is at its lowest. It takes 6 weeks after vaccination for immunity to develop and during this period we do not want an outbreak of the disease. If this happens animals have to be block treated again and the vaccine will be destroyed. If however you want to vaccinate animals during the red water season, these animals have to be kept tick free for 6 weeks.

If the vaccine is used to establish immunity in a herd, tick numbers can be controlled to increase production by dipping, injecting long acting macrocyclic lactones and applying acaricide growth regulators.

Do not rely on ticks to establish immunity, vaccinate your animals!

Written by dr. Neil Fourie, Former Private Veterinarian, Middelburg, Mpumalanga and presently with MSD. (neil.fourie@merck.com)

For the Afrikaans version:

<http://www.landbou.com/kundiges/vra-vir-faffa/optrede-tydens-n-rooiwater-uitbreek/>

Visit the website of the National Animal Health Forum

The website of the National Animal Health Forum (NAHF) is now operational.
www.nahf.co.za

Read what the Forum is all about:

<http://nahf.co.za/about/>

This website will become the information centre of animal health in Southern Africa. On the toolbar click on **Stakeholders** and you will find links to producer organizations and other organizations who are participating in the NAHF

<http://nahf.co.za/stakeholders/>

Provincial Animal Health Forums have their own site – click on **Provinces**

<http://nahf.co.za/provinces/>

Important is to study the Veterinary Strategy (2016 -2026) as it gives direction to where we are going with Animal Health in South Africa.

<http://nahf.co.za/wp-content/uploads/Vet-strategy-final-signed.pdf>

Click on **Info centre** for more information on the “war” we have against Bovine Brucellosis. Please be up to date on the role all have to play to control this zoonotic disease.

<http://nahf.co.za/category/diseases/brucellosis/>

Information on other controlled diseases (Ovine Johne’s Disease, Pest of small stock – PPR, and African Horse Sickness) is available

This link will continuously be updated.

Information on **antibiotic resistance** is also available at this address:

<http://nahf.co.za/category/antibiotic-resistance/>

Better relationships are being built between the State Veterinary departments and the private sector.

For additional information on Brucellosis in Afrikaans go to the following website:

Besoek ook www.landbou.com

Klik op Indeks van antwoorde

Klik op Beeste

Klik op Siektes

Klik op Brusellose

Klik op die verskillende antwoorde

Live the slogan so that we ALL can be part of controlling bovine brucellosis!

V = Vaccinate

E = Educate

T = Test

Summary of disease report for February 2017

129 Reports from veterinary practices and laboratories were received (Mpumalanga (MP) 14; Gauteng (G) 8; Limpopo (L) 10; North West (NW) 9 Free State (FS) 24; KwaZulu-Natal (KZN) 16;

Red-legged ticks	X	X	X	X	X	X			
Paralysis ticks					X				
Tampans									
Biting lice	X				X	X		X	
Sucking lice									
Itch mites									
Sheep scab					X				
Mange mites									
Nuisance flies	X			X	X	X	X	X	
Midges	X		X	X	X	X	X	X	
Mosquitoes	X		X	X	X				X
Blowflies	X		X	X	X	X	X	X	
Screw-worm	X	X	X		X		X		
Geddoelstia (uitpeuloogsiekte)									
Nasal bot					X	X		X	X

With the good summer rains there was an increase in tick numbers. Ticks transmitted diseases such as African and Asiatic red water, heartwater, anaplasmosis and lumpy skin disease increased

Brown ear-ticks and bont-legged ticks caused serious wounds which attracted screw-worm flies to lay their eggs, aggravating the condition.

Prevent losses by studying the life-cycle of the various tick species and vaccination programmes to prevent these diseases.

The toxin injected into animals by bont legged-ticks cause sweating sickness and their bites inflict serious wounds which become infested with screw-worms.

Blue tick resistance to drug groups is on the increase – ask your veterinarian to assist you with information so as to minimize the chances of selecting blue ticks for resistance. Biosecurity is of utmost importance when buying in animals.

Tick borne diseases

The following tick borne diseases were reported by practices in the provinces:

Tick borne diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
African red water	X	X	X	X	X	X	X	X	
Asiatic red water	X	X	X	X	X	X	X	X	
Anaplasmosis	X	X	X	X	X	X	X	X	
Heartwater	X	X	X	X		X	X	X	
Lumpy skin disease	X	X	X	X	X	X	X	X	X
Corridor disease									
Theileriosis									

An increase in tick transmitted diseases were reported.

The following tick toxicosis was reported by practices in the provinces:

Tick toxicosis	MP	G	L	NW	FS	KZN	EC	WC	NC
Sweating sickness		X	X	X	X				

Insect transmittable diseases

The following insect transmittable diseases were reported by practices in the provinces:

Insect transmittable diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
Lumpy skin disease	X	X	X	X	X	X	X	X	X
Ephemeral fever (Three day stiff sickness)	X	X	X	X	X	X			X
Blue tongue	X	X	X	X	X	X	X	X	X
Rift Valley Fever									
Wesselsbron									
Nagana									

Serious outbreaks of lumpy skin disease, three day stiff sickness and blue tongue were reported. In most cases animals were not vaccinated.

Standing water is present in many parts of the summer rainfall areas. This is the ideal habitat for mosquitoes to breed. Mosquitoes are the hosts spreading the Rift Valley fever virus and midges spread blue tongue viruses. Other insect transmitted viruses are lumpy skin disease, three day stiff sickness, Wesselsbron disease and African horse sickness. There are other viruses that we sometimes encounter such as Wesselsbron, Akabane and West Nile fever viruses but we hardly talk about them.

Be on the lookout for these diseases. If possible move valuable animals to higher areas on the farm and spray them with insect repellent actives such as deltamethrin if needed.

Venerial diseases

The following venereal diseases were reported by practices in the provinces:

Venereal diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
Trichomonosis	X	X	X	X	X	X			
Vibriosis			X	X	X		X		
Pizzle disease						X			
<i>Actinobacillus seminis</i>	X								

New cases of **trichomonosis** are reported every month and this disease is out of control. Make sure to buy bulls from farmers where biosecurity measures are in place and bulls are tested for these diseases at regular intervals.

Make sure that fences are in tact and gates closed so that bulls cannot escape to neighbouring cows that may be infected with *Tritrichomonas* and become infected or infected neighbouring bulls are jumping fences.

Cattle study groups should discuss preventative and control measures with their veterinarians. **Be sure to test bulls regularly for these diseases.**

Beware when buying in or sharing bulls! Remember female animals may also be infected.

Study the Good management SOP's for cattle farmers as is on the RPO website

<http://www.rpo.co.za/wp-content/uploads/2016/04/nuutRPO-NERPO-Code-Addendum.pdf>

<http://www.rpo.co.za/wp-content/uploads/2016/04/nuutRPO-NERPO-Code-Addendum-4-Good-management-practices-and-SOPs-for-cattle-farmers-1.pdf>

Bacterial diseases

The following bacterial diseases were reported by practices in the provinces:

Bacterial diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
Anthrax									
Blackquarter	X		X	X	X	X	X	X	X
Botulism				X				X	
Pulpy kidney		X	X	X	X	X	X		X
Lamb dysentery									
Swelled head		X	X		X				
Red gut (cattle)	X				X	X	X		
Blood gut (sheep)	X				X		X	X	
Tetanus					X				X
Salmonellosis						X			
Bovine brucellosis	X		X	X	X		X		X
Ovine brucellosis (Ram's disease)							X		
<i>Actinobacillus seminis</i>									
Bovine tuberculosis									
Johne's								X	
Leptospirosis									
Listeriosis					X				
<i>Pseudomonas</i>									
<i>Fusibacterium necrophorum</i>									
Septicaemia									
<i>E. coli</i>	X	X	X	X	X	X	X		
Enzootic abortion	X				X			X	
Lumpy wool				X	X				X
Uterine gangrene									
Bovine dermatophilosis (Senkobo disease)	X	X				X			
Wooden tongue									
Lumpy jaw									

Comment: Too many diseases are reported for which vaccines are available. Visit your veterinarian to update your vaccination programme.

The brucellosis control programme consists of:

V = Vaccinate all heifers between the ages of 4 and 8 months with either strain 19 or RB 51

E = Educate: visit www.nahf, click on Information centre, click on diseases and then on Brucellosis

T = Test: arrange to have your herd tested, **KNOW YOUR STATUS!**

Due to wet wool fleeces caused by rain, be aware of lumpy wool caused by a bacteria.

Viral diseases

The following viral diseases were reported by practices in the provinces:

Viral diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
BMC (snotsiekte)			X		X		X		
Rabies (cattle)					X				
BVD			X						
IBR					X	X			
BRSV									
PI3									
Maedi visna virus									
Rotavirus / Coronavirus								X	
Enzootic bovine leucosis (EBL)							X	X	
Sheep leucosis									
Jaagsiekte							X		
Orf	X	X	X	X	X	X	X		
Warts	X	X	X	X	X	X	X	X	

There is no treatment for viral diseases with the result that animals have to be protected by vaccinations if they are available.

Discuss vaccination programmes and biosecurity measures with your veterinarian.

Fungal diseases

The following fungal disease was reported by practices in the provinces:

Fungal diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
Ringworm	X	X	X	X	X	X	X	X	

Protozoal diseases

Onion poisoning									
Bracken fern									
Pollen beetle (<i>Astylus atromaculatus</i>)									
Water contamination	x								
Nitrate									
Urea					x				
Snake bite			x		x	x			
Moth cocoons (impaction)									
Blue green algae									
Copper									
Selenium									
Zinc									
Fluoride									
Lead									
Paraquat									
Phosamine									
Organophosphate									
Zinc phosphide									
Pyrethroid									
Amitraz									
Levamisole									
Tilmicosin									
Ionophor									
Hypo									

Beware when buying in animals as they are the animals which usually eat toxic plants such as tulp.

For further information on treatment of tulp and other poisonings visit:

www.landbou.com

Klik op Indeks van antwoorde

Klik op Beeste of Skape

Klik op Vergiftigings

Klik op die Opskrifte

Urea poisoning was on the increase which is due to a management problem.

Before treating animals read the lable or packet insert and make sure of the dosage rate and warnings.

Chemical substances are recorded every month as being the cause of huge losses. Top of the list is urea poisoning. In October over 90 cows died as a result of zincphosphide poisoning!

Nutritional deficiencies

Joint ill		X		X		X	X	X	
Lameness/foot problems	X	X	X	X	X	X	X	X	X
Lung infection	X		X	X	X	X	X	X	
Mastitis				X	X	X	X	X	
Navel ill	X				X				
Red gut (sheep, torsion of gut)					X				
Rectal prolaps									
Trauma		X				X		X	
Teeth wear									
Plastic bags (ingestion)									
Downer		X			X	X			

Discuss the origin, treatment and prevention of these diseases with your veterinarian

Metabolic diseases

The following diseases were reported by practices in the provinces:

Metabolic diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
Acidosis		X			X	X			X
Displaced abomasums						X			
Ketosis (Domsiekte)					X		X	X	
Milk fever	X				X	X		X	

Make sure that you adapt animals to feed containing concentrates.

Discuss the etiology, treatment and prevention of these diseases with your veterinarian.

Reproductive diseases

Reproductive diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
Dystocia (difficult births)	X	X	X	X	X	X	X	X	X
Endometritis	X				X	X		X	
Hydrops									
Metritis	X	X	X	X	X	X	X	X	
Poor conception	X			X	X	X	X	X	
Retained afterbirth	X		X		X	X	X	X	
Sheath prolaps	X	X		X	X	X		X	
Uterine prolaps	X	X			X	X			
Vaginal prolaps	X	X			X	X	X		
Penis injury									

Environmental conditions

	MP	G	L	NW	FS	KZN	EC	WC	NC
Exposure to cold					X		X	X	

Frozen to death					X				
Heat stress						X			
Lightning	X		X		X	X	X		
Drought							X	X	

Other conditions

	MP	G	L	NW	FS	KZN	EC	WC	NC
Drug residues (milk, meat, liver, kidney etc)									
Preditors					X	X			X
Theft				X	X				
Traumatic pericarditis (wire in fore stomachs)					X	X	X		
Trauma (fractures etc)					X		X		

In the CODE OF CONDUCT of the RPO the following standard operating procedures are documented. The local veterinarian should be your partner to help you achieve the necessary standards. <http://www.rpo.co.za/BestPractices/English.aspx>

PRECAUTIONARY MEASURES TO SUPPORT BIO-SECURITY.

Precautionary measures are required to protect the herd against diseases acquired because of external contact. The following categories are of concern:

1. DIRECT LIVESTOCK PURCHASES (and own animals returning):

The following should be **verified** before importing new animals into the herd:

How long animals have resided at the purchase or previous location?

Have there been any recent disease outbreaks in the location?

Do brand marks clearly confirm ownership?

Was a vaccination program followed (need paper or veterinarian proof). What are the local prevalent external parasites and the routinely implemented control program?

Is a veterinarian supported control program against transmittable diseases followed?

Dates and sufficient number of tests for reproductive diseases of both male and female

Dates and tests for zoonotic diseases

The above should also be verified with the purchaser's own veterinarian.

2. PURCHASES FROM SALES OR SPECULATORS

Purchase only in areas which are not in close proximity to scheduled areas

Visually inspect the animals before purchasing for:

* brand marks

* parasite infestation

3. TRANSPORT TO THE FARM

Use only reputable transporters

Has the truck been cleaned and disinfected?

Truck to follow the shortest uninterrupted route

Truck to take the shortest route to the handling facilities

Do not allow the truck personnel to get in contact with the farm herd

4. ARRIVAL ON THE FARM

Off-load the livestock to limit stress and to be visually evaluated for any unnatural conditions.

Isolate them from the farm herd and shared facilities for at least 21 days (quarantine)

Retest for diseases of concern if needed, before mixing with the rest of the herd

Process new arrivals within 24 hrs after arrival (unique ID tag brand, dip, dose, vaccinate)

Inspect regularly

5. FEED PURCHASES

Ensure bales of hay are sourced from areas that are not bordering scheduled areas

Purchase feed from reputable dealers only

Avoid buying feed in second hand bags

Ensure feed trucks are also disinfected and cleaned, especially if also used to transport animals to abattoirs

6. VISITORS

Do not allow strangers or their vehicles amongst the livestock

Ensure fences are well maintained and preferably jackal and warthog proof

7. EMPLOYEES

Do not allow the employees to eat in feed stores

Supply employees with sufficient ablution facilities

Regularly arrange to let employees be medicated for tape worm and have health check-ups

Keep record of all employee livestock on the property

Treat employee livestock with separate but dedicated health programs

Ensure employees understand the reason behind the implemented bio-security measures to help ensure compliance.

GENERAL AND REPRODUCTION MANAGEMENT

Record keeping: All animals are individually identified and recorded.

To prove ownership: All animals are marked with the registered brand mark according to the Animal Identification Act, No 6 of 2002.

A defined breeding season is the basis of effective management: The breeding season coincides with the rainy season, i.e. the period when nutritive value of the pasture is at its best.

Sufficient energy reserves in the herd as measured by condition scoring are vital, especially for effective breeding, and when inadequate the herd is supplemented in consultation with a nutritionist: Condition scoring of bulls and cows are regularly done, particularly at the onset of the breeding season and supplemented if necessary.

Bull - cow ratios are maintained: A ratio of 1 to 25 is maintained in every separate herd.

Fertility of breeding bulls: All breeding bulls are tested for mating ability and semen quality before the breeding season.

Sexually transferable diseases: Sheath washes or scrapes on bulls are performed annually.

Diseases that can cause poor conception, abortion or weak calves: Cows are vaccinated against such diseases in consultation with the veterinarian.

Breeding success monitored by a veterinarian: Rectal pregnancy or scan diagnosis is done by the veterinarian 8 weeks after the breeding season.

Twenty percent of cows or more not pregnant: Further tests are done to determine cause of low pregnancy rate.

Culling of non-pregnant cows: Non-pregnant cows are removed from the herd and considered a necessary bonus to supporting herd income.

HERD HEALTH AND BIO-SECURITY

Maintenance of herd health is key to a successful enterprise: A veterinarian should visit the farm bi-annually at least.

Calf mortality before 3 months of age is an important reason for poor weaning percentage: Good management practices are applied to limit early calf deaths.

Some diseases and parasites (internal and external) are more often encountered in specific areas: Annual vaccinations and a parasite control program should be applied according to regional requirements and in liaison with the veterinarian.

Farmers selling weaned calves to feedlots may want to have a market advantage compared to others: A specific vaccination program is applied before weaning for that purpose.

Herds may be at risk of being exposed to CA and TB: The herd is tested annually for CA and all heifers are vaccinated against CA between 4 and 8 months of age with an efficient, approved remedy. The herd is tested at least every 5 years for TB

Precautionary measures are required to prevent diseases being imported into the herd: A quarantine program to keep incoming animals separate is followed. All incoming animals have a suitable certificate of negative test results or are of a certified clean, closed herd.

Stock remedies and medicines should be registered, correctly stored and used before the transpire date: All medicines and stock remedies are registered, stored and applied according to prescription.

Prescribed medicines with a specific application are under the control of the veterinary profession: All prescription medicines are obtained and applied under prescription from a veterinarian.

Practices that had nothing to report

Montagu – Dr. Trudie Prinsloo

Pietermaritzburg – Dr. Rick Mapham

Piketberg – Dr. Andre van der Merwe

Plettenberg Bay – Dr. Stephan Nell

Vanderbijlpark – Dr. Kobus Kok

Witelsbos – Dr. Bernadine van den Berg

Ostriches

Western Cape

Oudtshoorn – Ostrimed

Condition	Comments
Bont-legged tick -1	
Flies -2	Hot weather with flood irrigation allocation has seen an explosion, dry hot weather forces insects to search for moisture? Thunderstorm weather brings out plenty of flies.
Diarrhoea-3	Down significantly as most chicks are past the high risk period. Severe hot days or over heating followed by cooler days result in a trigger for

	diarrhoea. Severe tiflocolitis – normal entero flora overgrowth notably Clostridial group. Peracute to acute condition. If preliminary antibiotics (oxytetracyclines or macrolides) do not work, mortality rate of 80% is to be expected. 2nd and 3rd generation antibiotics or quinolones have little to no effect.
<i>Clostridium</i> spp.	Continued problem but should be less with the autumn weather. Heat wave days result in lowered intake, moderate weather following result in increase/ over intake of highly fermentable and digestible nutrients. Overgrowth of <i>Clostridium</i> = rooiderm= enterotoxaemia
Energy deficiency - 3	Heat waves reduce feed intake considerably.

Equines

Mpumalanga

Lydenburg

Blue ticks – 2

Bont ticks – 2

Red-legged ticks – 2

Middelburg – dystocia in mare, recto-vaginal fistula

Gauteng

Magaliesburg

Equine encephalosis – 1 (suspected not confirmed)

Nigel

Dermatophilus congolense - 2

Limpopo

Bela-Bela

Ticks - 3

Makhado

African Horse Sickness – 3 cases

Mokopane

African Horse Sickness – 1- One Horse died off mixed dunkop /dikkop infection. Head slightly swollen
Still eating previous afternoon, morning recumbent, dead by 13h00. Owner from East Rand.
Horse not vaccinated

Free State

Gariepdam

West Nile Fever – Thorough bred stallion euthanized, confirmed, Colesberg district.

Ladybrand/Excelsior

Blowflies – 1

Bont –legged ticks – 1 necrosis and gangrene due to tick bites in loin, tail, tail base, inside ear, between hind legs

Middelburg virus – 1 suspected

Northern Cape

Colesberg

Middelburg virus – Few horses, neurological signs

Upington

Methiocarb toxicity – 2 Horses ate lucern sprayed with methiocarb. Stasis of the intestines, slight icterus, foal died in uterus.

African horse sickness – 4 horses were vaccinated against AHS. Developed fever but not full blown disease.

Game

Mpumalanga

Lydenburg

Wireworm – 3

Copper deficiency – 1

Zinc deficiency – 1

Selenium deficiency - 1

Gauteng

Pretoria

Biting lice – 1

Blue ticks – 2

Bont ticks - 3

Brown-ear tick – 3

Bont legged-tick – 3

Diarrhoea – 2

Abscesses - 2

Magaliesburg

Acute infectious septicaemia - Springbuck

Limpopo

Bela-Bela

Intestinal roundworms – Roan and Sable 3

Ticks - 3

Balance problem – White rhino, no diagnosis made, recovered

Malnutrition – Sable, died

Snake bite – Sable calf

Lephalale

Wireworm – Sable 3

Modimolle (Nylstroom)

Wireworm – Game in poor condition, many deaths

Screw-worm - 3

Pneumonia – Sable, severe

Vaalwater
Intestinal roundworms – Roan 1
Three day Stiff Sickness – Roan 4

Tzaneen

Biting lice and biting flies – 3 Bushbuck severe anaemic

Mokopane

Abscess - 1
Blue ticks – 3
Bont-legged ticks - 1
Brown ear ticks - 3
Heartwater ticks – 3
Red legged-ticks – 1
Screw-worm - 2
Midges – 1
Sweating sickness - 1
Malnutrition – Sable, died
Snake bite – Sable calf

Polokwane

Intestinal roundworms – 3
Brown ear-tick – 3
Bont-legged tick -3
Abscesses – 1

North West

Klerksdorp

Bont-legged ticks – 3
Red-legged ticks – 3
E. coli – 3
Lameness - 3
Ophthalmia – 1

Stella

Intestinal roundworms – 3

Vryburg

Intestinal roundworms – 2 Springbok, Oryx
Conical fluke – 2 Springbok, Sable, Oryx
Blue ticks – 3
Deaths reported by farmers – Giraffe, Sable

Free State

Bethlehem

Biting lice - 2

Parys

Brown ear-tick – 3
Dystocia – Giraffe 1

Eastern Cape

Middelburg

Conical fluke

Bont-legged ticks – 3

Western Cape

Vredenburg

Traumatic reticulopericarditis – Buffalo, wire sticking in heart sack

Northern Cape

Kimberley

Wireworm - Bontebokke 2

Swine

Gauteng

Mange - 2

Alpacas

KwaZulu-Natal

Mooi River

Lightning - Three

Monthly report on Livestock and Wildlife isolations for February 2017 from Vetdiagnostix –Microbiology Laboratory, supplied by dr. Marijke Henton (henton@vetdx.co.za)

Fluorescent antibody stains for clostridial myositis were positive for *Clostridium chauvoei*, *C. novyi* and *C. septicum* [one case each] in cattle, and a case of *C. novyi* in a White Rhino. There are only four FA stains for clostridial myositis available [*C. sordelli* in addition to the above]. Clostridial myositis can also be caused, but more rarely, by other clostridial species, such as *C. perfringens*. There is no FA stained serum available for *C. perfringens*. It is therefore fruitless to send intestinal smears for FA tests where *C. perfringens* is suspected.

Enteritis in calves [3], lambs [1] and piglets [2] all yielded *E. coli*, but the direct smears of most of them showed a heavy presence of yeasts in the intestines. An overgrowth of yeasts usually indicates previous antibiotic use. Diarrhoea can also be caused by yeast overgrowth. Samples from animals treated with antibiotics are likely to give poor results, as the antibiotics may well have eliminated the original cause of the problem. The laboratory result would then only report secondary invaders, and the original cause of the problem would remain undetected. The sample from the lamb was also positive for *Cryptosporidium*, and one of the piglet *E. coli* strains was an ESBL [Extended Spectrum Beta Lactamase] producer, which means that none of the penicillin nor cephalosporin groups of antibiotics will be effective.

Keratoconjunctivitis in a large dairy herd, where the *Moraxella bovis* vaccine was used, yielded *Trueperella pyogenes* and *Mycoplasma. Moraxella bovoculi*, which is also, but more rarely, associated with keratoconjunctivitis, was also isolated. The *M. bovis* vaccine does not protect against *M. bovoculi*.

Pneumonia in feedlot sheep was caused by *Mannheimia haemolytica*, *Pasteurella multocida* and *Mycoplasma*. *Corynebacterium pseudotuberculosis* caused abscessation in a sheep.

Salmonella Typhimurium caused septicaemia in a pig, and *Actinobacillus pleuropneumoniae* was the cause of pneumonia on a farm.

ESBL producing strains caused two infections in horses. *Klebsiella pneumoniae* was associated with pneumonia, and *Serratia marsescens* caused an abscess. *Staphylococcus pseudintermedius* was associated with pyoderma in a horse.

Monthly report on Livestock and Wildlife isolations for February 2017 from IDEXX Laboratories supplied by dr. Liza du Plessis (Liza-DuPlessis@idexx.com)

Condition	Comments and Specie
Bont ticks	B,E,G 2
Red legged-tick	E 2
Heartwater	C 1
Theileriosis	G 1
<i>E.coli</i>	P,G 1
Diarrhoea	O,G 2
Pneumonia	O 1
Urea poisoning	B 1
Cardiotoxicity	O 2
Abortion	B,G 2
Metritis	E 1

Feedlot report received from Drs. Shaun Morris, Eben du Preez and Pierre Van Vuuren for February 2017 (edupreez1@telkomsa.net)

Sheep Feedlots:

With the rainy conditions many cases of respiratory disease as well as adaptation problems in the feedlot were encountered.

Footrot cases also increased due to wet conditions.

Severe cases of Orf and secondary bacterial infections causing extra problems with adaptation, increased costs for treatment, more losses due to mortalities and increased risk of handlers becoming infected due to this zoonosis.

Diarrhoea due to mal-adaptation, Coccidiosis, Colibacillosis, Cryptosporiosis and Salmonellosis occurred with some mortalities.

Few cases of pulpy kidney, acidosis and bloodgut

Cattle Feedlots:

Morbidity and mortalities due to the tick borne diseases

Many cases of Lumpy Skin Disease and Ephemeral Fever (Three Days Stiff sickness)

Fly worry and tick infestations worse after the rains.

BRD (respiratory disease) also increased during the wet weather as well as footrot and cases of nutrition related conditions like bloat, acidosis, red gut and vitamin B1 deficiency.

Where the pens could not be cleaned due to the wet conditions, some cattle standing in deep mud developed oedema (swelling)of the legs.

Intakes also became erratic with some consequences like bloat and red gut.

Few Clostridial disease mortalities

Feedlot report received from Dr. Andy Hentzen for February 2017 (andyvet@mweb.co.za)

Condition	Comments and Specie
Conical fluke	B2
Cysticercosis	B3
Blue ticks	B 3
Brown ear-ticks	B 3
Bont-legged ticks	B2
Nuisance flies	B 3
Midges	B3
African red water	B3
Asiatic red water	B3
Anaplasmosis	B2
Heartwater	B1
Sweating sickness	B1
Lumpy skin disease	B3
Three Day Stiff sickness	B3
Blackleg	B2
Red gut	B 3
Leptospirosis	B 1
BVD	B 3
IBR	B 3
EBL	B 1
Urea poisoning	B 1
Protein deficiency	B 1
Copper deficiency	B 2
Zinc deficiency	B 2
Selenium deficiency	B 2
Vitamin A deficiency	B 3
Combination of trace mineral	B 3

deficiencies	
Lameness	B3
Lungs	B3
Diarrhoea	B3
Eye problems	B3
Abscesses	B,C3

Monthly report for February 2017 from Dr R D Last (BVSc; M.Med.Vet(Path); MRCVS)

Specialist Veterinary Pathologist, Vetdiagnostix - Veterinary Pathology Services

Contributors

Mr Butch Bosch, Ms Ntando Magoso, Mrs Beverley Williams, Ms Nicole Genga, Dr Rick Last

LIVESTOCK DISEASE SURVEILLANCE			
LIVESTOCK SPECIES	DISEASE AGENT	NO. CASES	LOCATION
Dairy Cow	Borellia theileri	1	Creighton, KZN
Bovine, Calf	Salmonellosis and bovine adenovirus	1	Dundee, KZN
Bovine Feedlot Steer	Bovine pulmonary hypertension	1	Northern KZN
Ovine, Adult Ewe	Prussic acid poisoning	1	Potchefstroom, North West
Bovine, Feedlot steers x 4	Atypical interstitial pneumonia	1	Northern KZN
Bovine, Adult Dairy Cow	Malignant Oedema	1	Howick, KZN
Bovine, Aborted fetus	Nephroblastoma	1	Underberg, KZN

WILDLIFE DISEASE SURVEILLANCE - 2017			
WILDLIFE SPECIES	DISEASE AGENT	NO. CASES	LOCATION
Cheetah, 7 months	Dermatophytosis	1	Hoedspruit, Limpopo
Roan Antelope, Bull 5 yrs	Cardiomyopathy	1	Bela Bela, Limpopo
Sable Antelope, Calf	Zinc deficiency	1	Nyumbu, Limpopo
Roan Antelope, Adult	Wireworm	1	Polokwane, Limpopo
Buffalo, Adult Cow	Lantanna / Lippia poisoning	1	Rustenburg, North West
Impala, Lamb 1 month	Thromboembolic meningoencephalitis (TEME)	1	Upington, Northern Cape
Sable Antelope, Calf 1 week	Neonatal hyaline membrane disease	1	Alexandria, Eastern Cape
Nyala Ewe	Capture myopathy	1	Mtubatuba, KZN

Monthly report for February 2017 from Queenstown Provincial Veterinary Laboratory as supplied by Dr. A.D. Fisher (alan.fisher@drdar.gov.za)

Condition	Area	Comments and Specie
Intestinal roundworms		O 3
Resistant roundworms		O 1
Liver fluke worms		O 1
Blowflies		O 3
Asiatic red water		B 1
Anaplasmosis		B 2
Heartwater	Cofimvaba	O 1
Blue tongue	Whittlesea, Queenstown, Stutterheim, Ngcobo, Elliot	O 3 Number of cases reported in young unvaccinated sheep after the first good rains fell in January and midges are on the increase
Pulpy kidney		O 1
Brucellosis	Cofimvaba	B 1 1 case (1/113) ex Ngwenya, Cofimvaba (CFT 784 titer) New outbreak
Rabies	Mthatha Qumbu Cradock Qumbu Ngcobo	Canine 2 Mongoose 1 Ovine 1 Caprine 1
Jaagsiekte	Ngcobo	O 1
Senecio (chronic)		B 1 <i>Senecio retrorsus</i> : 1 yearling from Queenstown – introduced ex Dordrecht about 12 m previously

B – bovine; O – ovine; C – caprine; P – pigs; G – game

1 = one case; 2 = 2 to 9 cases; 3 = more than 10 cases

Monthly report for February 2017 from Dr. Lucy Lange: PathCare Vetlab

lange@pathcare.co.za

Disease condition	Specie
Pneumonia/Pasteurellosis	Cattle
Inhalation pneumonia	Cattle
<i>Campylobacter</i> (Vibriosis)	Cattle
Trichomonosis	Cattle
Hemorrhagic enteritis	Cattle
Nephrosis (looks like acorn poisoning, no acorns where they were grazing)	Cattle
Septicemia	Cattle
Necrotic placentitis	Cattle
Anaplasmosis	Cattle
Cestrum poisoning	Cattle
Brucellosis	Cattle

Squamous cell carcinoma	Horses
Sarcoid	Horses
Nekrotic enteritis	Horses
Laminar cortical necrosis	Sheep
Geeldikkop	Sheep
Pneumonia (pasteurellosis)	Sheep
Bacterial enteritis (<i>E. coli</i>)	Sheep
Pulpykidney	Sheep
<i>Coxiella</i> abortions	Sheep
White muscle disease	Sheep
Domsiekte	Sheep
Laminar cortical necrosis	Boer goats
<i>Pasteurella</i> pneumonia	Boer goats
White muscle disease	Boer goats
Pox viral infection	Swine
Game:	
<i>Corynebacterium</i> abscesses	Bontebok
Lungworm	Bontebok
Tuberkulosis	Gibbon
<i>Pasteurella</i> pneumonia	Roan
Septicemia	Sable
Septicemia	Springbok
Gastritis	Rhino
<i>Clostridium</i>	Rhino
Purulent hepatitis	Lechwe

Report from Dr. Emily Lane Wildlife Pathology Research Programme



WILDLIFE PATHOLOGY RESEARCH PROGRAMME
 NATIONAL ZOOLOGICAL GARDENS
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Emily@nzg.ac.za; www.nzg.ac.za/research/services.php

27 February 2017

DAFF

Import/Export Policy Unit Subdirector

Monthly report:

Cases sent to referring veterinarians between 27th Jan and 27th February 2017

Cases from State vet Skukuza or Orpen (none)

Cases imported with master permit

PMDate	Species	Final diagnosis	PM no
30-Jan-17	African buffalo	Tuberculosis negative	17Z028
27-Jan-17	Ring tailed Lemur	Suspected Toxoplasmosis	17Z022
27-Jan-17	Hog Deer	Suspected renal failure	17Z021
27-Jan-17	Caracal	Cerebral oedema	17Z020
23-Jan-17	Scarlet Ibis	None possible (no histology)	17Z019
20-Jan-17	Cheetah	Result pending further tests	17Z018
19-Jan-17	African Elephant	Suspected septicaemia or viraemia	17Z016
19-Jan-17	Black Rhino	Suspected heart failure	17Z015
18-Jan-17	African Elephant	Normal neonatal cerebellum	17Z017
13-Jan-17	Cheetah	Gastritis monitoring	17Z006
11-Jan-17	Scimitar horned Oryx	Suspected resolving haematomas while suffering from starvation	17Z002
10-Jan-17	Lion	Epididymis tissue	17Z001B
23-Dec-16	Cheetah	Chronic renal disease with severe unilateral papillary necrosis	16Z155