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

December 2018

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

These reports include data from individual practices

Click on Disease Reports

The following practices and laboratories (121) submitted reports during December 2018:

Mpumalanga (11)

Balfour - Dr. Louis van Jaarsveld

Bethal – Dr. Hardus Pieters

Ermelo – Dr. Ben Potgieter

Grootvlei – Dr. Neels van Wyk

Karino – Dr. Silke Pfitzer

Lydenburg – Dr. Marietjie Malan

Middelburg – Drs. Erasmus, Malan and Bernitz

Nelspruit – Dr. André Beytel

Piet Retief - Drs. Niebuhr and Weber

Standerton - Dr. Kobie Kroon

Volksrust – Dr. Johan Blaauw

Gauteng (9)

Bapsfontein – Drs. Englbrecht and Olivier

Bronkhorstspruit - Dr. De Bruin, De Bruin and Labuschagne

Hammanskraal - Dr. Hentie Engelbrecht

Magaliesburg - Dr. Ryan Jeffery

Nigel - Dr. Cindy van der Westhuizen

Onderstepoort Veterinary Academic Hospital – Proff. Annandale, Shakespear, Holm, Pettey and Drs,

Fitte, Grobler, Hamman, Koeppel, Leask, Mabu, Marufu, Mokoele, O'Dell, Tshuma and Van der Leek

Pretoria – Dr. Hanneke Pienaar

University of Pretoria – Dr. Emily Mitchell

Vanderbijlpark – Dr. Kobus Kok

Limpopo (9)

Bela-Bela – Dr. Nele Sabbe

Makhado (Louis Trichardt) – Drs. Harris, Klopper and Jacobs

Mokopane (Potgietersrust)- Dr. Henk Visser

Mokopane - Dr. Alwyn Venter (CCS)

Polokwane (Pietersburg) - Drs. Watson, Viljoen, Jansen van Vuuren, Van Rooyen, Snyman and Cremona

Tzaneen – ZZ2 Farm practice – Dr. Danie Odendaal

Tzaneen - Drs. Cordier and van der Berg

Vaalwater – Dr. Hampie van Staden

Vaalwater – Dr. Annemieke Müller

North West (8)

Brits - Dr. Boshoff and Coertze

Klerksdorp – Drs. Geral, Theron, Van den Berg and Van den Berg

Leeudoringstad - Dr. Ian Jonker

Lichtenburg – Dr. Nelmarie -Krüger-Rall

Rustenburg – Drs. Goosen, Grobler, Sparks, Van Egdom, Van Rensburg and Van Rooyen

Stella - Dr. Magdaleen Vosser

Ventersdorp/ Koster – Drs. Benadé and Van der Merwe

Vryburg - Dr. Jurie Kritzinger

Free State (23)

Bloemfontein – Dr. Stephan Wessels

Bultfontein – Dr. Santjie Pieterse

Clocolan – Drs. Wasserman and Basson

Dewetsdorp – Dr. Marike Badenhorst

Ladybrand – Dr. Dedré Nel

Ficksburg – Drs. Kotzé and Coetzer

Frankfort - Drs. Lessing, Cilliers and Janse van Rensburg

Gariep Dam – Dr. Marni Malan

Hertzogville – Dr. Nico Hendrikz

Hoopstad – Dr. Kobus Pretorius

Kroonstad – Drs. Daffue, Eksteen, Van Zyl and Van der Walt

Memel – Drs. Nixon and Nixon

Parys – Drs. Wessels and Wessels

Philippolis – Dr. Stephan van Niekerk

Reitz - Dr. Murray Smith

Senekal - Dr. Jan Blignaut

Smithfield – Dr. Nienke van Hasselt

Viljoenskroon – Dr. Johan Kahts

Villiers - Drs. Hattingh and Hauptfleish

Vrede – Drs. Myburgh and Bester-Cloete

Wesselsbron - Dr. Johan Jacobs

Winburg – Drs. Albertyn and Albertyn

Zastron – Drs. Troskie and Strauss

KwaZulu-Natal (12)

Bergville - Dr. Ariena Shepherd

Bergville – Dr. Jubie Muller

Camperdown – Dr. Anthony van Tonder

Dundee - Drs. Marais, Fynn and Reynolds

Eshowe – Drs. Pryke and Hoffman

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

Kokstad/Elliot - Drs. Clowes and Shrives

Mtubatuba - Dr. Trever Viljoen

Newcastle – Dr. Barry Rafferty

Pongola - Dr. Heinz Kohrs

Underberg - Drs. Collins, King and Delaney

Vryheid – Drs.Theron and Theron

Eastern Cape (15)

Adlaide – Dr. Steve Cockroft

Alexandria - Dr. Johan Olivier

Alexandria – Dr. Charlene Boy

Aliwal North – Drs. Troskie and Strauss

Bathurst - Dr. Jane Pistorius

Cradock - Dr. Frans Erasmus

Graaff- Reinet - Dr. Roland Larson

Humansdorp – Drs. Van Niekerk, Jansen Van Vuuren and Davis

Jeffreys Bay – Drs. Lategan, Hoek and McFarlane

Kareedouw – Dr. Marten Bootsma

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

Steynsburg – Dr. Johan Van Rooyen

Stutterheim – Dr. Dave Waterman

Uitenhage – Drs. Mulder and Krüger

Witelsbos – Dr. Elmien Kotze

Western Cape (20)

Beaufort West - Dr. Jaco Pienaar

Caledon – Drs. Louw and Viljoen

Ceres – Drs. Pieterse, Wium, De Villiers and Scheepers

Darling – Drs. Van der Merwe, Adam, Lord, Jenkins and Hodgson

George - Drs. Strydom, Truter and Pettifer

Heidelberg - Dr. Albert van Zyl

Malmesbury – Dr. Otto Kriek

Malmesbury - Dr. Markus Fourie

Malmesbury – Drs. Heyns and Zolner

Moorreesburg -Drs. Kotzé and Sheridan

Oudtshoorn - Dr. Adriaan Olivier

Piketberg – Dr. André van der Merwe

Plettenberg Bay – Dr. André Reitz

Riversdale – Drs. Du Plessis, Taylor and De Bruyn

Stellenbosch - Dr. Alfred Kidd

Swellendam – Dr. Jacques Malan

Tulbagh/Ceres – Drs. Hamman, Wilson and Triegaardt

Vredenburg – Dr. Izak Rust

Wellington - Dr. Van Zyl and Louw

Worcester - Dr. Kobus Rabe

Northern Cape (7)

Calvinia – Dr. Bertus Nel

Colesberg – Drs. Rous and Rous

Kathu – Dr. Jan Vorster

Kimberley – Drs. Van Heerden and Swart

Kuruman – Dr. Lea Shuda

Postmasburg – Dr. Boeta van der Merwe

Upington – Drs. Vorster and Visser

Feedlots (1)

Drs. Morris and Du Preez

Laboratory reports (6)

Dr. Marijke Henton - Vetdiagnostix, Johannesburg

Dr. Liza du Plessis – Idexx SA - Johannesburg

Dr. Rick Last – Vetdiagnostix, Pietermaritzburg

Dr. Sophette Gers – Pathcare, Cape Town

Dr. Annelie Cloete - Stellenbosch

Dr. Mark Chimes – Dairy Standards, George

Summary

Biosecurity is the key to successful farming with production animals!



Just bringing in one infected (eg. foot and mouth disease, bovine brucellosis, ovine brucellosis, Johne's disease, pest of small stock – PPR, sheep scab and resistant parasites) may lead to huge economic losses to the farmer and the country!

Buyer Beware! Should always be on your mind. It is your right to demand from the seller a vendor's declaration – see later in the report.

All farmers, veterinarians, animal health technicians, auctioneers, agricultural advisors and sales persons have to work together to contain and eradicate the present Foot and mouth outbreak so thar South Africa gain regain its foot and mouth free status!!!!

Media release

Immediate release

Date: 08 January 2019

VHEMBE DISTRICT OF LIMPOPO

POSITIVE FOOT-AND-MOUTH DISEASE RESULTS IN THE

The Department of Agriculture, Forestry and Fisheries (DAFF) has been informed today, of positive laboratory results for Foot-and-mouth disease (FMD) in cattle in the Vhembe District of Limpopo. Samples were collected during a disease investigation after reports of cattle with lameness were received. The positive location is just outside the FMD Control Zone in the Free Zone without vaccination.

A team of experts from the Department and the Limpopo Veterinary Services is on the ground conducting further investigations to verify the results and determine the extent of the outbreak. The control measures will be determined by the findings of this investigation.

The matter has been reported to the World Organisation for Animal Health (OIE) on Monday (7 January 2019). As a result of this development, the official OIE recognised FMD-free status of South Africa is temporarily suspended. Consequently, any exports where FMD free zone

attestation is required, cannot be certified.

FMD is a severe, highly contagious viral disease which affects livestock with significant economic

impact. The disease affects cattle, pigs (domestic and wild), sheep, goats, and other cloven hoofed animals. The disease does not affect human beings. Signs of disease may include depressed animals, sores in the mouth of animals causing reluctance to eat and lameness. Any suspected case of the disease in animals must be reported to the local State Veterinarian

immediately.

The affected area is under quarantine and no movement of animals and animal products are

allowed. Farmers further away from the outbreak are cautioned to observe bio-security measures - not to allow any new animals into their herds, and to minimise the movement of their own herds

to other farms.

For more information, contact:

Spokesperson: Ministry of Agriculture, Forestry and Fisheries

Mr Khaye Nkwanyana

Media Liaison Officer

MLO.Minister@daff.gov.za

Tel. 083 952 9723

The technical spokesperson on FMD is Dr Mpho Maja

Cell: 082 323 0166



EPIDEMIOLOGY REPORT

VETERINARY SERVICES

December 2018

Volume 10 Issue 12

Animal disease surveillance: a refresher

Laura Roberts

Disease surveillance is one of the main functions of Veterinary Services, and a vital component of disease control. To control a disease, one needs to know where it is, what control methods to use and then whether the control is working. However, the exact aims and mechanisms of disease surveillance are not always clearly recognised or remembered.

Firstly, surveillance is often defined as more than just the collection of data; it is also the collation, analysis, interpretation and dissemination of information. All these facets should be planned together to ensure the efficiency of the system. There is no use in collecting information that is not used for anything.

The broad aims of disease surveillance include proving absence of diseases, usually with trade significance and, by the same token, early detection of exotic diseases (e.g. peste des petits ruminants). These aims involve simply determining presence or absence of a disease. Additionally, surveillance can target endemic diseases and serve to estimate prevalence or incidence of a disease. This could be related to monitoring the progress of a control strategy (e.g. bovine brucellosis). Thirdly, efforts should be made to detect emerging or new diseases as early as possible and to control and learn about them.

The surveillance methods used will depend on the target disease(s) (diagnostic methods required, transmission, consequences etc.), the aim of surveillance (as above), the population at risk and the personnel and resources available, to name a few factors. As with many things, the methods with the most conclusive outputs are often the most expensive and intensive. However, with some creativity, cheaper methods can still be useful. Hoinville et al (2009) report the observation by a workshop attendee (Haesler) that the adverse effects of a disease must be weighed against the cost of both its surveillance and control. If the budget is used up on surveillance and there is no money left to control the disease, the exercise may be pointless. Ideally, though, thorough surveillance may be a tool to motivate an increase in budget.

Surveillance methods can vary from dedicated surveys based on a careful sample size calculation to less specific, more constant surveillance which could simply involve a

disease notification system. The terms active and passive surveillance have been used traditionally, and can be seen as based on whether the action is initiated by the investigator or the observer respectively (does someone go out looking for the disease or wait for someone else to see it and tell them?). However, these terms tend to only identify the two extremes of how data is collected. Hoinville at al. (2013) propose that these terms should still be used but suggest the additional term "enhanced passive surveillance" to describe more organised systems where investigators encourage and assist disease recognition and reporting. Realistically, a veterinary service that does no awareness training with the public and other animal health role players (i.e. is truly passive) will never achieve useful surveillance and will not be able to provide useful information to trade partners. A structured passive surveillance system can be very valuable. The structure could involve specific people or organisations who commit to

reporting at set intervals. The OIE Terrestrial Manual disease surveillance chapter refers to "structured population-based" surveillance (e.g. random surveys) and "structured non-random" surveillance (e.g. disease reporting or notifications), a classification based on how units for observation are selected.

Passive (or non-random) surveillance can be based on data collected routinely with a more general purpose, such as ante- or post-mortem abattoir inspections,

Sampling of ostriches for avian influenza surveillance is one of the functions of Veterinary Services.

Laboratory test data (this will help detect subclinical disease), herd production records, private veterinarians' records or simply daily herd inspection records and observations. Indirect methods such as drug sales could also be considered. Newer, developing methods include syndromic surveillance and participatory epidemiology/ rapid rural appraisal. Syndromic data can potentially indicate an increase in disease incidence before a definitive diagnosis is made and assist with early warning. Participatory epidemiology and rapid rural appraisal (RRA) have been developed for resource poor countries, to assist with monitoring morbidity (signs of illness). Interview methods have been developed to obtain data from farmers and to integrate indigenous knowledge of diseases.

"Passive" methods can be more affordable than a dedicated survey, but may not give accurate estimates of prevalence or be truly representative of the population. There is also heavy reliance on awareness and a good relationship with people reporting. A farmer or private veterinarian who is expected to report livestock disease must know what to look for, how to compile the information, who to tell and be able to do this easily and quickly. Incentives will help ensure an efficient system, especially where more effort or risk is involved (e.g. potential culling of livestock by the state). All possible sources of animal health data should be considered. Emerging diseases especially rely on a good general disease surveillance system to detect when there is an increase in undiagnosed disease and ensure that the agent is identified as quickly as possible.

Ideal disease surveillance (active/ random) would make use of a reliable laboratory test that accurately identifies infected (good sensitivity) and uninfected (good specificity) animals. The surveillance plan would be based on a reasonably accurate census (to get a sampling frame) and knowledge of the population structure and composition (herd size and location, ages, breeds, vaccination status etc.) and then a sample size would be calculated to make sure a representative sample is taken. For an accurate sample size, one unfortunately also needs to estimate what the disease prevalence would be if the disease was present in the

population. This depends on the disease, and other factors including the population composition, vector prevalence and immune status. Sample size also depends on the required level of precision and confidence. To be more precise will require more samples.

Next, there is a difference in sample size calculation, depending on the aim of the surveillance. To simply determine presence or absence of disease requires far fewer samples than to estimate prevalence, with the same assumed maximum prevalence and precision. Interestingly, however, when detecting presence/ absence more samples are required when the disease is present at a lower prevalence while the opposite is true when determining prevalence.

To sum up, a simple example of a disease surveillance system would be based on education of animal owners and good communication between owners and Veterinary Services. This should assist with

identification of diseases with obvious clinical signs, and may be enough for less trade-sensitive diseases or diseases with fewer major consequences. Any other sources of animal morbidity data should also be included, where possible. Surveillance for sub-clinical diseases will probably require the use of laboratory tests, but the costs of surveillance will then increase, so the need for surveillance and the sampling strategy must be carefully justified.

References

Thrusfield, M. 2005. Veterinary Epidemiology. 3rd ed. Blackwell Science Itd

Chapter 1.4 of the OIE Terrestrial Animal Health Code. http:// w w w . o i e . i n t / i n d e x . p h p ? $id=169\&L=0\&htmfile=chapitre_surveillance_general.htm$

Hoinville et al., 2009. Discussing the development and application of methods for effective surveillance in livestock populations. Report of a workshop held prior to the ISVEE conference; Durban, South Africa

Hoinville, et al., 2013. Proposed terms and concepts for describing and evaluating animal-health surveillance systems. Preventive Veterinary Medicine, 112(1-2), pp.1-12.

An update on rabies in South Africa, 2018

No additional cases of human rabies have been confirmed since the last report. In total, 15 cases of human rabies have been confirmed in South Africa for 2018 to date. These cases were reported from KwaZulu-Natal (n=8), Eastern Cape (n=6) and Mpumalanga (n=1) provinces. In addition, two probable cases (not laboratory confirmed) were reported from the Eastern Cape Province.

Rabies in animals are continuously reported from various animal species in different locations in South Africa. In 2018, rabies has been reported in dogs from KwaZulu-Natal, Eastern Cape, Mpumalanga, Free State, North West and Limpopo provinces. Two cases of rabies in dogs were also confirmed in Ga-Rankuwa (located about 40 kilometres north of Pretoria), Gauteng Province, in November 2018. Rabies has also been reported in jackals, mongoose and genets. Livestock such as cattle, sheep, goats and horses have also tested positive for rabies in 2018.

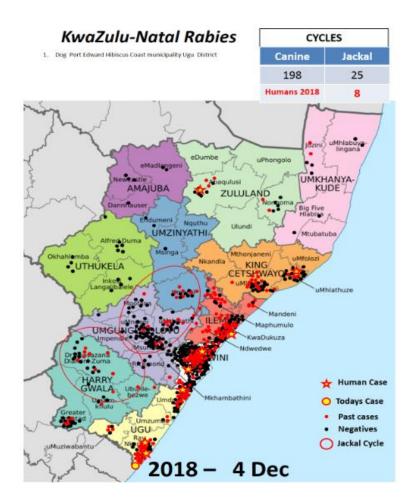
Although not treatable, rabies can be controlled and infection prevented. Dogs and cats can be vaccinated against rabies, which does not only protect the animal from the disease, but also all those who may come into contact with that animal. In South Africa, vaccination of dogs and cats is required by law (from three months of age) and can be routinely accessed through private veterinarians and many animal wellfare and nonprofit organisations serving communities in the country. State veterinary services routinely respond to reports of rabies in animals, and provide strategic vaccination of dog (and cat) populations in affected areas. The public is urged to ensure that their pets have been vaccinated against rabies and that their immunisation schedule remains up to date. This is particularly important ahead of the holiday season, and when families take their pets to holiday destinations around the country.

Since the rabies virus is spread through direct contact with rabid animals, it is advised to generally avoid interaction with unfamiliar animals. Rabies disease changes the behaviour of animals, for example, an animal that you would expect to be wild can appear tame. As such, it is important to report all direct contact with wildlife that is out of the ordinary. Do not feed or approach wild animals even though they seem friendly. On the other hand, an approachable pet may become aggressive. Report stray dogs to the responsible state veterinarian, and avoid interaction with such dogs if possible.

When potential exposure to rabid animals occurs, the infection can be effectively prevented through rabies post-exposure prophylaxis. This treatment includes thorough washing and treating of all wounds, and the application of rabies vaccine and rabies antibody-therapy.

It is important to understand that the rabies virus is transmitted through direct contact with the infected saliva of a rabid animal. Infection may occur when this infected saliva enters the body of a person, through a bite, scratch or other injuries that have penetrated the skin. Exposures that could have brought animal saliva into contact with a person's mouth, nose or eyes, or broken skin, should also be reported. This may occur when, for example, a dog licks your face. When such exposures occur, it is important that the advice of a healthcare practitioner is urgently sought. When rabies is considered a risk, based on the circumstances of the possible exposure, rabies post-exposure prophylaxis must be provided. More information on rabies post-exposure prophylaxis can be accessed from the NICD website.

Source: Centre for Emerging Zoonotic and Parasitic Diseases, NICD-NHLS; januszp@nicd.ac.za



Bovine Brucellosis

Although we have made positive steps in controlling Bovine brucellosis, the model disease stated in the Veterinary Strategy, we as a country is far from achieving our goal!

Many farmers are still shrugging their shoulders and saying: "Why should I test my animals as it will only cost me money and what if there are positive animals? IMy farm will be placed under quarantine, so I am not going to test my animals!"

Dr. Trudie Prinsloo a veterinarian and legal advisor has compiled legal aspects regarding brucellosis control and it is VERY IMPORTANT that you should avail yourself with the content of this document.

It is available in English and Afrikaans.

Legal Aspects of Brucellosis Control

Introduction

The main purpose of the Animal Diseases Act, No. 35 of 1984 ("the Act") is to control important and dangerous animal diseases. The Act and its Regulations have general control measures relevant to all diseases but also have specific control measures for certain diseases, such as brucellosis.

Livestock owners must inform certain people of presence of disease

Section 11 of the Act determines that livestock owners must take reasonable steps to prevent their animals from becoming infected and to prevent the spread of disease. This means that an owner is not allowed to knowingly buy infected animals and bring them into his herd. Where treatment is possible and available owners are also obliged to treat infected animals. An owner who suspects that his animals are infected with a controlled disease must report it to the local responsible state veterinarian.

The Regulations also stipulates that an owner who becomes aware of the presence of a controlled disease in his livestock must inform the following groups of people:

- all his neighbours;
- all prospective buyers;
- all buyers who had bought animals from him within the preceding 30 days.

This is the case even if the disease has not been confirmed yet but is suspected.

Precautionary measures that are legally required

Table 2 of the Animal Diseases Regulations determines that all heifers between 4 and 8 months of age must be vaccinated once with an effective vaccine for brucellosis (currently the only approved vaccines available are Strain 19 and RB51). Strain 19 may only be used in heifers between 4 and 8 months of age and it may not be repeated. Follow-up vaccinations with RB51 in female animals may be done, but only with the written permission of the responsible state veterinarian. No bulls may be vaccinated, regardless of their age.

Animals may only be tested by a state veterinarian or official or a private veterinarian. It is not compulsory to test all cattle at this stage, but it is highly recommended, and it might become a legal requirement in the future. In specific circumstances the Director of Veterinary Services may compel an owner to test his animals.

Requirements for a positive herd

If there are any animals that test positive, the laboratory must immediately inform the responsible state veterinarian and if the tests were requested by a private veterinarian, he will also be informed of the results. The state veterinarian will then place the farm under quarantine which means that no susceptible or infected animals may be moved from the farm without the permission of the state veterinarian. A

quarantine notice will be given which will contain all the requirements that the owner will have to adhere to. The requirements in the quarantine notice may differ depending on the situation.

Every owner also has a duty to isolate infected and contact animals and keep them in isolation as soon as he becomes aware of the presence or suspected presence of brucellosis in his herd. An owner that removes his animals knowing that there are positive animals on his farm, commits an offence in terms of the Act, even if he has not been placed under quarantine by the state veterinarian yet.

All contact animals must also be tested by an official or authorized person. Animals which test negative may be vaccinated for brucellosis with the written permission of the state veterinarian.

Positive cattle must be branded with a "C" mark on the right side of their necks. Such animals may only be slaughtered with the written permission of the state veterinarian and at an approved abattoir. Animals may only be moved to the abattoir under cover of a Red Cross permit and may only be moved to the specific abattoir indicated on the permit. Under no circumstances may such animals be sold to any other person or at any other place and a person that does that is guilty of an offence in terms of the Act.

An owner must minimize contact with animals in isolation and only allow persons responsible for the care of the animals and officials responsible for implementing the control measures to have access to them.

Milk from cows that are infected or suspected to be infected with brucellosis may not be used for any purpose unless it has been boiled, pasteurized or sterilized.

The owner also has a duty to disinfect the area where the infected animals had been kept with an effective disinfectant and this includes the vehicles on which such animals were transported. Any equipment that has been potentially infected must also be disinfected in the prescribed manner.

Where any control measures have been performed on the animals, the owner must keep the proof thereof. This includes proof of vaccinations. Where the control measures had been done by an official or private veterinarian, the owner should request a certificate which contains the details of such measures. If an owner had performed some of the measures personally, proof can be provided by way of an affidavit accompanied by empty container and proof of purchase where relevant.

Role of the State Veterinary Services

Both National and Provincial Veterinary Services are mandated to implement and enforce the Act. They can compel an owner to have his animals tested if there is a suspicion that they might be infected. Owners who refuse to cooperate or comply with the requirements can be served with an order which compels him to take certain steps within a required period. They also have the power to enter a property or vehicle in order to conduct an inspection. If an owner, or someone acting on behalf of the owner transgress the Act, criminal charges can be made. In special circumstances, officials may even take control over a property in order to control a disease, whilst the costs of the control measures will be for the owner's account. State Veterinary Services will however only do this in extreme circumstances and always attempt to get the owner's cooperation first.

Voluntary test programmes

The Bovine Brucellosis Scheme (R.2483 of 9 Dec 1988) is currently enforced. There is also an interim manual for the control of bovine brucellosis available, which has been compiled by the Department of Agriculture, Forestry and Fisheries. Since the bovine brucellosis control policy is currently under revision, further details will not be discussed here.

Conclusion

It is important to remember that the Act aims at protecting the national herd, as well as humans against serious diseases such as brucellosis. All the control measures have been put in place for the purpose of this aim and not to punish people. Simply by following the principles of disease control and prevention, it should be easy to remain within the framework of the Act.

Compiled by: Dr Trudie Prinsloo Van Der Heever, veterinarian and legal advisor (trudie@legalvetservices.co.za)

Issued by: Brucellosis Steering Committee of the National Animal Health Forum

Wetlike Aspekte van Brucellose Beheer

Inleiding

Die hoofdoel van die Wet op Dieresiektes, No 35 van 1984 ("die Wet") is om belangrike en gevaarlike dieresiektes te beheer. Hierdie Wet en die Regulasies daaronder bevat algemene bepalings maar stipuleer ook spesifieke beheermaatreëls vir seker dieresiektes soos brucellose.

Vee Eienaars moet sekere mense inlig oor siektes

Artikel 11 van die Wet bepaal dat vee eienaars alle redelike stappe moet neem om siektes en parasiete in hulle diere te voorkom en die verspreiding daarvan te verhoed. Dit beteken dat 'n eienaar nie willens en wetens besmette diere mag aankoop en tussen sy ander vee inbring nie. Eienaars is ook verplig om diere te behandel indien hulle wel besmet word waar behandeling moontlik en toelaatbaar is. Indien 'n vee eienaar vermoed dat sy diere 'n beheerde siekte het, is hy verplig om dit onmiddellik by die verantwoordelike staatsveearts aan te meld.

Die Regulasies bepaal verder dat 'n eienaar die voorkoms van 'n beheerde siekte moet bekend maak aan die volgende groepe mense:

- al sy bure;
- alle voornemende kopers;
- kopers wat die voorafgaande 30 dae diere by hom gekoop het.

Dis belangrik om daarop te let dat dit ook geld selfs al word die siekte slegs nog vermoed.

Voorkomende maatreëls wat wetlik vereis word

Tabel 2 van die Dieresiektes Regulasies bepaal dat alle verse tussen die ouderdom van 4 en 8 maande eenmalig ingeënt moet word met 'n effektiewe entstof vir brucellose (tans is die enigste twee entstowwe wat goedgekeur is Stam 19 en RB51). Stam 19 mag slegs in verse tussen 4 en 8 maande oud gebruik word en mag nie herhaal word nie. Opvolginentings met RB51 in vroulike diere is wel toelaatbaar indien die verantwoordelike staatsveearts skriftelik toestemming gee daarvoor. Bulle mag nie ingeënt word nie, ongeag hulle ouderdom.

Diere mag slegs getoets word deur 'n staatsveearts of - beampte of deur 'n privaatveearts. Dit is nie op die oomblik verpligtend dat alle beeste getoets moet word nie, maar dit word aanbeveel en mag moontlik in die toekoms vereis word. In spesifieke gevalle mag die Direkteur van Veeartsenydienste wel 'n eienaar verplig om sy diere te laat toets.

Vereistes vir 'n positiewe kudde

Indien enige diere positief toets moet die laboratorium die verantwoordelike staatsveearts dadelik inlig. As 'n privaatveearts die toetse aangevra het sal die veearts ook ingelig word. Die staatsveearts sal die plaas onder kwarantyn plaas, wat beteken dat geen vatbare of besmette diere sonder toestemming van die staatsveearts van die plaas verwyder mag word nie. Die kwarantyn kennisgewing bevat die vereistes waaraan die eienaar moet voldoen en moet streng nagekom word. Dit mag effens ------ verskil van geval tot geval en hang af van die spesifieke situasie.

Elke eienaar het self ook 'n plig om alle besmette en kontak diere te isoleer en in isolasie te hou sodra hy bewus word van brucellose in sy kudde of selfs net van 'n vermoede daarvan. 'n Eienaar wat sy diere verwyder wetende dat daar positiewe diere is, oortree die Wet selfs al was hy nie onder kwarantyn geplaas nie.

Alle kontakdiere moet ook getoets word deur 'n beampte of gemagtigde persoon. Diere wat negatief toets mag met die skriftelike toestemming van die verantwoordelike staatsveearts geënt word teen brucellose.

Alle positiewe beeste moet gebrandmerk word met 'n "C" op hulle regter nek. Sulke diere mag alleenlik met die skriftelike toestemming van die staatsveearts geslag of verwyder word na 'n goedgekeurde abattoir. Diere kan net na 'n abattoir vervoer word met 'n Rooikruispermit en mag slegs na die spesifieke abattoir, wat op die permit aangedui is, gevat word. Sulke diere mag onder geen omstandighede aan enige ander persoon of op enige ander plek verkoop word of van kant gemaak word nie, en 'n persoon wat dit doen, oortree die Wet en dit is 'n strafbare handeling.

Die eienaar moet toegang tot diere, wat in isolasie aangehou word, beperk. Slegs persone wat verantwoordelik is vir die versorging van die diere en beamptes wat beheermaatreëls moet toepas, mag toegang tot sulke diere hê.

Melk van diere wat met brucellose besmet is (of vermoedelik besmet is) mag glad nie vir enige doel gebruik word nie tensy dit gekook, gepasteuriseer of gesteriliseer is.

Daar rus ook 'n verpligting op die eienaar om die plek waar 'n besmette dier aangehou is, en die voertuig waarop so 'n dier vervoer is, te ontsmet met 'n effektiewe ontsmettingsmiddel. Enige toerusting, wat potensieel besmet is, moet ook op die voorgeskrewe manier ontsmet word.

Bewys van enige beheermaatreëls, wat op die diere toegepas is, moet deur die eienaar gehou word. Dit sluit bewys van inentings in. Indien dit deur 'n beampte of veearts gedoen word, moet die eienaar daardie persoon vra vir 'n sertifikaat waarop die besonderhede daarvan aangedui word. Indien dit deur die eienaar self gedoen is, moet hy bewys daarvan lewer deur middel van 'n beëdigde verklaring wat ook vergesel word van die leë houers en bewys van aankoop, waar die beheermaatreël die gebruik van middels insluit.

Rol van die Staat

Dis is Nasionale en Provinsiale Veeartsenydienste se mandaat om die Wet toe te pas. Hulle kan 'n eienaar verplig om sy diere te toets indien daar 'n vermoede is dat die diere besmet mag wees. Waar eienaars met verdagte of positiewe diere nie saamwerk nie, kan beamptes 'n bevelskrif beteken op die eienaar wat hom verplig om sekere stappe binne 'n bepaalde tydperk te neem. Hulle het ook die mag om 'n perseel of voertuig te betree en inspeksies uit te voer. Indien 'n eienaar, of iemand wat namens die eienaar optree, die Wet oortree, kan daar kriminele klagtes gelê word teen die betrokke eienaar en persoon. In uiterse omstandighede mag beamptes selfs beheer oor 'n perseel oorneem om siektebeheer uit te oefen, terwyl die kostes steeds vir die eienaar se rekening sal wees. Die staat poog egter altyd eers om die samewerking van die eienaar te kry en sal hierdie stappe slegs neem in hoogs uitsonderlike gevalle.

Vrywillige toetsprogramme

Die Beesbrucelloseskema (R.2483 of 9 Dec 1988) word tans afgedwing. Daar is tans ook 'n Interim handleiding vir brucellosebeheer beskikbaar, wat deur die Departement Landbou, Bosbou en Visserye opgestel is. Aangesien die Beesbrucellose beheerbeleid tans onder hersiening is, sal verdere besonderhede nie hier bespreek word nie.

Samevatting

Dit is belangrik om te onthou dat die bepalings van die Wet daar is om die nasionale kudde te beskerm, maar ook om mense teen ernstige siektes te beskerm. Alle beheermaatreëls is in plek gebring om hierdie doelwitte te bereik en nie om as strafmaatreëls te dien nie. As mens net die beginsels van siektebeheer en siektevoorkoming navolg en alle nodige partye so spoedig moontlik inlig oor die teenwoordigheid van 'n beheerde siekte, behoort dit maklik te wees om binne die raamwerk van die Wet op te tree.

Saamgestel deur: Dr. Trudie Prinsloo Van Der Heever, veearts en regsadviseur (trudie@legalvetservices.co.za)

Uitgereik deur: Brucellosestuurkomitee van die Nationale Dieregesondheidsforum

When buying cattle this Vendor declaration can help you to minimize risk!

VENDOR DECLARATION BOVINE BRUCELLOSIS

I hereby declare that I am the legal owner or authorised representative of the cattle on sale and am competent to make this declaration

1	The cattle for sale are clearly and permanently identified		Yes	No
2	The cattle for sale/slaughter were born on my farm		Yes	No
3	The farm has a closed herd policy i.e. I do not buy in cattle, rent out grazing or speculate with cattle		Yes	No
4	I practice bio-security on my farm to a level that is **	Poor	Moderate	Good
5	I vaccinate my heifer calves against Bovine Brucellosis once between the ages of 4 – 8 months		Yes	No
6	In addition, I vaccinate my cattle older than 8 months with RB51		Yes	No
7	I have all the cattle on my farm tested for Bovine Brucellosis		Yes (date)	No
8	My herd has been tested negative within the past year		Yes	No
9	I did not buy in cattle since my last negative brucellosis test		Yes	No
10	I/my vet investigates any abortions on my farm		Yes	No
11	To the best of my knowledge, my immediate neighbours and farms in my area are free of Bovine Brucellosis		Yes	No
12	I use a veterinarian to advise me on my cattle's herd health		Yes	No
13	The cattle handling facilities on my farm are	Poor	Average	Good

Note: Vaccination does not mean freedom from Bovine Brucellosis as cattle can still be carriers

Please attach the most recent *Brucella* blood test certificate

Owner or authorised representative:
Signature:
Date:
** * Biosecurity

Poor – speculates with cattle, does not vaccinate, poor fences, cattle come into contact with other cattle

Medium – Vaccinates heifers, does not buy in cattle of unknown health status

Good – closed herd/never buys in cattle, vaccinates heifers and no contact with other cattle, follows a herd health plan as advised by his veterinarian, does not allow transport trucks onto property, washes and disinfects truck after returning from the abattoir or auction grounds.

Compiled by: Dr. Sewellyn Davey, Chairman of the Brucellosis Steering committee of the National Animal Health Forum

OVINE JOHNE'S DISEASE VENDOR DECLARATION

ON THE SALE OF SHEEP

(Updated Draft May 2015)

1.	I hereby declare that I am the owner or authorised representative of the sheep on sale and am competent to make this declaration.	YES	NO
2.	The sheep for sale are clearly identified in the accompanying description.	YES	NO
3.	The sheep for sale were born on my farm.	YES	NO
4.	The farm has a closed flock policy. (No live sheep are brought onto the farm from elsewhere)	YES	NO
5.	I know the signs of the disease and to the best of my knowledge, all of my properties are free of cases of Ovine Johne's Disease.	YES	NO
6.	I have actively looked for Ovine Johne's Disease and have had tests done for this.	YES	NO
7.	To the best of my knowledge, my immediate neighbours and farms in my magisterial district of my farm(s) are free of cases of Ovine Johne's Disease.	YES	NO
8.	The sheep on my properties have been vaccinated against Ovine Johne's Disease and are clearly marked with the approved ear tag.	YES	NO
9.	All lambs born are vaccinated	YES	NO
10	If vaccinated, the number of years that the vaccinations have been done is		years
NO	DTE: Vaccination does not mean freedom from OJD, vaccinated animals can still be carriers		
	atement 8 and 9 apply only to already infected flocks, and such sheep can only be sold to o		ected
	cks by law.	2101 1111	ocau a
	•		
Bu	yers should consult their veterinary advisor before any purchases.		
_		_	
Sig	gnature Date		
_	Farm:	_	
NΑ	ME		
	District:	_	
	WNER OR AUTHORIZED	_	
-	PRESENTATIVE		













SOP for the control of Bovine Brucellosis

Audit date:	
Authorised person:	_

		Y/N	Comment
1	Fences and gates in good condition		
2	Gate control - log in		
3	Disinfection of vehicles coming onto the farm		
4	Protective clothing and boots given to people		
	visiting the farm (cattle area) coming from high		
	risk areas eg. veterinarians, nutritionists,		
	representatives, truck drivers, workers, etc.		
5	Sterilizing equipment coming in contact with cattle		
6	Run off water/ streams from neighbouring farms		
7	All animals identified with a brand mark and ear		
	tag		
8	Data base of all animals		
9	Closed herd		
10	When last were animals bought in or moved from		
	another farm?		
11	Only buy in animals from a farm which has a		
	recent negative tested brucellosis herd certificate		
12	Origin(s) of acquired cattle? Bought at an auction?		
13	Keep heifers separate from herd until they have		
	calved and tested negative for brucellosis		
14	Quarantine camp available		
15	Separate calving camps		
16	Were all heifers vaccinated between 4 and 8		
	months vaccinated with Strain 19 or RB51?		
17	Any cattle vaccinated with Strain 19 over 8 months		
	of age? History over last few years.		
18	Were there any abortions on the farm – samples		
	taken, diagnosis?		
19	All sexually mature cattle in herd tested for bovine		
	brucellosis (provide proof)		

20	Bovine brucellosis is a State controlled disease.	
	Positive cattle are branded with a C on the right	
	side of the neck.	
21	Isolation of infected animals & separate handling	
	facilities	
22	Prohibition of movement of animals off	
	quarantined property except under cover of a Red	
	cross permit for slaughter at an abattoir	
23	Prohibition of use and on-farm disposal of	
	unboiled, unpasteurised or unsterilised milk on	
	quarantined property	
24	Disinfection of places where infection is a	
	possibility.	
25	Neighbours/ recent buyers informed of infected	
	herd status	
26	Fly, crow and predator control	
27	Destruction of afterbirths/abortions in a	
	responsible manner	
28	Beware of livestock, game interface	

Websites that are there to help you with information regarding animal health:

National Animal Health Forum

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/

Rural Veterinary Association of South Africa

www.ruvasa.co.za

Click on **Disease reporting** where maps and information can be sourced on the prevelance of diseases in all provinces. Abattoir reports are available. Use the information available to update management programmes

Landbouweekblad's webpage

www.landbou.com

Vra vir Faffa

Click on: Indeks van antwoorde where more than 4 000 answers can be sourced on animal health.

Click on Beeste

Click on Siektes

Click on Brusellose

Stop Brusellose

Gevaar om Beesbrusellose (BBR) deur vendusies en skoue te versprei

Rapportering aan bure of ander eienaars oor die voorkoms van brusellose

Inligting oor brusellose op die NAHF se webblad

Kuddebestuur voor die dekseisoen

Bees Brusellose handleiding

Teenliggaamwaardes om beesbrusellose in koeie te bepaal

Veterinêre Strategie 2016 -2026

'n Dosyn dinge wat jy moet weet van beesbrusellose

Vyf kernfeite wat jy van beesbrusellose (Besmetlike misgeboorte - BM) behoort te weet

Veiligheid van vleis en biltong afkomstig van 'n bees met brusellose

Vervoer van diere uit 'n positiewe brusellose kudde

Beheer van brusellose in 'n beeskudde

Boerderypraktyke wat die gevaar van die voorkoms van brusellose verhoog

Pak brusellose by die horings

Brucellose kan jou lewe verwoes

Brusellose in wild

Bestuur van positiewe besmetlike misgeboorte beeste

Aankoop van beeste wat besmetlike misgeboorte het

Antwoorde oor brusellose

Behandeling van besmetlike misgeboorte

Besmetlike misgeboorte uitbreek in 'n kudde

Gevaar van brusellose onderskat

RB51-inenting teen brusellose in dragtige koeie

Alles oor Besmetlike Misgeboorte (BM)

Kompensasie vir BM en TB positiewe beeste?

Nóg vrae oor besmetlike misgeboorte

Koeie positief getoets vir besmetlike misgeboorte

Vrae, antwoorde oor besmetlike misgeboorte

Brucellose: Wat staan ons te doen?

Internal parasite control

www.wormx.info

Summary of disease report for December 2018

121 Reports from veterinary practices and laboratories were received (Mpumalanga (MP) 11; Gauteng (G) 9; Limpopo (L) 9; Northwest (NW) 8; Free State (FS) 23; KwaZulu-Natal (KZN) 12; Eastern Cape (EC) 15; Western Cape (WC) 20: Northern Cape (NC) 7; Feedlots (FL) 1 and Laboratories (Lab) 6).

For the detailed report and previous reports go to www.ruvasa.co.za and click on Disease reporting

Internal parasites

The following reports were received from practices regarding internal parasite infestations:

Internal parasites	MP	G	L	NW	FS	KZN	EC	wc	NC
Roundworms	х	х		х	х	х	х	х	

Resistant roundworms	х				х				
Wireworm	х	х	х		х	х	х	х	
Brown stomach-worm								х	
Long-necked bankruptworm									
Large-mouthed bowelworm									
Nodularworm									
Lungworm									
Eyeworm									
Parafilaria				х		х			
Tapeworms	х	х			х		х		
Liver fluke				х	х		х		
Conical fluke	х				х				
Cysticercosis (measles)	х						х	х	
Schistosomiasis (bilharzia)									
Coccidiosis	х	х	х	х	х	х	х	х	
Cryptosporidiosis		х			Х	х	х		

In many parts of South Africa there is a severe drought and the perception is that internal parasites do not occur. Please do not get caught as there may be some wet spots such as leaking water troughs and water piplines, irrigation, wet kraals, etc. on the farm. Water snails, the intermediate hosts of liver fluke and conical fluke worms concentrate as water levels drop and surprise oubreaks of these parasites may occur. Use the five point check to keep on top of what is happening in the flock. For further detail contact your local veterinarian.

http://hulp.landbou.com/kundiges/vra-vir-faffa/vyfpuntplan-en-famacha-stelsel-vir-inwendige-parasietbestuur-in-skape/

https://docs.wixstatic.com/ugd/aded98_cb447e77eef6450f93a2b23cb0e6b9de.pdf
www.wormx.info

Prevention of Cryptosporidiosis

- Since there is no vaccine or registered treatment for *Cryptosporidium*, prevention is the best control method. Animals with a good immune system will generally easily overcome *Cryptosporidium* thus this must be the main aim in controlling *Cryptosporidium*.
- A consistent, vet approved and farm appropriate vaccination program for other diseases.
- Ensure no nutritional deficiencies especially vitamin A and Selenium
- Excellent bio-security
- Ensure clean pathogen free water sources
- Hygiene training of personnel
- Consult your veterinarian

External parasites

The following reports were received from practices regarding external parasite infestations:

External parasites	MP	G	L	NW	FS	KZN	EC	wc	NC
Blue ticks	х	х		х	х	х	х	х	
Resistant blue ticks									
Heartwater ticks	х	х		х		х	х		
Brown ear-ticks	х	х			х	х	х		
Bont-legged ticks	х	х		х	х	х	х		х
Red-legged ticks	х				х			х	
Paralysis ticks					х				
Tampans									
Biting lice								х	
Sucking lice									х
Itch mites					Х		х		
Sheep scab									
Mange mites	х				Х				

Nuisance flies	х	х		х	х	х	х	
Midges	х	х	х	х	х		х	
Mosquitoes		х	х	х			х	
Blowflies				х		х	х	
Screw-worm	х	х				х		
Gedoelstia (uitpeuloogsiekte)								
Nasal bot	х			х				

Blue tick infestations were reported from most provinces. Blue ticks (African and Asiatic blue ticks) are able to transmit red water, anaplasmosis and lumpy skin disease.

Make sure to assess the blue tick resistance status on your farm before buying tickicides. Your veterinarian will be able to collect engorged blue ticks to be tested for resistance.

Actives to be tested for resistance are: organophosphates, pyrethroids, amidines, fipronil. Actives registered only for controlling blue ticks are: macrocyclic lactones, fluazuron (acaracide growth regulator).

Discuss your tick control programme with your veterinarian as controlling ticks early in spring can prevent large outbreaks of ticks in the summer.

Below is a list of diseases transmitted by ticks.

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	х			х	Х	х	х	х	
Asiatic red water	х	х	х		х	х	х	х	
Anaplasmosis	х	х		х	х	х	х	х	
Heartwater	х	х	х	х		х	х		
Lumpy skin disease	х		х	х	Х	х	х		

Corridor disease					
Theileriosis					

Asiatic red water is spreading and is one of the deadliest diseases in cattle.

Numerous mortalities were reported!

The keyword is vaccinate your animals! Contact your veterinarian.

Anaplasmosis outbreaks were reported in 7 provinces. Biting flies are probably the main spreader of this disease!

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

Tick toxicosis	MP	G	L	NW	FS	KZN	EC	wc	NC
Sweating sickness			х	х	х	х			

This disease is caused by the toxin of the bont legged-tick.

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	х		х	х	х	х	х		
Ephemeral fever (Three-day-stiff sickness)	х	х	х			х		х	
Blue tongue	х				х		х	х	
Rift Valley Fever									
Wesselsbron									
Nagana						х			

As soon as insect populations increase with wet weather conditions, unvaccinated animals with a lack of immunity to insect transmittable diseases, will be the target of these diseases. Analysis of blood

samples taken by an international research group in the Free State showed that antibody levels against Rift Valley Fever were very low although they were vaccinated. Poor cold chain management of vaccine? This is of great concern!

Out of experience from previous years the prevalence of insect transmitted diseases will increase in months to come until the first frost in May. The rains came lat this year.

Have you vaccinated your animals vaccinated against Rift Valley Fever?

Out of experience I can tell you that when outbreaks of diseases occur, vaccines will be difficult to acquire as many people will be ordering vaccines all at once.

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	х	х	х	х	х	х			
Vibriosis		х	х	х	х		х		
Pizzle disease									
Actinobacillus seminis plus HPA									

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. Trichomonosis were reported from 6 provinces.

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 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

Consider Trichomonosis as an area disease, farmers should work together to keep areas free from diseases such as trichomonosis, brucellosis and sheep scab.

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	х			х	х	х			
Botulism					х			х	х
Pulpy kidney	х				х	х	х	х	
Lamb dysentery	х								
Swelled head		х						х	
Red gut (cattle)	х	х				х	х		
Blood gut (sheep)									
Tetanus	х				х	х		х	
Salmonellosis	х			х			х	х	
Klebsiella									
Bovine brucellosis	х		х	х	х				
Brucella melitensis (goats)									
Ovine brucellosis (Ram's disease)				х	х			х	х
Bovine tuberculosis									
Johne's									
Leptospirosis									
Listeriosis								х	
Pseudomonas									
Fusibacterium necrophorum	х						х		

Septicaemia									
E. coli	х	х	х	х	х	х		х	х
Enzootic abortion								х	х
Lumpy wool		х			х		х		
Bovine dermatophilosis (Senkobo disease)									
Uterine gangrene									
Wooden tongue									
Lumpy jaw								х	

Multiclostridial vaccines should be used if blackquarter outbreaks still occur when only using a vaccine containing *Clostridium chauvoei*. Remember to give a booster vaccine when using an inactivate vaccine for the first time. Read the packet insert!! Study the table above and determine the risk for animals on your farm. Get advice from your veterinarian on *Cryptosporidium/E. coli* outbreaks in your area and what to do to prevent losses in lambs and calves.

Enzootic abortion contributes to the disappearance of foetuses in sheep and goats scanned pregnant. Vaccinate replacement ewes with the live vaccine before putting them to the ram!

Pulpy kidney (*Clostridium perfringens* type D – *epsilon* toxin) is still the biggest killer of sheep. There are various factors that could lead to pulpy kidney such as: the intestinal tract stops functioning (stasis), sudden change from poor veld to lush artificial pastures; sudden change in diet; grazing of fodder crops such as lucerne, green wheat and green oats, diet high in protein, overeating of concentrates or fertile pastures, deworming and coccidiosis infection. Sudden changes in the weather and grazing in wilted pastures, may also play a predispositional role.

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)	х			х	х				
Rabies (cattle)									

BVD								х
IBR		х						
BRSV							х	
PI3								
Maedi visna virus								
Rotavirus / Coronavirus					х			
Enzootic bovine leucosis (EBL)							х	
Sheep leucosis								
Jaagsiekte							х	
Orf			х	х			х	х
Warts	х	хх	х	Х	х	х	х	x

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

Preventative vaccinations are the best way to protect animals against viruses and bacteria causing pneumonia.

Keep cattle and wildebeest well separated especially when wildebeest are under stress to prevent snotsiekte outbreaks! There is also a sheep associated form of the disease.

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	х		х		х	х		х	

Protozoal diseases

Protozoal diseases	MP	G	L	NW	FS	KZN	EC	WC	NC
Besnoitiosis (olifantsvelsiekte)									

Toxicities

The following toxicities were reported by practices in the provinces:

Toxicities	MP	G	L	NW	FS	KZN	EC	WC	NC
Cardiac glycoside							х		х
Slangkop									
Crotalaria									
Gifblaar									
Gousiekte	х	х							
Cestrum (ink berry)					Х				
Tulip					Х		х		
Cynanchum (bobbejaantou)									
Facial eczema					Х			х	
Lantana	х					х			
Prussic acid							х		
Acacia nilotica									
Senecio									
Cotula nigellifolia (stagger wood)									
Geeldikkop (duwweltjies) and dikoor					х				
Vermeersiekte									
Hertia pallens (Nenta, krimpsiekte)									
Chrysocoma ciliata (bitterbos)									
Solanum incanum (maldronksiekte)		х							

Gomphocarpus (Asclepias) fruticosus (milkweed)						
Heliotropium (potato weed)	х					
Bracken fern						
January bush (Gnidia polycephalatus)						
Chinkerinchee						
Ceylons rose						
Eucalyptus (bloekom) bark						
Kikuyu					х	
Ryegrass						
Ganskweek						
Paspalum staggers						
Phalaris aquaticum (Phalaris staggers)						
Photosensitivity (Turknael, Erodium						
moschatum)						
Photosensitivity (Stellenbosch)						
Lusern						
Mycotoxicosis				х		
Apergillus	х					
Aflatoxin						
Diplodiosis						
Lupins						
Harpuisbos						
Syringa berries						
Acorn						

Cycad						
Kraalbos, Geelbos (Galenia africana)						
Radish						
Carrot poisoning						
Onion poisoning						
Bracken fern						
Pollen beetle (Astylus atromaculatus)						
Water contamination						
Nitrate						
Tannins						
Urea		х	х	х		
Salt						
Wet carcase syndrome						х
Snake bite				х		
Moth cocoons (impaction)						
Blue green algae					х	
Copper						х
Selenium				х		
Zinc						
Fluoride						
Lead	х					
Paraquat						
Phosamine						
Aldicarb						

Organophosphate			х		
Zinc phosphide					
Pyrethroid					
Amitraz				х	
Levamisole					
Ivermectin					
Moxidectin					
Oxytetracycline					
Tilmicosin					
Bromoxynil nitrate					
Ionophor					
Monensin					
Нуро					
Diazinon					
Glyphosate					
Chicken litter					

Beware when buying in animals or moving them into rested grazing camps as they are the animals which usually eat toxic plants such as tulp and ink berries (*Cestrum*).

Do have activated charcoal on the farm as the antidote for tulip poisoning! Toxic plants are sometimes eaten by young animals that do not know these plants. Be aware of this situation and know where these plants are growing on the farm.

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

www.landbou.com

Vra vir Faffa

Klik op Indeks van antwoorde

Klik op Beeste of Skape

Klik op Vergiftigings

Klik op die Opskrifte

Every month there are reports of urea poisoning. Be aware when feeding this product that the correct concentration is used and that the lick does not get wet!

A few cases of Lantana-poisoning were reported.

Research are being done to control Lantana:

We would like to investigate involvement of your readers and yourself in the development of a National Programme for Management of Lantana similar to the attached National Programme for Management of Parthenium. Our focus would be on the biological control of the species, however, farmers, landowners and communities would be interested in an integrated approach to the management of the species. Please do bear in mind that the rust-fungus will unfortunately not be a 'silver-bullet' as it is likely to impact some subspecies more than others and work better in some micro-climates than others..

Please can we consider how your readers would be able to contribute to the development of a National Programme? One element would be accurate mapping of the distribution of Lantana. If readers could be encouraged to report locations of Lantana then a more comprehensive map of its distribution would be feasible (we need to make sure that this is done in a co-ordinated fashion and using technology that allows for accuracy and ease of data collection (smart phone application to geographically referenced database – which would need to be set up and managed).

Encouraging readers to give input into a National Programme would result in greater support for its implementation. We would need to make sure that this is not too tedious a process.

Encouraging readers to be aware of the biological control agents that are out there already would also be useful. Again this could be reported using photographs and submitting these to a central database.

It would also be good if we could have landowners who would be willing to have 'biological control reserves' on their property. This would mean setting aside land that is infested by Lantana and ensuring that it is not cleared for any reason. The biological control agents would then be allowed to multiply in this area under the 'protection' of the landowner.

I write on behalf of Biological Control researchers at the Agricultural Research Council – Plant Protection Research Institute and at the Centre for Biological Control at Rhodes University.

http://www.ru.ac.za/centreforbiologicalcontrol/

Philip Ivey [mailto:P.Ivey@ru.ac.za]

Nutritional deficiencies

The following nutritional deficiencies were reported by practices in the provinces:

Deficiencies	MP	G	L	NW	FS	KZN	EC	wc	NC
Energy	х			х	х		х	х	х
Protein	х	х		х	х		х		х
Phosphate					х				х
Calcium					х			х	

Nutritional deficiencies were reported. It is important that Ewes and cows receive sufficient supplementation so as to have optimal colostrum quality for their offspring!

Drought conditions are present in many areas!

Livestock production during drought - guidelines

HO de Waal dewaalho@ufs.ac.za

In large parts of the central interior available grazing material is scare on veld (natural pasture). Prospects for improvement of the poor grazing conditions in the remaining part of summer and winter are not favourable. In addition to current poor grazing conditions, low levels of water in the soil during spring and early summer will also have a negative effect on veld production and livestock. Crops are already affected negatively and therefore crop residues which are usually used as livestock feed will also not be readily available. The current prevailing situation is not good, but can be managed and the following guidelines may help to prevent mortalities and reduce financial losses:

- Ensure that cash flow is maintained judiciously.
- Safeguard the core breeding livestock. Income must be generated again by these females after the drought.
- Where still possible, provide strategic supplementary feeding on veld.

- Reduce the number of livestock that are dependent on feed sources on the farm by selling surplus animal or by temporary removing them from the veld to a kraal or planted pasture.
- Restrict movement of livestock by confining them to small paddocks with shade trees or other protection from the elements. This provides better control over the quantities of feed provided daily to the animals.
- Ensure that all animals have freely access to clean drinking water.
- Separate the stronger and weaker animals to reduce competition at the feed troughs.
- Prevent thin livestock, especially cattle becoming too emaciated because of poor feeding conditions and lie down.
- Do not feed animals ad lib. over a long period. Ration the feed according to the required production levels, for example survival or maintenance (maintain body mass) or lactation.
- Do not waste feed by throwing it on the ground use appropriate feed troughs or conveyor belts.
- Provide the rationed feeds every second or third day. Most animals will receive enough feed. It will also reduce competition at the feed troughs.

What can be fed?

The basis for ruminants is roughage, be it on the veld or in the trough. Coarsely ground roughage is always better utilised (less waste) than in the long form. The energy content can be increased with an appropriate source (e.g. ground maize) and balanced with an appropriate crude protein source. The intake of minerals is then balanced according to the requirements of the animals.

- Feed pellets are merely convenient (transport, handling, less waste) but coarsely ground roughage and properly balanced(discussed above) can adequately meet the requirements of animals.
- Restrict the daily intake of salt (NaCl) for sheep to 5-10 g and cattle to 50-60 g.

Core herds/flocks

- Herds/flocks must be grouped according to age and production status. Determine pregnancy in cattle as soon as possible after the current mating season. With sheep and goats, females can be scanned to determine if they carry twins/triplets to adjust their nutrition level.
- In addition to pregnancy, the condition of teeth must also be assessed, especially for older cows and ewes/does. Pregnant cows must still be able to graze until the next calving and specifically be able to wean the unborn calf. Females with worn teeth can still complete their production in a kraal, but this will have a price tag.
- Create an inventory of all available veld and other feed sources. This information is needed to determine the number of animals that can be maintained until after well into the next summer.

- Reduce the number of animals dependent on the feed sources by marketing surplus animals or remove them temporarily from the veld. Note the reproduction record and weaning mass of the progeny of females. In each age class the less productive animals must be culled.
- The principle of "cutting-your-losses" applies and all expenses must be weighed and discounted against expected income over the short to medium term. Caution to sell younger breeding animals at a premium because they are in good condition and pregnant.
- Seek veterinary advice regarding any changes in the internal and external parasite control. General The situation of farmers differ seek professional advice for assistance with strategic planning. When grazing material on veld is scare licks will not help often too much supplementary feeding is provided under such conditions on veld. Determine timely when to remove animals from veld and feed them strategically in small paddocks. Plant material may still be available along roads and can be cut and baled. The cladodes of spineless cactus pears can also be used as a good feed source whole cladodes for cattle and coarsely chopped for sheep and goats. During droughts we cannot be too choosy about the quality of feed sources which can mean the difference between life and death of livestock. If poor quality roughage such as veld grass hay or crop residues or cactus pear cladodes are available, animal nutritionists can use it as basis to formulate diets to meet the minimum requirements of livestock.

The ruminant

The plant material selected during drought on poor and dry veld contains little crude protein. The digestive system of ruminants and the symbiosis with microbes in the reticulo-rumen offer opportunity to supplement crude protein with a non-protein nitrogen (NPN) source such as feed grade urea. The microbes in the reticulo-rumen break cellulose (fibre) down and produce new nutrients (volatile fatty acids and microbial protein). The complex four compartment "stomach" develop gradually from the suckling phase (basically still monogastric) to that of a physiological mature ruminant. In younger calves and lambs/kids the reticulo-rumen is still in the process of developing. Therefore, it is better to use natural and higher quality protein sources instead of NPN; bypass protein may also be supplied strategically.

Supplementary feeding (licks)

It is important to address some critical questions regarding a supplementary feeding programme:

• What is the aim with the supplementation? Must protein, energy, a combination of protein and energy, or minerals be supplemented? Should animals gain in condition or must dry animals maintain mass (maintenance) or must lactation be supported? Animals in different production phases thus require specific types and quantities of strategic supplementary feeding.

- How can the aim be achieved best? Have the less productive animals been removed to make all grazing available for the remaining livestock? This option is still not used to the best advantage and can make a great contribution to improve the efficacy and also lower the cost of supplementary feeding to the remaining animals.
- Can it be ascertained whether the aim has been reached? Most well-intended programmes to improve animal performance fail in this regard, because the recommended level of supplementation is seldom achieved. Intake of supplementary feeding varies and is affected by feeding space (number of animals/troughs), access to troughs (dominance between animals), level of supplementation and how often the troughs are filled.
- Unless the provision of supplementary feeding is managed, some animals will consume too much while others ingest too little to benefit at all.
- Do not feed animals aimlessly on veld.
- A range of products are available; seek advice from a professional animal nutritionist regarding the options and products to be considered.
- Animals may lose body mass in moderation (10-15%), but then it must take place over a relatively long period and under control of judicious nutrition management.

Veld fires

- Runaway veld fires or accidental fires can change the current precarious drought situation into a real crisis. An area where veld has burnt is practically in a disaster drought situation.
- Make effective fire breaks, especially along roads, around dwellings and ash dumps. Roads are not good fire breaks because the road surface is smooth and embers are easily blown over it by strong wind. Fire also spread easily through culverts.
- Veld fires suppress grass production for about two seasons. Therefore, veld must rest at least one growing season after an accidental fire and at least one growing season before a planned burning of the veld. In closing Production and reproduction of cattle are usually affected by drought and the get ill easier; the extent will depend on the severity of the drought conditions. Lactating cows, late pregnant heifers and weaners are the most vulnerable because of higher nutrient requirements. A good understanding of these factors is needed for a cost effective management strategy to mitigate the effects of drought on animal production, reproduction and health.

The following general aspects of management may be considered for beef cattle:

- Determine pregnancy of cows and heifers as soon as possible (8 weeks for cows and 6 weeks for heifers) after the bulls have been removed. Non-pregnant animals are identified for culling and the stage of pregnancy (early, mid and late conception) relative to mating determined.
- This information and body condition can be used to identify cows that may benefit from early weaning and/or strategic supplementation as well as those to be sold. Informed decision making create opportunity to lessen the effects of a drought.
- Sheep/goat production can benefit from early weaning of lamb/kids the ewes/does can be fed at lower maintenance levels and lambs/kids finished in a feedlot.
- Animal health starts at the mouth; good nutrition is the basis of healthy animals and production. Changes in management may require adjustments in the programme for the prevention of diseases (inoculation). Remember, inoculation is a simple action (an injection), while creating immunity is a more complex process in animals which requires protein (amino acids in the diet) to produce the antibodies. During droughts and dry seasons the protein content of veld is generally low. Timely inoculation may be considered to ensure the development of better immunity.
- Drastic changes in management such as restricting animals in kraals increases stress and susceptibility for diseases. The incidence of opportunistic diseases may increase and require inoculation which is usually required. Specific local conditions and circumstances will dictate any changes in inoculation as well as external and internal parasite control programmes. Discuss any possible changes in the animal health and disease control programme with your veterinarian.
- Vitamin status must be evaluated and supplemented. We wish you success with the livestock enterprise.

Prof. HO de Waal Pr. Sci. Nat., Anim. Sci. [401721/83] Department of Animal, Wildlife and Grassland Sciences (70) University of the Free State PO Box 339 Bloemfontein South Africa

Vir die Afrikaanse weergawe:

https://www.netwerk24.com/Landbou/Search?query=Veeproduksie+tydens+droogte&ex=1

Maak voorsiening vir droogtes

Vraag

Wat kan ons uit huidige droogte leer wat ons slimmer en meer voorbereid maak vir die volgende een wat kom?

Antwoord

- Die natuurverskynsel van droogte kom siklies en gereeld in Suid-Afrika voor en kan verwag en dus voor beplan word om te sorg dat die nadelige effek daarvan so min as moontlik is.
- Hierdie opmerkings is op tipiese seisoenale en eenjarige droogtes van toepassing, daar waar ons kan sorg dat ons broek nie tot op ons knieë sak nie – soms is die droogtes meer jare agtermekaar en ons kan nie effektief daarvoor voorberei nie.
- Daar is nie 'n kortpad of wondermiddel nie, diere het daagliks 'n minimum hoeveelheid verteerbare energie nodig om te oorleef (onderhoud) en addisionele energie om te kan produseer – addisionele voer moet dus verskaf word of die getal diere moet verminder word om met beskikbare voer hierdie energie te kan verskaf.
- Die herkouer beskik oor 'n unieke verteringstelsel van mikrobevertering en hersirkulasie van stikstof en is in staat om energie uit laegraadse ruvoer (vesel) te ontsluit hierdie eienskap moet maksimaal benut word deur ook die regte aanvulling (stikstof of proteïen) te verskaf.
- Daar is tye van oorvloed en goedkoop voer wanneer ruvoer oor tyd opgeberg moet word en opgeberg moet bly, selfs in tye van gunstige klimaatsomstandighede – ten minste 3 maande se gebruik moet so opgeberg word en beskikbaar bly.
- Die hoeveelheid ruvoer wat nodig is om aan die onderhoudsbehoefte van beeste te voldoen, is 10kg ruvoer per GVE (grootvee-eenhede; 450kg LM) per dag dit beteken 100 ton voer (±400 ronde bale van ±250kg elk) vir 100 dae vir 100 GVE'e.
- Hierdie bale moet verkieslik in miedens van 50 ten minste 20m weg van mekaar af, gepak word om die risiko van brand te verlaag.
- 'n Veiliger keuse om 'n voorraad voer vir sporadiese droogtes op te berg en wat nie 'n brandgevaar inhou nie, is kuilvoer in een of ander vorm – om droogtevoer vir 100 GVE'e vir 100 dae in die vorm van mieliekuilvoer op te berg, sal ±160 ton nat kuilvoer nodig wees wat teen 16kg per dag per GVE verskaf moet word.
- Saam met hierdie ruvoer of kuilvoer kan goeie kwaliteit hoendermis (droë braaikuikenmis) opgeberg word, wat hoogs effektief en ekonomies as droogtevoer aangewend kan word – onthou om die diere teen botulisme of lamsiekte in te ent (ten minste twee keer en ten minste twee weke uit mekaar).
- Indien hoendermis ook gebruik word, kan 50% van die 10kg ruvoer per dag en 10% van die 16kg kuilvoer met hoendermis vervang word om 'n onderhoudsvoer te maak – hier sal die hoendermis as stikstofbron dien om beide die ruvoer en kuilvoer se tekort aan stikstof aan te vul en die energie te ontsluit – die minimum lek, indien enige, sal dan ook nodig wees.

Geskryf deur: Dr. Kobus Swart, PhD; Pr. Sci. Nat, Dierevoeding. (kobus@mixcure.co.za)
www.mixcure.co.za

Micro-nutritional and vitamin deficiencies

The following micro-nutritional deficiencies and vitamins were reported by practices in the provinces:

Deficiencies	MP	O	L	NW	FS	KZN	EC	WC	NC

Iodine						
Copper				х		
Zinc					х	
Selenium			х			х
Magnesium				х		
Manganese						
Vitamin A		х	X		х	
Vitamin B 1					х	

There are antagonists such as calcium, iron and sulphur which hamper the uptake of micro-minerals. Have water and soil samples analysed to see what the levels of these antagonists are. Arrange with your veterinarian to have liver samples analysed to determine the status of these micro-minerals in your herd or flock.

Selenium is a powerful anti-oxidant and necessary for immunity. Check the status of the herd.

Beware of fluoride poisoning as borehole water levels drop.

Supplement animals with vitamin A during winter and drought conditions.

Multifactorial diseases and other conditions

The following conditions were reported by practices in the provinces

Multifactorial diseases and other conditions	MP	G	L	NW	FS	KZN	EC	wc	NC
Abortions	х			х	х			х	х
Stillbirths	х				х			х	
Abscesses	х	х		х	х	х	х	х	
Intestinal ulcers									
Bladder stones –urolithiasis					х				
Blindness	х				х		х		Х
Bloat	х				х	х		х	х

Blue udder	Х	х			х		х	х	
Diarrhoea	х	х	х	х	х	х		х	х
Epididymitis					х			х	
Eye cancer	х				х		х	х	
Eye infections	х			х	х	х		х	х
Joint ill	х				х	х	х		
Lameness/foot problems	х	х		х	х	х	х	х	
Lung infection	х				х	х	х	х	х
Mastitis	х				х	х		х	
Navel ill	х				х		х	х	
Umbilical hernia									
Red gut (sheep, torsion of gut)									
Rectal prolaps									
Rumen stasis									
Swelsiekte									
Traumatic reticulo-pericarditis	х							х	х
Trauma								х	х
Teeth wear									
Plastic bags (ingestion)									
Downer		х			Х		х	х	х
Anaphylactic shock									
Vestibular syndrome (middle ear infection)									
			<u> </u>	·		·	·	1	·

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

The cause of abortions should be established: brucellosis, enzootic abortion, Q-fever, leptospirosis, etc. The necessary preventative measures can then be taken.

Pneumonia and lameness (foot conditions) are wide spread.

Metabolic diseases

The following diseases were reported by practices in the provinces:

Metabolic diseases	MP	G	L	NW	FS	KZN	EC	wc	NC
Acidosis	х	х	х		х	х		х	
Displaced abomasum						х			
Ketosis (Domsiekte)					х	х	х		х
Milk fever					х	х		х	

Make sure that you adapt animals to feed containing concentrates as more and more cases of acidosis are reported when grazing animals on harvested maize fields.

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)	х	х		х	х	х	х	х	х
Endometritis								х	
Hydrops									
Metritis	х			х	х		х	х	
Poor conception	х			х	х	х	х	х	
Retained afterbirth	х			х	х	х		х	
Sheath prolaps	х				х	х			
Uterine prolaps	х			х	х	х		х	х
Vaginal prolaps	х	х			Х	х	х	х	

Penis injury					
Orchitis					

A poor conception rate on many farms is a huge issue. Visit your veterinarian to rectify this problem.

Environmental conditions

	MP	G	L	NW	FS	KZN	EC	WC	NC
Exposure to cold						х			
Frozen to death									
Heat stress					х	х		х	
Lightning	х				х	х	х		
Electrocution									
Drought		х					х	х	х

Other conditions

	MP	G	L	NW	FS	KZN	EC	WC	NC
Drug residues (milk, meat, liver, kidney etc)									
Preditors	х				х				
Theft		х		х	х				
Trauma (fractures etc)	х	х	х			х		х	
Trauma (veldfires)									

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 biannually 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

Bathurst - Dr. Jane Pistorius

Cape Town - Dr. Sophette Gers

Kaapmuiden – Dr. Silke Pfitzer

Kuruman - Dr.Lea Shuda

Lichtenburg – Dr. Nelmarie Rall

Nigel - Cindy van der Westhuizen

Pretoria – Dr. Emily Mitchell

Stellenbosch (Elsenburg) – Dr. Annelie Cloete

Tulbagh – Dr. Dirk Trigaardt

Tzaneen – Drs. Van Der Berg and Cordier

Vaalwater – Dr. Annemieke Müller

Vanderbijlpark – Dr. Kobus Kok

Vryburg – Dr. Jurie Kritzinger

Wellington - Dr. William van Zyl

Ostriches

Western Cape

Oudtshoorn

Tapeworms	2
Red gut	2 Clostridium perfringens, heat leads to varibale feed intake and clostridial overgrowth
E. coli	3 Diarrhoea, high nutrient spill over into caeca and large intestines – overgrowth <i>Clostridium</i> and normal flora. Poor antibiotic selection – <i>E. coli</i> overgrowth

Equines

Northern Cape

Colesberg

Rhodococcus pneumonia – Foals Biliary – horses Coital exanthema – Few race horses

Game

Gauteng

Pretoria

Intestinal roundworms – 1 Resistant roundworms – 2 Selenium deficiency – 1 Dystocia – 1 Opthalmia – 1

North West

Lameness - 1

Klerksdorp

Intestinal roundworms - 1

Free State

Vrede

Rabies – Meerkat

Western Cape

Oudtshoorn

Coccidiosis - 2

Swine

Gauteng

Onderstepoort

Abscess - 1

Monthly report on Livestock and Wildlife isolations for December 2018 from Vetdiagnostix – Microbiology Laboratory, supplied by dr. Marijke Henton

(henton@vetdx.co.za)

December was a quiet month, after a very busy year, and there is little of interest to report this month.

It is generally difficult to make a positive diagnosis in abortion cases, but there were two in cattle this month. One was due to *Campylobacter fetus*, and the other, *Salmonella* Dublin. *Salmonella* Dublin is carried by cattle, often after calfhood infection, and the abortion caused by it is usually unexpected. Proper vaccination of the whole herd usually controls it well.

Another unexpected finding was a case of gangrenous myositis due to Clostridium sordellii.

Trueperella pyogenes was associated with arthritis in one case, and pneumonia in another. Klebsiella pneumoniae caused mastitis in a cow where the milking shed abutted onto the horse stables. Klebsiella infections are often associated with wood shavings. The horses were kept on shavings, which had spread into the shed.

Enteritis in calves was mostly caused by *E. coli* [12] together with *Cryptosporidium* in one case. The same was true for lambs; *E. coli* [8] and *Cryptosporidium* [1]. It is very difficult to see *Cryptosporidium* on direct smears in cases where Halocur is used on the farm. Halocur damages Cryptosporidium, so that the usual typical shape can't be seen when stained. The RuVASA guidelines for diagnosis should be followed. Histopathology on intestinal samples is the gold standard.

E. coli associated with ruminant enteritis are usually MDR or XDR strains [MDR – Multiple Drug Resistance is defined as being resistant to 3 or more classes of antibiotics. XDR – Extreme Drug Resistance is defined as being resistant to all suitable antibiotics for that condition in that type of animal] because many antibiotics have been used before samples are submitted to a laboratory. Both MDR and XDR strains can be a zoonotic threat.

Mannheimia haemolytica caused septicaemia in a sheep.

Pneumonia in pigs was caused by Bordetella bronchiseptica [1] and Pseudomonas sp. [1].

Feedlot report received from Drs. Shaun Morris and Eben du Preez for December 2018 (edupreez1@telkomsa.net)

Condition	Comments and Specie
Wireworm	O 3
	Especially in poor condition sheep
Lumpy skin disease	В 3

	Severe infection
Drought	B 3 Calves in poor condition
	from drought areas

Monthly report for December 2018 from Dr R D Last (BVSc; M.Med.Vet(Path); MRCVS)

Specialist Veterinary Pathologist, Vetdiagnostix - Veterinary Pathology Services

LIVESTOCK DISEASE SURVEILANCE			
		NO.	
LIVESTOCK SPECIES	DISEASE AGENT	CASES	LOCATION
Bovine, Calf	Pasteurella multocida	1	Dundee, KZN

WILDLIFE DISEASE SURVEILANCE				
WILDLIFE SPECIES	DISEASE AGENT	NO. CASES	LOCATION	
Springbok, Juvenile	Thymic hemorrhage (rodenticide?)	1	Krugersdorp, Gauteng	
Buffalo, calf	Coccidiosis	1	Grahamstown, E. Cape	
Green turtle, Adult	Spirorchidosis (blood fluke)	1	Durban, KZN	
Albino Shellless turtle	Nannizziopsiaceae spp fungal shell infection	1	Dubai	

Monthly report on Livestock and Wildlife isolations for December 2018 from IDEXX Laboratories supplied by dr. Liza du Plessis (<u>Liza-DuPlessis@idexx.com</u>)

Condition	Comments and Specie
Blue ticks	E 2
Bont tick	B, E 1
Red -legged ticks	E 1
Salmonellosis - abortion	B 1

E. coli	B 2
Cryptosporidiosis	B 2
Diarrhoea (bacterial enteritis)	B, O 2
Lungs	B 1
Abortion	B 1
Cardiac glycoside toxicity	B 1
Senecio toxicity	B 1



Section of Pathology Department of Paraclinical Sciences Faculty of Veterinary Science

No report received for December 2019