

as 8 maande in die wintermaande geskied wanneer bosluisgetalle laer en makliker beheerbaar is.

Diere wat met imidokarb (Imizol) behandel was moet nie met Asiatische Rooiwater entstof ingeënt word binne 4 maande nadat hulle behandel is nie. So moet diere ook nie binne 2 maande nadat hulle met diminazene (Berenil) behandel is, geënt word nie. Die middels sal die infeksie vir hierdie onderskeie periodes steriliseer en voorkom dat die diere immuniseer. Wanneer die diere geimmuniseer het, sal die middels egter nie die siekte "steriliseer" soos wat algemeen aanvaar word nie. Die dier se immunitet kan nie gesteriliseer word nie en slegs toestande wat die dier se immuunstelsel affekteer kan veroorsaak dat die diere weer vatbaar raak vir die siekte.

Behandeling van Rooiwater

Middels wat effektiief is om Rooiwater te behandel is middels wat diminazene soos bv Berenil en imidokarb soos bv Imizol bevat. Die sukses van behandeling word egter bepaal hoe vroeg in die verloop van die siekte die diere behandel word. Die prognose van die siekte in diere met gevorderde Rooiwater raak swakker en kan intensiewe behandeling deur die veearts nodig wees om die diere te red. Selfs met intensiewe behandeling kan die prognose steeds laag wees. In die geval van 'n uitbreek van Rooiwater in 'n vatbare kudde moet die hele kudde met Imizol of Berenil geblok word deur die diere met die aanbeveelde dosis soos op die pamflet van die produkte aangedui, te behandel. Boere wat halwe of kwart dosisse van Berenil gebruik om hulle diere te blok loop die risiko dat die Rooiwater parasiete weerstand teen die middel sal ontwikkel en sal dit oor 'n periode nie meer suksesvol wees om die siekte te behandel nie.

Verwysings

- 1) Infectious diseases of Livestock with special references to Southern Africa: J.A.W Coetzer, G.R Thompson en R.C Tustin Vol. 1



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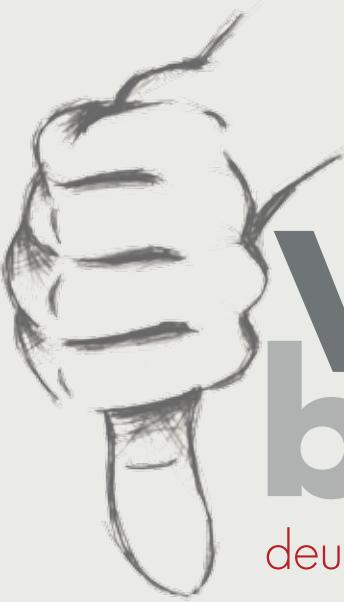
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- CORNELIS RAUTENBACH
Nonnie Tuli Stoet

Verkeerde besluite

deur beesboere gemaak ten opsigte van onnodige kostes tyd, frustrasies en verliese

1. VEEHANTERINGS GERIEWE

- * By die meeste veeposte waar ek al gebrandmerk het, draai 'n vers of twee gewoonlik om in die gang en veroorsaak dat alles wat in die gang staan weer die proses moet herhaal. Gange moet nie 680mm tot 700mm oorskry nie afhangend die grootte van die ras waarmee jy boer.

Die regte opsie sal wees om 'n aparte drukgang vir kalwers te hê, of aan die eenkant van die gang moet die pype na binne verstel kan word om die gang te vernou vir die jonger diere.

- * Baie beeste is onnodig dood met onoplettendheid. Sommige nekklampe word verkeerd vervaardig. Daar is baie gevalle waar beeste tydens die klamp posisie plat gevallen het. Dit kan tydelik of permanent wees afhangende van hoe vinnig die nekklamp oopgemaak word. Beeste het senuwees wat uit die bors in die nek teenwoordig is wat baie sensitief is. Hul is dan verlam en van balans af omdat suurstof na die brein afgesny word. Indien sulke diere nie vinnig herstel om op te staan nie, moet hul geslag word. Dit gebeur ook dat hul onmiddellik kan dood wees.

Om jouself gerus te stel werk liewers voor die toe nekklamp, tensy aan die kop gewerk wil word moet die oë en asemhaling van die dier noukeurig dop gehou word. Sommige nekklampe het weer 'n opening waar 'n bees sy kop of kloutjie kan indruk om gebreek te word.

Werk ook individueel met elke bees om te verhoed dat hul gaan lê of onder die voorste een inkruip om getrap te word.

- * Gebruik genoegsame maar sterk dukwand hekke van 3mm met genoegsame staal sodat nieks sy kop daardeur kan druk nie. Sowel binne en buite krale moet 'n gewone bees behoorlik



Drukgang met tuisgemaakte nekklamp, sonder advies

kan inhoud. Sodoende bly beeste kalm en sny onnodige werkers uit wat 'n lawaai kan maak.

2. **Swak temperamentdiere** is gewoonlik **swak reproduksie diere**. Meestal 'n tipe vroulike dier wat nie gereeld kalf as gevolg van haar hormone wat versteur is.

3. **Vroulike diere** wat verkeerd gebou is word baie waargeneem. Daar is baie redes hiervoor en tekens om voor op te let. Sulke diere se **T.K.P. is baie hoog** of sal ook nooit in haar tyd kalf nie. Skakel my om baie losseerders vroegtydig uit te skakel, veral met 'n kudde besoek. Of sou u sukkel met kalfprobleme weet ek waar die probleem is; met voeding, verse, koeiself, die bul of albei. Dit moet streng en jaarliks geskied deur enige beesboer wat sy kudde wil verbeter.



Daar kan nie aan 3 koeie terselfdertyd gebrandmerk word nie

4. Boere met **goeie rekordhouding** (sonder sentiment) kan wel van dié diere vroegtydig sonder die oog uitskakel. Daarvoor moet 'n jaar en volg nommer op elke bees gebrand word. Oorplate is tydelik, net 'n mors van geld. Om diere te identifiseer wat permanent is, is ook 'n stap verder om jou saak tydens diefstal te staaf.
5. **Boere tel gewoonlik** die koeie, maar nooit hul kalwers wat saamloop nie. 'n Toenemende tendens deur veediewe is om kalwers so vroeg moontlik van moeders te verwijder en aan hul eie tipe melkbees saam met haar kalf te laat soog.
6. **Tatoëring** is 'n moet, maar nie sigbaar van 'n afstand nie. Ek stel voor om die klein kalwers met 'n kleiner, fyner brandyster met 'n letsel te laat, wat slegs 'n kwart van 'n sekonde duur. Die nodigheid daarvan word bepaal deur die area waarin jy boer.
7. Selfvervaardigde brandysters en verhittings toestelle kan jouself baie duur te staan kom. Met die gebruik van kits toestelle wat vinnig en maklik klink kan die **brandmerk** verdwyn of met die verkeerde ontwerp daarvan, diere waarnem waar al die hare afwesig is. Veediewe sien dit dadelik raak om sulke diere te onderskep.
8. **Doen afstand van modes en giere.** Gewoonlik maak prulfoute jou dan blind. Verkies eerder 'n liger kalf teenoor 'n dooie groot kalf met geboorte. Teel met bulle wat se moeders self kon kalf en in 'n goeie kondisie is en bly na kalwing. Waak teen platsydigheid op bulle en koeie. Sulke diere het nie 'n sprong van rib en sal altyd in 'n swakker kondisie bly. In 'n voerkraal presteer hul ook swakker. Sodra jy sonder lekke wil begin boer sal platsydige

beeste soveel te meer uitsak. Met 'n swak konstitusie bees sal die herkonsepsie ook baie swak wees.

9. **Die belangrikste is tog om elke jaar 'n kalf van elke koei te kry.** Doen dragtigheid ondersoeke 6-8 weke na dektyd, van verkiekslik nie langer as 3-4 maande nie. Doen semen en Trigomoniase toetse op alle teelbulle vroegtydig voor die dekseisoen begin. Boere redeneer soms dat dit te droog was toe word die bulle teruggehou en daarom kalf sy koeie later en maak dan nog 'n ander dekseisoen. Die gevolg is dat daar eers 6 maande later 'n kalf gaan wees sodat die koeie werklik oorgeslaan het. So het alles 'n tyd soos met planttyd. Doen elke 5 jaar TB en Brucellose toetse. Doen ook 'n inventingsprogram jaarliks op sy tyd met selfs twee inventings van sponsiekste, want dit veroorsaak jaarliks die grootste vrekstes, veral op jonger diere.
10. Verkry altyd **goeie advies.** Woon inligtingsdae en beoordelaarskursusse by sou dit dan van enige ras wees.



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Photo: Wayne Southwood

BULL REPRODUCTIVE SOUNDNESS



- ALEX ASHWOOD

The profitability of a business is highly dependant on efficient reproductive performance and the capacity of fertile bulls to successfully service cows for several seasons.

A deficiency in the bull's breeding ability has a large impact on net income and the costs of production. Using sub fertile bulls leads to lower calving percentages, extended calving intervals, reduced genetic progress and the expense of carrying empty cows. Additionally, cow wastage may increase due to fat cows which can be difficult to get in calf. The impact of these factors are further accentuated if the beef operation relies on a limited breeding season of 60-90 days.

The actual service capacity of a bull is the result of a combination of the reproductive soundness, genetic potential and environmental (eg nutrition, climate, health) factors and the level of herd management. Subsequently, it is not possible to determine the "true" breeding soundness before a bull is used in the herd.

"Breeding soundness evaluations assist in the assessment of bulls"

Both pre and post sale evaluations are necessary to determine the reproductive soundness of bulls. Ongoing assessment is also necessary on an annual basis 60-90 days prior to turning bulls out to allow time to replace ineffective bulls.

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HERITABILITIES

Heritabilities are moderate-high for most of the semen traits (Table 1) and high for testes size and scrotal circumference. This has major implications for bulls with poor semen traits and below average semen testes/scrotum measurements.

TABLE 1: HERITABILITIES OF SEMEN TRAITS AND SCROTAL CIRCUMFERENCE

CHARACTERISTIC	HERITABILITY	
Scrotal Circumference	0.40	0.68
Volume	0.24	0.44
Concentration	0.36	0.52
Mobility	0.31	0.46
No. of sperm	0.38	0.54
No. of sperm/ejaculate	0.49	0.64

Note: Repeatability 0.41 - 0.64 (ie high)

FACTORS AFFECTING REPRODUCTIVE SOUNDNESS

There are 7 main factors which can affect bull fertility and performance. These are:

- o Age of the bull
- o Capability of reproductive organs
- o Semen quality
- o Level of libido
- o Plane of nutrition
- o Structural soundness
- o Environment

AGE OF THE BULL

Puberty is related to age, body weight, testes size and feed management. Increasingly bulls are being purchased at a younger age (18-24 months) with the expectation that they can effectively service cows. Age and bodyweight at puberty can vary across bulls but scrotal circumference at puberty remains relatively constant.

Bulls exhibit sexual interest about 3 weeks prior to puberty and attain mating ability about 6-8 weeks after puberty. Certainly young bulls can breed but reproductive efficiency increases up to maturity.

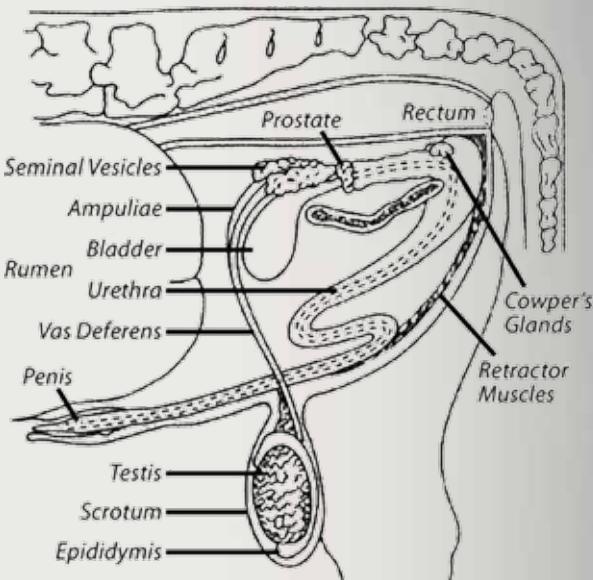
Producers may believe that after a successful season that bulls are of sound breeding value for the next season. Unfortunately this can be incorrect. Mature bulls that do not settle their share of cows in a prescribed breeding period are contributing to reproductive inefficiency. Subsequently a breeding soundness examination should be carried out annually to ensure that the bull is basically sound.

REPRODUCTIVE SYSTEM

Figure 1 illustrates the various parts of the bulls

reproductive tract. Sperm is produced continuously by the testes and stored in the epididymis. The prostate gland, seminal vesicles and cowpeas gland secrete the fluid component of the semen. The seminal fluid contains substrates, buffers, inorganic ions (sodium, chlorine, calcium etc) and proteins. These proteins (known as fertility associated antigens) are particularly important since they bind to certain compounds in the female tract that increased the chances of fertilisation. Factors that affect the quality of sperm cells also impact on the efficacy of the seminal fluid.

Figure 1: the reproductive tract of the bull



The scrotum supports and encloses the testes. Its main function is to regulate testicular temperature through perspiration and muscular contraction that raises the testicles in cold weather and relaxation that lowers them in warm weather.

Inside the scrotum (Fig 1) and attached to each testicle is the epididymis, a 3 metre long tightly coiled tube made up of three sections (head, body, tail). The functions of the epididymis are concentration, storage, maturation and transportation of sperm cells. Immature sperm cells are immobile when they enter the epididymis and become mobile after maturation.

TESTICLE SIZE AND CONSISTENCY

Testicular consistency refers to the firmness and resilience (or springiness) of the testicles and is a reasonable indicator of testicle function and semen quality. Soft testicles with low resilience are associated with high percentage of abnormal sperm and low reproductive performance. Normal testicle function and good semen quality are indicated by firm testicles with high resilience (tendency and return to normal shape after squeezing) Table 2.

TABLE 2: testicular consistency score

SCORE	FEATURE
1	Very firm
2	Firm
3	Moderate
4	Soft
5	Very soft

Bulls with testicle consistency scores of 2 or 3 generally produce good quality semen. Bulls with 4 or 5 scores are likely to produce poor quality semen. Bulls with very firm testicles (hard) may have suffered fibrosis and may have unsatisfactory semen.

Testicle size is the main factor determining the number of semen and volume of ejaculate. Since testicular development in bulls is a highly heritable characteristic (0.68) it is important to monitor the testicular development of bulls.

SCROTAL CONFORMATION

Scrotal circumference is the most accurate indicator of testicle size and its measurement is directly related to the total mass of sperm producing tissue, sperm cell normality, the onset of puberty in bulls and the fertility of female progeny. Table 3 shows the average scrotal circumference of Brahman bulls at various ages.

TABLE 3: comparison by age of average scrotal circumference (cms) FOR pasture fed brahman bulls (personal communication., i tucker, qld)

MONTHS			
18 - 23	24 - 26	27 - 30	31 - 36
28 - 30	32	34	36

Note:

- (i) Several factors affect scrotal size (SS) measurements (eg nutrition, growth, environment).
- (ii) Where available use SS-EBVs in preference to raw SS scores
- (iii) Scrotal size can be 3 - 6 cms higher when bulls are fed concentrate rations

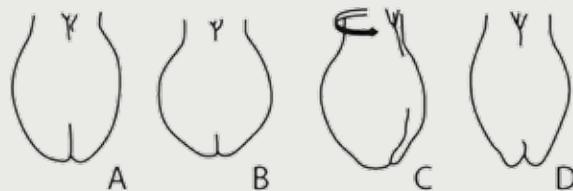
The appearance of the scrotum and its contents can vary widely (Figs 2 & 3). Lateral rotation of the testicular axis (Fig 2c) & incomplete separation of the scrotal septum (Fig 2d) whilst not functionally important often raise discussion amongst producers.

“Major faults and abnormalities reduce fertility”

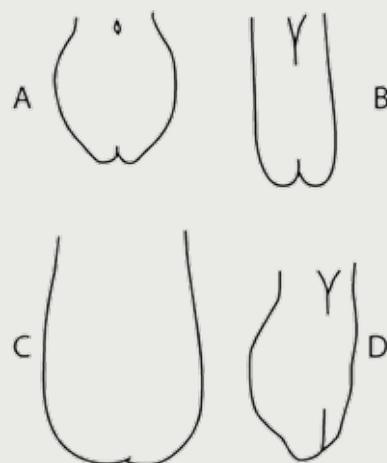
Bulls with their testes close to the body (Fig 3a) should receive fertility checks whilst excessive

elongation of the testes can result in serious injuries. Testicular bilateral hypoplasia (Fig 3b) (underdevelopment) with testes 1/2 - 1/3 normal size reduces fertility and is highly heritable and is subsequently not tolerated in bull selection. Fig 3d shows the underdevelopment of one testicle (unilateral hypoplasia)

Scrotal hernias (Fig 3c) are not common but easily diagnosed. This condition is heritable and these bulls should not be selected for breeding.

Figure 2:

Scrotal conformation: (a) normal (elongated), (b) Normal (round), (c) north-south, and (d) Y-balls/ cleavage.

Figure 3:

Scrotal confirmation: (a) cold bath scrotum, (b) bilateral hypoplasia, (c) scrotal hernia, (d) unilateral hypoplasia

PENIS AND PREPUCE

The penis and prepuce should be examined for any sores, lacerations, abscesses, scar tissue or adhesions. Penile hair rings and penile deviations and persistent frenulum (tied back penis) are occasionally found (Fig 4 & 5).

Spiral deviation, where the penis is twisted instead of straight is the most common structural fault of the penis. Bulls with this defect produce fewer pregnancies than normal bulls. Bulls may show spiral deviations when using a electro ejaculator which will not normally occur at matings.

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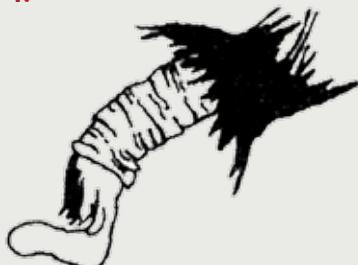
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A persistent frenulum is a heritable condition in which the tip of the penis remains attached to the sheath and cannot be extended. It can be surgically corrected.

Figure 4:



Persistent frenulum

TABLE 4: bull breeding soundness evaluation

MOTILITY - MIN IS 30% (PREFERABLY 60 - 70%)	
Rapid swirling >70%	Very good
Slower swirling 50 - 69%	Satisfactory
Generalised oscillation 30 - 49%	Fair
Sporadic oscillation <30%	Poor

An external examination involves the palpation of the testes, epididymis and scrotum. The upper portion of the epididymis should be soft pliable and free from any lumps or enlargements.

SEmen QUALITY

Sperm cell concentration, motility and morphology evaluations are the basis of scoring semen (Table 4).

- Concentration (the number of normal sperm cells present in each cc of ejaculate) and volume (the number of cc's of ejaculate) represent the total seminal output. Some bulls do not respond well to electrical stimulus and the collection can be inconclusive

- Motility of individual sperm is an important factor in determining the breeding soundness of bulls. Whilst >30 per cent motility is the acceptable standard (Society of Theriogenology), the figure of 60-70 per cent provides a more confident value since active moving sperm cells are essential for fertilisation. Semen with high motility has vigorous swirls whilst poor activity represents limited motility.

- Morphology or the shape of the sperm cells is important since normal cells are necessary for fertilisation. Minimal values are set at 70-75 per cent normal with abnormal cells less than 25 per cent. Sperm cell abnormalities can either be primary or secondary conditions.

- Colour is also an indication of semen quality. The

semen should be milky-creamy in appearance and free from contaminants such as blood, pus or urine.

Semen tests for young bulls may be inconclusive and subsequently not totally reliable indicator of semen quality. Semen quality improves dramatically up to 4 months following puberty and bull maturity (4-6 years).

"Semen quality tests are important snapshots at a particular point of time"

Semen quality tests need to be considered in conjunction with other aspects of breeding soundness examinations, ie visual assessment of mounting, internal and external examination and monitoring pregnancies.

Unless there is trauma, fever, stress or inflammation, testes function is relatively stable. Where function is compromised, semen quality may be affected immediately and subject to the degree of damage may persist for several months.

LIBIDO (MATING ABILITY)

Libido, or sex drive, is important in the bulls ability to service a large number of cows. There is no practical way to estimate a bulls potential mating ability except to observe the bull servicing cows.

"Up to 20 per cent of reproductive failures are due to low mating ability"

Semen production, scrotal size or hormone levels do not relate well to mating performance. It is possible to get good semen bulls with a low desire to mate and vice versa.

Irrespective of whether formal evaluation tests are conducted for reproductive soundness, producers would be wise to test a new bull with a group of females (ie trial group post sale). These observations should be supported by heat observations and monitoring and pregnancy testing.

NUTRITION

Nutrition is important for the development and maintenance of the reproductive system. Balanced rations (ie energy, protein, fibre, minerals) are necessary for semen health, semen production and physical activity.

"Feeding practices can have a profound effect on reproductive performance"

Underfeeding causes delays in puberty of young bulls and reduced libido and sperm quality of mature bulls. Overfeeding, on the other hand, can

cause irreversible testicular damage & low libido. Excessive fat deposits in the scrotum interferes with temperature regulation although the degree of fatness to cause deteterious effects is yet to be fully determined. Studies in Canada have shown that high carbohydrate diets with low levels of exercise reduces the fertility of bulls. The study showed that bulls with 4mm of fat compared to 10mm had 60 per cent more sperm cells and also had higher quality semen.

“Young bulls should be well grown but not in a fat condition”

Fertility can be negatively affected by certain feedstuffs (eg excessive gossypol from white cotton). Certainly cottonseed byproducts can be fed to bulls but they should be fed at low to moderate rates (ie 1-2kg/day for a limited period of time (3-4 months). Fertilisers (eg MAP/DAP) are not recommended for cattle feeding as a source of phosphorus due to the presence of heavy metals. The presence of cadmium has also been shown to produce adverse effects on sperm quality. Apparently the toxic effect induces membrane impairment, lower maturity and reduced fertility.

High levels of soluble carbohydrates (eg fast grains) greatly affects the breeding soundness of bulls. It is suggested that producers when obtaining a bull acquire information on the type of diet & level of feeding.

In addition to balanced intakes of protein and energy (ie energy to protein ratio), adequate intakes of mineral (trace and macro) are necessary for reproductive performance eg zinc deficiency causes lower fertility due to reduced sperm quality. Selenium deficiency in bulls decreases the development and maturation process for sperm (spermatogenesis). Calcium and phosphorus are necessary for skeletal development and the latter essential for efficient metabolism of feed nutrients. Zinc, copper and manganese are also needed for skeletal development and hoof integrity for walking and mounting.

The administration of trace minerals and inclusion of key macro minerals can stimulate mineral dependent reproductive process where there are mineral deficiencies in certain diets and environments.

The best approach to mineral supplementation is to determine the levels of intake & potential shortfalls then provide strategically timed intakes of balanced mineral supplements prior to the breeding season. Imbalances of minerals or excessive levels of intake have an antagonistic effect eg zinc and copper become antagonistic if

either mineral is oversupplied and extreme ratios of phosphorus and calcium can limit the absorption of these minerals.

Exercise is important for bulls fed on high grain-low fibre diets. Physical activity strengthens the feet, legs & back ie physical attributes essential for walking and servicing cows. Prolonged periods of lying down also negatively impact on semen quality.

STRUCTURAL SOUNDNESS

The bull needs to be able to effectively source and service females and any factor that reduces walking and mounting ability impacts negatively on the bulls breeding performance.

The structural soundness of feet and legs is paramount if the bulls are expected to seek and service cows. Structural defects of feet and legs can seriously impact on mating ability and longevity of the bull. A conformation problem commonly associated with poor breeding performance is extreme straightness of the rear legs. A moderate angle in the hock is necessary for the bull to thrust properly after mounting. Proper angulation in the leg joints also helps to absorb the shocks produced when walking, and increases the life span of the bull. Most structural faults (eg sickle hock, cow hock, post legged) are heritable (0.12) and subsequently defects can be passed onto both female and bull progeny.

In the preparation of bull for sale, overfed bulls may have been foundered (acute and sub acute laminitis) to some degree in their growing phase. The effects of laminitis may not be fully expressed for some time after purchase (ie swollen joints and deformed feet). The long term effects however is reduced walking, servicing capacity, lameness and foot problem, lower reproductive efficiency and reduced bull longevity.

ENVIRONMENT

Degeneration of the testes may occur at any time and can be caused by prolonged hot weather with high humidity levels, extreme cold weather with severe frosts, poor blood circulation, age, trauma and stress, bacterial diseases and general ill health. A general sign of degeneration is either excessive swelling or a decrease in testicular size.

“External and internal heat can be detrimental to semen quality and bull fertility”

In locations experiencing severe winters a bulls scrotum may be damaged. Low temperatures &

frostbite can damage the epididymis permanently & prevent the passage of semen.

Excessive heat and humidity can reduce semen quality due to inadequate thermo regulation of the testicles. Respiratory problems also have a negative effect on breeding ability.

Sources of internal heat include ill health, infections and disease (eg 3 day sickness) which can reduce bull libido, mating ability, semen production and quality.

Studies to evaluate the important environment and physiological status on semen quality (volume of ejaculate, sperm concentration, sperm maturity and morphology) found that semen characteristics improved up to 6 years of age. Cooler temperatures and lower humidity improved all semen quality traits in young bulls and most traits in mature bulls. Several factors were involved in these seasonal effects including feed quality and intake.

REPRODUCTIVE OUTCOMES

The importance of bull reproductive soundness cannot be underestimated. Besides the potential economic losses due to reproductive failure, the bull is responsible for 50 per cent of the genetic base of the calf drop and the genetic improvement of

the herd. This means the bull to cow ratio of 30-40+ cows to 1 bull is an underestimation of the importance reproductively of sound bulls.

Reproductive unsoundness is caused by a variety of factors including poor health, disease, poor nutrition, unsuitable environments and genetics.

It is subsequently essential that bulls undergo breeding soundness assessment at purchase and pre and post seasonal matings. Breeding soundness assessment by qualified practitioners in conjunction with visual evaluation can assist in the elimination of bulls with a less than satisfactory breeding potential and allow the selection of bulls that will improve profitability and productivity through effective reproductive performance.

"Selecting fertile and active bulls improves profit, reduces wastage and helps beat the rising costs of production"

"We would like to thank Alex Ashwood for permission to reprint this article which appeared in the Australian Brahman News 2009".



TULI STUD AND COMMERCIAL HERD



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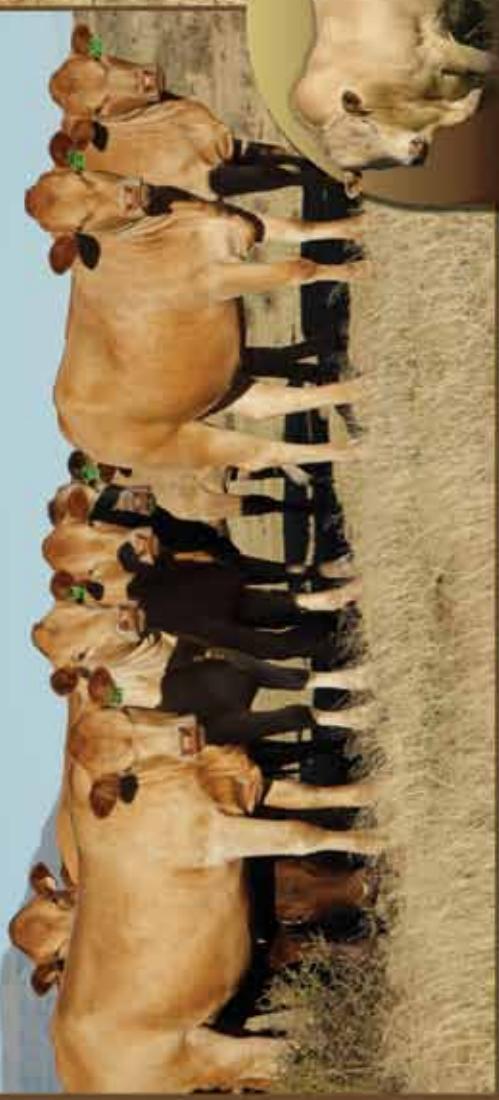




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Waar bevind die **STOETVEEBEDRYF** hom (Die Toekoms)

- CHARL VAN ROOYEN

Die afgelope dekade is gekenmerk deur veranderings op alle vlakke in die stoetveebedryf. Die doelpale het verskuif en dit gebeur op 'n gereelde basis.

Gevollik dink ek daar rus 'n groot verantwoordelikheid, op veral Rade van Genootskappe om deurlopend te besin oor die toekoms en om hul doelwitte so te posisioneer dat die ras waarmee hul teel en boer op so 'n peil te hou om die beste aanvaarbare produk aan die bedryf beskikbaar te stel.

1. Hoe lyk die omgewing waarin ons boer?

Is dit wat ek doen reg, is ek tevreden met waar ons staan of bereik het?

Of het ek reeds lankal my kop in die sand gesteek?

2. Toekoms

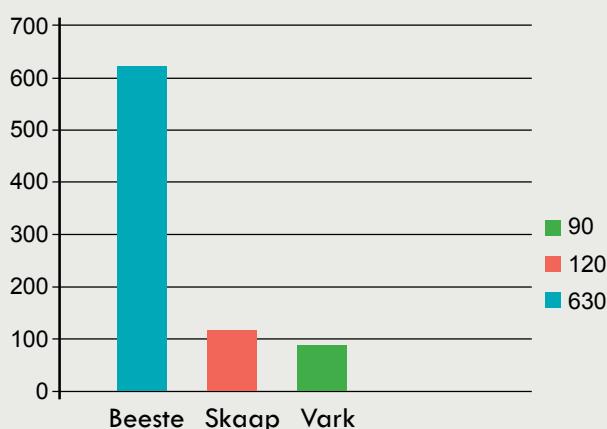
Boerdery in die algemeen is onder groot druk. Dieselfde geld vir stoetboerdery en kommersiële beesboerdery.

Die droogte die afgelope drie maande het 'n groot letsel gelaat op die boerdery en die boere gemeenskap.

Ek is egter van mening dat as ons deur die huidige krisis kan werk, die vleisbedryf aan die vooraand staan van groot groei.

Kom ons staan vir 'n oomblik stil en ons kyk na ons vleisproduksie, beesgetalle en ons populasie(mense getalle) om bogenoemde vooruitskatting te staaf.

VLEISPRODUKSIE (TON)



Die verbruik van beesvleis het van 554 000 in 2001 gestyg tot 892 000 ton in 2013 terwyl die verbruik per kop oor dieselfde tydperk gestyg het van 12,69kg tot 17,07kg.

Ons produseer egter slegs 630 000 ton.

Die groter koopkrag van die groeiende middelklas is hoofsaaklik hiervoor verantwoordelik.

GETALLE: BEESTE/MENSE

BEESTE	MENSE
±13 Miljoen	±50 Miljoen

Dit is dus duidelik dat die produksie van beesvleis voor 'n rooskleurige toekoms staan.

3. Tendense

Die stoet en kommersiële beesboer sal moet aanpas by veranderde tendense waarvan die volgende feite is.

3.1 Globale Verwarming

Globale verwarming is 'n gegewe, 2014 was die warmste jaar ooit in SA.

Die effek hiervan is dat die klimaat drasties verander. Reënpatrone en seisoene skuif. Voorspellings dat die Sentrale streke en Oos Kaap naby aan normaal gaan met groot probleme in ander streke.

Bogenoemde tendense beïnvloed die produksie van beeste. Temperature van rondom 25°C is die beste geskik vir doeltreffende vleisproduksie.

- Beeste gaan meer in die koelte of skaduwee lê
- Meer water drink
- Weipatrone gaan verander
- Sekere rasse kan moontlik verdwyn
- Ons sal meer doeltreffende diere moet teel

4. Raskeuse

Raskeuse gaan al hoe belangriker raak in die toekoms. Gevolglik gaan aanpasbaarheid naas vrugbaarheid van die belangrikste seleksie kriteria wees in beesboerdery.

Die grootste groei in getalle die afgelope dekade het plaasgevind by sintetiese rasse. Ek glo dit gaan voort duur, maar glo baie verwarming en gevolglik aanpassing, karkasgehalte en gemak van kalwing kan van hierdie rasse tot voordeel wees veral van 'n inheemse ras soos die Tuli.

5. Kliënte – Wie is hulle?

- Kommersiële boere
- Opkommende boere
- Voerkraal
- Verbruiker (Gaan die regte produk op die tafel kom)
- Naspeurbaarheid (word al hoe belangriker)

6. Kommersiële boere

Die grootste gedeelte van stoettelers se aanteel (verse en bulle) word aan kommersiële boere verkoop.

- Wie is die kommersiële teler van hierdie dekade – wat soek hy?
- Kommersiële boer, is kundig hy weet, wat hy soek – sterke tegnologies onderleg.
- Hy wil geld maak.
- Aanpasbaarheid belangrik (easy care beeste – kalfgemak)
- Vrugbaarheid

7. Hoe is die Tuli ras geposisioneer ten opsigte van bogenoemde?

7.1 Agtergrond

Tuli is 'n inheemse ras wat in die laat 1940's ontwikkel is uit die Bamagwato bees in die destydse Suid-Rhodesië en basis teekudde van die hoogs vrugbare Tswana-tipe bees.

Die Tuli beskik oor baie spesifieke uitstaande eienskappe soos:

- Hoogs vrugbaar
- Goeie karkas (oogspier tot karkasverhouding) soos getoets deur Texas A&M Universiteit
- 90% Natuurlik Poenskop
- Kalfgemak
- Natuurlike weerstand teen bosluise
- Wyd aanpasbaar
- Uitstekende eiers en spene
- Goeie temperament

Tabel 1: Totale getal diere geregistreer by SA Stamboek

10 Grootste rasse

RAS	2011	2013
Angus	30984	27131
Afrikaner	14154	11745
Beefmaster	58005	59201
Bonsmara	155847	1500220
Boran	54547	54980
Drakensberger	19027	18082
Hereford	15469	14701
Nguni	77065	75155
Sussex	11201	8540
Tuli	10755	12472

Uit bogenoemde Tabel is dit duidelik dat die Tuli vanaf 2011 goeie groei toon.

Tabel 2: Getal diere in produksie toetse per ras Plaas toets

RAS	2011	2013
Angus	314	412
Afrikaner	192	170
Beefmaster	1002	659
Bonsmara	8122	8608
Drakensberger	430	226
Nguni	253	141
Sussex	319	229
Tuli	126	186

Weereens toon die Tuli baie goeie toename en deelname in groeitoetse en wys naas Angus en Bonsmara die beste verbetering

Tabel 3: Getal vroulike diere met gemete syfers en gemiddeld per ras

RAS	2011			
	GEB	SPEEN	OEK	TKP
Afrikaner	31.8	191	33	464
Bonsmara	34.2	213	30.5	412
Boran	28.7	188	31	419
Drakensberger	33.8	206	33.1	439
Hereford	35.2	218	30.4	391
Senepol	34.7	195	29.1	480
Sussex	36.4	220	30.8	480
Tuli	31.0	190	32.5	420

RAS	2013			
	GEB	SPEEN	OEK	TKP
Afrikaner	30	192	32.8	452
Bonsmara	34.1	219	30.2	410
Boran	28.4	196	31.1	416
Drakensberger	33.5	214	32.8	419
Hereford	35.7	223	29.6	387
Senepol	35.2	199	30.6	454
Sussex	37.1	223	30.5	416
Tuli	31.0	194	31.5	391

8. Gevolgtrekking

Uit die statistieke (Tabelle) van SA Stamboek van die laaste paar jare, is dit duidelik dat die Tuli ras besig is om 'n waardige en kompetenterende plek in te neem onder die top presterende stoetvee rasse in SA.

Die Tuli ras toon nie alleen groot verbetering ten opsigte van produksie syfers nie, maar wys ook baie goeie groei in getalle.

Die redes hiervoor kan gevind word in die volgende:

- Uitstekende aanpasbaarheid as gevolg van goeie vel en haar en kleur van die beeste
- Kalfgemak waarvoor daar streng geselecteer is sedert sy ontstaan/ontwikkeling
- Fynere beenstruktuur
- Poena faktor
 - Gevolglik is my mening dat die Tuli ras as gevolg van die poena faktor en sy ander unieke eienskappe in die volgende dekade nog sterker sal groei en uiteindelik sy plek onder die top stoetrasse in SA sal inneem.

OPSOMMING

Nieteenstaande tydelike probleme en skommelings lyk die toekoms van vleisproduksie in Suid-Afrika baie goed.

Daarom gaan ons 'n interessante tydvak binne waarin die volhoubaarheid van sekere rasse en of groei tot die uiterste beproef gaan word aan die hand van besprekings en tendense soos in die artikel verduidelik is.

Daarmee saam is die verdwyning van 'n paar rasse of die kleur rol wat hulle gaan speel in die veebedryf 'n feit.

Laastens moet telersgenootskappe inringend kyk na die rol wat opkomende boere reeds speel en in die toekoms gaan speel. Spesifieke planne sal op die tafel gesit moet word om hierdie geskatte 240 000 boere te akkomodeer.

CONCLUSION

Without going in to too much detail, the following facts are not negotiable:

- If any stud breed does not have a strong commercial base, strong growth is not possible
- In any cattle breed, sustainability is a top priority beware of fly by nights (Pyramid schemes)
- Is the breed affordable for any projective new breeder?
- Is the cow herd adaptable in any veld conditions and any production system?
- In any cow/calf enterprise it is of the utmost importance that your female is efficient, capable of calving as early as possible (heifers) and that cows are able to conceive at a maximum of 70 days after calving. In other words, to make cattle farming more viable it will be important to accelerate your production chain.
- Looking at future developments and expected market requirements certain breeds will keep on growing, both on the stud and commercial side because of the breed adaptability and if your breed can give a total package deal, a most wanted product.
- The Tuli breed is in a situation to offer you this.