no 5 December

1977

a publication by the students of the faculty of veterinary science 'n publikacie deur die studente van die fakulteit veeertaanykunde

> universiteit van pretoria university of pretoria



'n'Tenk' is die beste wapen teen Terroristiese **Bosluise**

Coopers beskik oor die regte wapens om 'n algebale

oorlog teen siektes te veg. Suid-Afrikaanse boere verloor jaarliks miljoene rande deur die toedoen van bosluise

Ongelukkig is dit 'n nimmereindigende stryd. Een van die vernaamste redes is verkeerde dipmetades en die ontwikkeling van bestandheid teen bostuisdoders. Coopers het nou die VV (Volledige Verplasing) dipmetode* vervolmaak wat die probleem van ondoekreffende diaping urtukakai

Die gebruik van Triatix [®] VV* (Reg Nr G 67 Wet 36/1947) stel die boer instaat om die terroristiese bosluise deeplik te beheer,

> Beesdin HEREN VALUE WEST !

DEPOS TO PERSON

- Dit is 'n diamidied en nie 'n organofosfast-, organochlorien-, arseen- of karbamaatdip nie
- Die gedeeltelike sistemiese effek bring goeie beneer teweeg, selfs in swakbenatte gedeeltes. Dit verskaf ook 'n afwerende aksie wat met weeklikse behandeling 'n langer nawerkende beskerming teen bosluise verskaf.
- Dit is veilig vir beeste in alle weersomstandigheda
- Teatix is biologies afbreekhaar en besoedel nie die omgewing nie.
- 'n Litstekende dip met geen stropings-probleme in die dipbak nie -- elke beet word in volsterkte dip gedip.
- Geen dipmonsterneming nie Geen omslagtige berekeninge - Maatstok onnodig - Geen bekommernis oor oorstroomde diphakke.







Help v land on uself - koop Cnopers on won Verdedigingsbonusobligasies

Coopers - u frontlinie teen siektes

International J13889

EXPERTO CREDE

No 4 NOVEMBER, 1977

INDEX:

editorial	
whither the modern veterinary graduate? W.L. Jenkins .	24
die geboorte van die Onderstepoort wapen	
a case of pulmonary neoplasia, M. Briggs	
die veearts in die weermag, D.J. Goosen	
endurance riding, S. Murray	28
die verlenging van die B.V.Sc. Kursus, C.F.B. Hofmeyr	20
the Onderstepoort Cultural Club, R.M. Jackson	
O.P. Sport	
I.V.S.A., R.O. Gilbert	9
cruising down the Liver	
One flew over the Horse's Stable	
Crossword	
publications committee: rob gilbert (editor)	all correspondence to be
laura woodward	students' hostel
peter loock	p.o. onderstepoort
willem shultheis	0110 transvaal

EDITORIAL

Dalk die grootste enkele verandering hierdie jaar op O.P. was die aankoms van die Dip.Cur.Anim. I studente, of "verpleegsters" soos hulle meer algemeen bekend staan. Uit die staanspoor is hulle hartlik welkom geheet, en, voorspelbaar genoeg, die meisies is vinnig opgeneem in sosiale kringe.

In contrast to this, their welcome in their "professional" capacities by their fellow students at O.P. was more hesitant, this perhaps stemming from the uncertainty felt by the average B.V.Sc. student about even his own future, an uncertainty inherited. I feel, from our European counterparts with very real problems. Be this as it may, the initial enthusiasm of the girls towards their studies waned perceptibly just before midvear. This was aggravated by what they felt to be an overloaded curriculum, due at least to some extent to an uncertainty on the part of their tutors as to exactly what would be required of a Dip. Cur. Anim. diplomate.

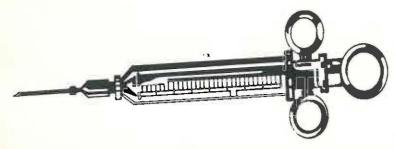
Gelukkig blyk dit nou asof die gees van die "verpleegsters" weer opwaarts geswaai het, met die besef dat hulle uiters bekwaam sal moet wees om te kompeteer met ongeskoolde arbeid en menige "girl Fridays?" wat alreeds in praktyke gevestig is en



Expertrix Crede

hierdie bekwaamheid moet hulle alreeds besit die dag as hulle O.P. verlaat,

Girls, we wish you luck, and more than luck, steadfastness of purpose, for you are in the unique position of being able to shape not only your own futures but the futures of your whole profession.



ADENOCARCINOMA IN A DOG

Class Case — M. Briggs

SPECIES

Canis

BREED

Corgi Cross

AGE

8 years

SEX

Male

COLOUR

Tan and White

WEIGHT

8 Kg

OWNER

S.J.B. van Heerden 923 13th Avenue

Wonderboom South

Pretoria

U NUMBER

21495

NAME

Ouhaas

HISTORY

As a young puppy, Oubaas was bitten by a larger dog. A perforated thoracic cavity was resutured by a veterinarian.

In October 1975 the dog began coughing when excited and a high pitched yelping was heard.

In mid-January 1976 the dog was treated by Dr H.P. van Niekerk for upper respiratory infection with Tribrissen. The condition improved and the owners went on holiday.

At the end of February while the owners were still away the dog was found lying on its side and sometimes back, vomiting a sticky yellow substance; the dog was very weak.

It was taken to a private practitioner where a diagnosis of Pneumonia complicated by Babesiasis was made. The following treatment was given:

29.2.76	Temp. 40 degrees Celsius.
	Injected with Lincospectin, Deltacortril and a babesiaside.
1.3,76	Temp. 39 degrees Celsius.
	Improvement. Berenil and Dipenilente
2.3.76	Temp. 40 degrees Celsius.
	Bykahepar. Tetracyclines. Tioctan.
3.3.76	Temp. 39 degrees Celsius.
	Bykahepar. Tetracyclines, Tioctan.
4.3.76	Temp. 39 degrees Celsius.
	Bykahepar, Chloramphenicol, Tetracyclines.

Since then the dog has been coughing whenever excited and remains coughing for a long time. Normal respiration involved the abdominal muscles. The dog had been drinking and eating well and normally shows no pain.

On Dr van Niekerks advice, the dog was admitted to the Medicine Department on the 12th March 1976.

CLINICAL EXAMINATION

The general condition was good but the dog developed coughing fits on exercise.

Locomotion was well co-ordinated at the walk and run.

Mucous membranes showed a slight cyanosis at the time of examination.

The pharynx had a foamy clear fluid present.

Palpation of the abdomen appeared to disturb the dog and dyspnoea lead to coughing.

The respiratory rate was 80 b.p.m. Respiration was regular but costo-abdominal. Auscultation showed irregular popping and crackling sounds audible in the bronchial and pharyngeal areas. These dry, crepitant rales may disappear for a few breaths. Periodic coughing fits lead to gagging and salivation. Laryngeal pressure exhibited the cough reflex The laryngeal cartilages however felt soft and collapsed.

Heart sounds were strong, regular and slow (60 per minute).

The faeces had Dipylidium caninum eggs and segments present otherwise normal.

The urine showed a trace amount of protein and a few white blood cells.

Haematology was normal.

DIFFERENTIAL DIAGNOSES

- 1. Pneumonia
- a. Nocardiosis
- b. Tuberculosis
- c. Congestion
- d. Ancylostomiasis
- e. Ascariasis
- f. Other
- Left heart failure of L.H. insufficiency. Paroxysmal dyspnoea and cough is typical of this.
- 3. Pulmonary neoplasis. Primary or secondary.
- 4. Tonsilitis
- Filaroides osleri in trachea
- 6. Foreign body in trachea
- 7. Bronchostenosis, Bronchiectasis and Atelectasis
- 8. Tracheobronchitis
- 9. Laryngeal paraplegia with prolapsed lateral ventriculi

SPECIAL DIAGNOSTIC TECHNIQUES

- 1. Re-examination under sedation
- 2. Clinical pathology
- 3. Electrophoresis
- 4. Radiography
- 5. Laryngoscopy
- 6. Thoracentesis
- 7. Tracheal swabs
- 8. E.K.G.

Results:

1. Auscultation confirmed the original clinical findings.

2. Clinical pathology

Enzyme	Units	Result	Normal
LDH HBDH SGPT SAP	mu/ml mu/ml mu/ml mu/ml	187 86 30 56	48 94 12 24 6 25 50 122
CPK	mu/ml	15	40 - 80

The elevated LDH and HBDH indicated liver damage, but low SGPT and SAP ruled this out. LDH is also elevated in neoplastic conditions.

Electrophoresis.

A high alpha-3 value of 1,31 g per cent (normal 0,3 g per cent) indicated tissue damage due to inflammation, necrosis or neoplasia.

4. Radiography

The left diaphragmatic lobe showed diffuse severe consolidation. The upper respiratory tracts were patent and free of obstruction.

- Laryngoscopy showed only fluid accumulation in the trachea and bronchi. Bronchi were patent and free from inflammation.
- Thoracentesis.

Swabs and cultures were negative.

- Tracheal swabs cultured were positive for Staphylococcus epidermis, rough E.coli, Enterobacteria and contaminants.
- 8. E.K.G.

Negative.

PROVISIONAL DIAGNOSIS

A diagnosis of neoplasia of the left diaphragmatic lobe was made on the following results:

- a. High LDH. ..
- b. Consolidation on X-ray

- c. High alpha-3 globulins
- d. The slow development of the lesion
- e. Condition refractory to antibiotics
- Age. 8 years is considered the most common for pulmonary neoplasia.

The differential diagnoses were excluded as follows:

- Bronchostenosis and bronchiectasis were excluded on auscultation and laryngoscopy.
- 2. Pneumonia was considered unlikely on the following:
 - a. Radiographs showed a localized area which was not bilateral.
 - b. Normal haematology indicates absence of inflammatory reaction.
 - c. Absence of eosinophilia possibly excluded nematode migration.
- 3. Cardiac insufficiency was excluded on auscultation and E.K.G.
- Filaroides osteri was excluded on laryngoscopy.
- 5. Tonsilitis was excluded on examination under acetylpromazine.
- 6. Laryngeal paraplegia was absent on laryngoscopy and radiography.
- 8. Tracheobronchitis was absent on laryngoscopy.

TREATMENT

Thoracotomy with possible excision of any neoplastic growth.

The operation proceeded as follows:

Incision through the left 7th intercostal space revealed adhesions between the left diaphragmatic lobe and the parietal pleura and an almost spherical 7 cm diameter growth. The right diaphragmatic lobe appeared normal. The neoplastic area was ligated and removed. A drainage tube was inserted for 3 days and altogether 170 ml pleural fluid was aspirated. The dog recovered well in an oxygen tent and under antibiotic therapy. Ten days after the operation, the sutures were removed and the dog was discharged.

FINAL DIAGNOSIS

Histopathological examination of the tissue revealed an adenocarcinoma. Smaller foci of neoplastic tissue surrounded the larger growth.

DISCUSSION

The growth may have been primary or secondary. Because of the size of the lesion, it is probably primary. The dog did not show any extra-pulmonary growths on careful clinical examination under sedation. The smaller focal area seen on histopathogical examination could have been secondary metastisies via the lymphatics. Although the right diaphragmatic lobe appeared normal during the thoracotomy, small condensed areas were still present on post-operative radiographs.

However, they were much the same size as on the pre-operative X-rays. It is considered that if these areas are neoplastic, they show appreciable growth in about one month.

An interesting development in the control of human neoplasms is the stimulation of the cellular immunological system by vaccination. The B·C.G. type of tuberculosis vaccine has been inoculated after removal of the tumour. The immune mechanism restricts any smaller secondary growths thereby prolonging the life of the patient.

REFERENCES:

- a. Canine Medicine (Relevant Chapters) Edited by Catcott
- b. Current Veterinary Therapy (Relevant Chapters)
 Edited by Kirk
- c. Canine Surgery (Relevant Chapters) Edited by Archibald
- d. Veterinary Pathology by Smith, Jones and Hunt

THE PHANTOM TYPEWRITER'S QUOTATIONS:

Prof. Reinecke. "A certain convocation of politic worms are e'en at him Your worm is your only emperor for diet".

-William Shakespeare, 1564-1616

Prof. Le Roux. "By our first strange and fatal interview."

- John Donne. 1571-1631

Prof. Howell. "Life is an incurable disease"

-Abraham Cowley, 1618-1667

INTERNATIONAL VETERINARY STUDENTS' ASSOCIATION, (I.V.S.A.)

R.O. Gilbert

In 1975 I had the good fortune to be elected to lead the local branch of the I.V.S.A., and in 1976, my trip to the XXIX Winter Congress in Gent, Belgium, was kindly sponsored by Pfizer Laboratories.

"On the way" to Gent, I visited facilities in London, Berlin, Oslo, Copenhagen and Brussels. In Gent, I met 29 other veterinary students from Austria, Belgium, Denmark, England (and Scotland and IRELAND), France, Germany, Italy, the Netherlands, Norway, Poland, Sweden, and Yugoslavia. Member countries not represented Finland Spain, and some of the extra-European countries, which find finance a severe obstacle to their representation.

A common weakness of student Congresses is to attempt more than they are capable of, but after a brush-off from the WHO, this particular gathering stopped trying to revise veterinary aid to developing countries!

The academic side of the Congress was far more satisfying, and included addresses by Prof. Dr. M. Pensaert, and Prof. Dr. M. Vandeplassche, on Aujescky's Disease and Prostaglandins respectively.

Other business involved details of student exchange programmes, an area where South Africa has always been most active. After a definite decline after the disturbance of June 1976, interest in South Africa is increasing rapidly again.

There was, of course, a well-developed social programme, including visits to a modern Arab stud farm, and Janssen Pharmaceutica, one of the largest Belgian pharmaceutical firms.

If I have given the impression that the Congress was in any way a waste of time or money, this is completely erroneous. In an era of increasing South African isolation, it is gratifying to be a welcome member of an inter-national organisation of this sort, and a privilege to be able, in a small way, to play a part in the continued international recognition of the South African veterinary profession.

Incongrous as it may seem, it was the numerous formal and informal social gatherings that the true value of the Congress could be exploited. Many valuable friendships between people, cultures and perhaps even countries, formed, grew, or were cemented in the abundant small Belgium pubs.

One lasting impression is that any South African veterinary student or graduate can hold his head high in international company.

I.V.S.A. extends its sincere thanks to the Pfizer Laboratories for their continued dedication to South African representation in this international forum.

DIE GEBOORTE VAN DIE ONDERSTEPOORT WAPEN

Sir Arnold Theiler, die vader van Veeartsenykunde in Suid-Afrika en eerste dekaan van die Fakulteit Veeartsenykunde, was die inspirasie vir die ontwerp van die wapen soos ons hom vandag ken.

Na afloop van sy lesings het hy gewoonlik die studente met talryke staaltijes uit sy kleurvolle lewe vergas. Sy beskrywing van die drie mees noodsaaklike instrumente was veral aangrypend. Met 'n glimlag het hy as volg vertel:

"As praktisyn het ek drie artikels as uiters noodsaaklik beskou, nl:

- 1. Die Bybel om die boer se vertroue te wen.
- 2. Die perkussiehamer en pleksimeter vir deeglike ondersoek.
- 3. 'n Kurktrekker vir die medisynebottels vir sowel die pasiënt as myself".

Die finale jaar studente van 1926 se gedagtes is gaande gemaak en as grap word 'n wapen, wat hierdie drie instrumente uitbeeld, deur dr John Dickson ontwerp, Prof. Doug Coles, gewese professor van pluimyee aan die Fakulteit te Onderstepoort, sorg vir die leuse: "EXPERTO CREDE (BELIEVE ONE WHO KNOWS)"

Die wapen het soveel byval gevind dat dit in 1927-28 as offisiële kleure van die Veeartsenykunde Fakulteit aangeneem is.

THE NINE COMMANDMENTS

- 1 Thou shalt preserve a clear airway at all times.
- Thou shalt relieve pain at all times.
- Thou shalt never run in the corridor, unless it be a case of fire or cardiac arrest.
- Thou shalt never let the oxygen cylinder run out or thou shalt incur My wrath.
- 2. 3. 4. 5. 6. Thou shalt only glance occasionally to assess bleeding and the colour of the blood.
- Thou shalt ignore all that pharmacologists and Americans tell thee about a anaesthesia; and thou shalt never give apomorphine to greyhounds.
- Thou shalt never buy Panadol when thou can'st buy Paracetamol B.P.
- 7. 8. Thou shalt not covet they neighbour's Boyle Bottle, nor his Microvent, nor his intra-venous technique, nor anything that is his unless I invented it.
- 9. Thou shalt praise me for I can do anything with thiapentone though amateurs cannot; and I use chloroform in a safe manner though amateurs cannot.

From the 7th edition - translated from the Hebrew By: 6th year student Cambridge



"PLAYING HARD"



O.P. SPORT, 1977

In a fairly successful year of sport, O.P. won the squash league convincingly, and for the first time, we fielded a womens' team.

O.P. also won the hockey league, with the second team 2nd or 3rd pending the outcome of their final match. Also for the first time, a women's hockey side was fielded.

After a very successful start to the season, O.P. was third on the rugby log at the end of the first semester, and could look forward to a challenging second half of the season, which turned out to as successful. The highpoint was possibly the defeat of the previously unbeaten team of Kollege Huis.

- O.P. were narrowly beaten into second place in the soccer league this year, after winning the league last year. With only one point in it, it was an exciting end to the season.
- O.P. also has a newly-established baseball team, a tennis team, a water-polo and swimming, and a very social golf team.

The pi-pi-ti (Greek letters for p-p-t or Physiology Pharmacology and Toxocology) Trophy was donated in 1977 by the relevant department for the best individual sportsman, and won for the first time by Johnny van der Merwe, Tukkies cricket club captain and Northern Transvaal player.

The Glynn Horton Trophy for the best all-round sportsman at O.P was awarded to a deserving Peter Humphreys.

With sport presently on a high note, we look forward to even more successes in 1978.

QUOTATIONS: continued

Dr. H van Niekerk. 'My flocks feed not My ewes breed not My rams speed not All is amiss''

Richard Bamfield, 1574-1627

Dr. Genis. "The shrill sweet lark"

-Thomas Hard. 1799-1845

Dr. Stogdale. "The woman who Did"

Grant Allen, 1848-1899

DIE VEEARTS IN DIE WEERMAG

Baie van u as studente moet nog militêre diensplig verrig wanneer u studies voltooi is. Ek glo dit is met gemengde gevoelens dat u dit afwag.

Dat dit 'n groot aanpassing verg, is verseker. Skielik bevind jy jou in 'n geweldige groot organisasie waar dissipline 'n groot rol speel en jou magsnommer belangriker is as jou naam.

Die Weermag word uit drie groepe saamgestel, nl:

- A. Dienspligtiges
- B. Burgermaglede
- C. Staandemaglede.

Die veearts speel 'n rol in al drie die groepe.

A. Dienspligtiges.

Na voltooiing van studies word die pasgekwalifiseerde veearts opgeroep vir 'n verpligte tydperk van diens in die Weermag vir 2 jaar. Hierdie diensplig bestaan uit 2 fases, nl.

- 1. Opleiding
- Aanwending as veearts.
- 1. Opleiding.

Dit is algemeen bekend as "basics". Dit is die meer onaangename deel van die diensplig maar is tog uiters noodsaaklik en met die regte benadering is dit nie so moeilik nie. Die opleiding word weer in twee verdeel.

- (a) Basies
- (b) Gespesialiseerde opleiding
- (a) Basies

Hiervoor help dit om vooraf fiks te word, want dit behels driloefening, elke dag liggaamsoefening, skietkuns, veldkuns, ens. Met ander woorde, dit behels basiese opleiding in oorlogvoering. Alhoewel dit baie fisiese inspanning en groot ongerief veroorsaak, is dit avontuurlik en goeie ervaring, Hierdie tydperk duur ongeveer agt weke.

(b) Gespesialiseerde opleiding

Dit behels opleiding om die veearts voor te berei vir sy spesifieke taak in die Weermag. Wat sy benadering moet wees in sekere situasies in die veld. Hoe hy medisyne moet bestel en gebruik. Waar hy in die organisasie inpas. Hierdie tydperk is ongeveer 2 weke maar kan selfs langer wees.

Na voltooiing van die opleiding ontvang die veearts kommissie. Hy word dan 'n volluitenant, die sg "twee pipper"

2. Aanwending as veearts.

Die veearts word in die Weermag op verskeie terreine professioneel aangewend, maar in die verlede was daar nie 'n goeie koördinasie of beheer oor veeartseny-aangeleenthede nie. Dit het gelei tot 'n mate van frustrasie vir die veearts. Daar was niemand wat spesifiek na sy belange omgesien het of wat sy probleme kon hanteer nie.

Serderdien het 'n veeartsenykundige afdeling onder die Geneesheer Generaal tot stand gekom. Die veearts het dus nou 'n meer spesifieke plek in die Weermag en hoë offisiere wat na hulle belange omsien.

Ek het pas 'n jaar diensplig in die Weermag voltooi en het gevind dat veeartse in die algemeen 'n goeie naam daar het. My persoonlike opinie is dat daar nie 'n beter manier is om diensplig te verrig as 'n veearts nie. Pligsbesef en bereidwilligheid maak jou aanvaarbaar as 'n professionele persoon met dienooreenkomstige aansien en status.

'n Veeartsenykundige offisier word as volg aangewend:

- (a) As veearts in die Weermag self.
- (b) Burgersake
- (c) Staatsdiens.
- (a) As veearts in die Weermag

Die Weermag vul eers sy eie behoeftes en die res word onder b en c aangewend.

Die Weermag benodig veeartse om na die welsyn van sy perde en honde om te sien. Veeartse word dus toegewys aan die volgende sentra:

Hondeskool (Pretoria)twee veeartse.

Berede sentrum (Potchefstroom.. 1-2 veeartse.

Perdeteelplaas (De Aar) 1-2 veeartse.

By bogenoemde sentra sal die veearts werksaam wees in 'n toegeruste kliniek.

(b) Burgersake

Die Weermag is betrokke in feitlik al die tuislande in 'n ontwikkelende hoedanigheid. Hierdie tuislandontwikkeling geniet hoë prioriteit en die veearts het hier 'n belangrike rol. In uniform kan hy dus bydra tot die verbetering van die gesondheidsstatus van die veestapel van die tuislande.

Die tuislande aan die noordelike grens van S.W.A. geniet baie hoë prioriteit en daar sal te alle tye veeartse teenwoordig wees.

Ek wil 'n beroep doen op diegene wat tuislande toe gaan om uiters verantwoordelik op te tree. U moet onthou u is besig daar met 'n baie belangrike taak om menseverhouding en goeie gesindheid te bevorder.

Die geleentheid wat ek gehad het om twee tuislande aan die grens te besoek, was baie interessant en dit is 'n ondervinding van 'n leeftyd.

(c) Staatsdiens.

Indien die Weermag se behoeftes gevul is, kan die oormaat veeartse na die staat gesekondeer word vir diens as staatsveeartse of inspeksies by abbatoirs.

B Burgermag.

Na voltooiing van die twee jaar diensplig word die dienspligtige dan by 'n Burgermageenheid ingedeel. Hy word dan jaarliks opgeroep om kampe by te woon, gedurende tye wanneer daar min veeartse in die Weermag is, by net na innames wanneer 'n groep besig is met opleiding.

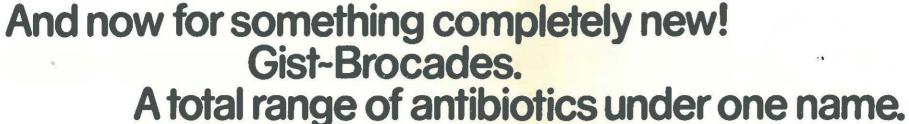
C Staandemag.

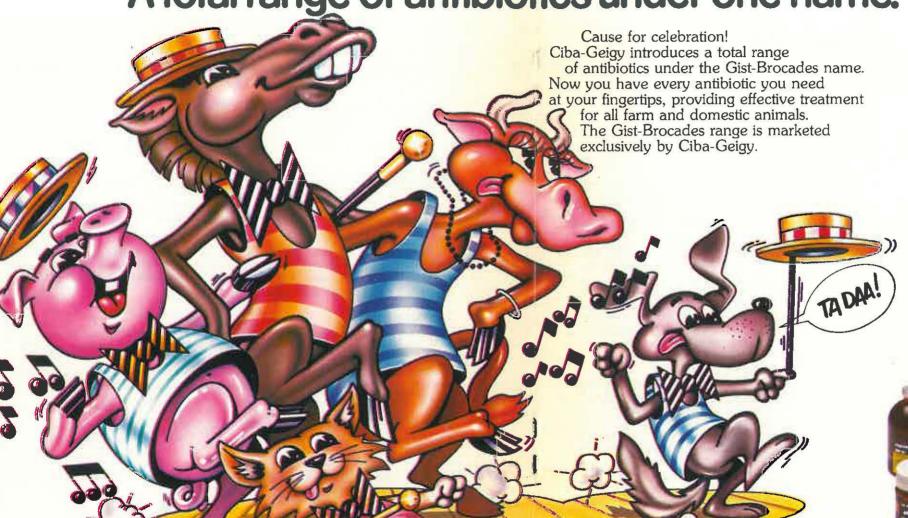
'n Veearts kan ook by die Staandemag aansluit en hy is dan voltyds permanent in diens van die Weermag. Die salarisskaal is dieselfde as die van 'n staatsveearts.

Op die stadium is daar een veeartspos in die Staandemag, en die is gevul. Met die beoogde uitbreiding van die beredeafdeling en hondeafdeling word verdere poste beoog.

Laastens dan, wanneer u diensplig verrig as veearts, onthou net dat dit 'n baie groot organisasie is, dissipline noodsaaklik is en dikwels nie uitgeskakel kan word nie.

Of u die tydperk gaan geniet, hang van uself af. Met die regte benadering kan u wel baat by u diensplig.





ALBIPEN

(tablets and injectable)

Ampicillin

A semi-synthetic penicillin, based on the PATENTED production of

DEPOCILLINE

Procaine pen-G

Penicillin in a unique suspension.

DUPLOCILLIN Procaine pen-G

Benzathine pen-G Long acting penicillin (3-5 days) in a uniquely fine suspension.

DEPOMYCINE FORTE

Procaine pen-G

Dihudrostreptomucin

Pen/strep-combination in a unique suspension.

ENGEMYCIN

ENGEMYCIN FORTE

Oxytetracycline

A PATENTED, painless solution of oxytetracycline in a mixture of polyvinylpyrrolidone and water. Suitable for all parenteral routes of administration.

GLOVETICOL 25%

Chloramphenicol

For painless administration without adding a local anaesthetic.

NAFPENZAL MC AND DC

Procaine pen-G Sodium pen-G Dihydrosteptomycin

> A unique product, with the semisynthetic penicillin, Nafcillin as one of the active ingredients, active against more than 90% of all mastitis organisms. It proved to show the highest activity of any specific mastitis preparation, known so far. MC (Milking cow) for treatment of mastitis in lactating cows. DC (Dry cow) exclusively for dry cows in calf.



CGist-Brocades.

For all the animals under your care.

Ciba-Geigy (Pty) Limited, Biotechnical Products Department P.O. Box 92. Isando, 1600 Tvl. Telephone 975-9830



ONDERSTEPOORT CULTURAL CLUB 1977

This has been an active and enjoyable year for the OPCC. We have been able to organize at least one event per month for the enjoyment of the faculty, staff, and students on both sides of the road. Perfomances have included PACT orchestral and ballet events, plays, museum tours and an exciting evening at the Zillertahl restaurant downtown. By far our most successful event was the second annual Variety Concert held at the Aula in June. A very enjoyable evening was spent getting involved in melodrama, piano and bazouki playing, singing by Dr Eddie Genis as well as our choral and folk groups, with a special guest performance by professional raconteur Mr Patrick Mynhart. A very elaborate wine and cheese sampling was arranged by the Veterinary Wives from their own culinary efforts as well as generous donations of wines and cheeses.

Beginning in August the OPCC has organized bi-weekly film nights in the large auditorium for our inexpensive enjoyment. For only 20c we can watch documentaries, TV shorts and a full-length feature film- all within walking distance of the residence. Just like the good old days, eh? Our efforts here have been financially profitable, so we plan to continue the series as long as interest runs high.

Later in September we will present an Abortion Symposium largely through the efforts of Mr Phillip Steyn. Authorities from various professions have been invited to speak and will surely give a thought-provoking presentation. For the more distant future, Dr Genis is diligently working to organize a European tour for the singers' groups during the Christmas 1978 vacation. Several drug companies have already pledged very helpful donations while we will complete the balance with local performances and other donations. We would greatly appreciate any assistance you could give toward the realization of this tour.

Almost half the second year students have joined the OPCC where Ms Dagmar Rogl and I are co-representatives, with Ms Laura Woodward and Mr Steyn co-representing the third year students, Mr Gabriel Cort for the fourth years and phantom representatives from the fifth years and the veterinary nurses. OPCC faculty advisers include Drs' Malie Smuts and Braam Bezuidenhout from anatomy and Dr Genis from Zootechnology. Anatomy Professor J.M.W. Le Roux is the club's chairman and guiding light. ROBERT M. (Bo) JACKSON



The Song of the Undescended Testicle — to the tune of "Cruising Down the River".

Just a couple of oval organs is all we seem to be, But deep inside, one on each side, we start our long journey ...

Cruising down the liver In die foetal mesoderm Can't stay long in the abdomen We've got to make lots of sperm Just the two of us together Till we reach the scrotal sac We're cruising down the liver An we're never coming back.

CRUISING

DOWN

THE

LIVER

Cruising down the liver Intraperitoneally We can't go any faster Or we'll hasten his puberty So we both go down together On our predetermined track And thanks to the gubernaculum We're never coming back.

When we reach our destination
We can have a little rest
We don't go into production
Till the feller's left the nest
On the day he reaches manhood
We shall start to work flat out
And we hope that once we've made them
He can shoot the blighters out.

Cruising down the liver
Is the only way to go
We've got to reach the vas deferens
And the difference will show
Being a cryptochid
Isn't our idea of fun
So if he's to get his testorone
We really ought to run.

Final Chorus:





DIE VERLENGING VAN DIE KURSUS

Verlenging van die kursus het nodig geword om studente die geleentheid te gee om die kennis wat deur die jare opgedoen is in verskillende dissiplines te integreer, aangesien die neiging deur die kursus is om te kompartimentaliseer. Ten einde hierdie ideaal te bereik, moet studente die geleentheid gegee word om gedurende hulle finale afronding 'n minder afgemete studietydperk te betree en geleentheid te hê om groter indiwiduele inisiatief aan die dag te lê.

In breë trekke loop die beplanning van die laaste twee semesters soos volg: Alle teoretiese opleiding word voltooi aan die einde van die eerste semester in die vyfde jaar. Vakke word dan afgeskryf behalwe die drie kliniese vakke Patologie, Pluimveesiektes, Voedselhigiëne en Volksgesondheid en daar word ook gedurende die finale twee semesters tyd ingeruim vir Soötegnologie.

Die klas van die finale twee semesters word in twee gedeel. Die een helfde sal voltyds elke dag in groepe verskillende klinieke doen soos tans. Die tyd sal egter die volle dag beslaan om studente genoeg tyd to gun om meer tydsame en gevorderde prosedures uit te voer terwyl hulle na eie keuse kan beweeg tussen verskillende departemente wanneer daar een of ander besonder belangrike of interessante prosedure aan die gang is. Van die studente sal ook verwag word om veel meer tyd in die biblioteek deur te bring om op te lees onder andere in verband met gevalle waarmee hulle besig is.

Vir drie dae in die week word gereeld 'n periode of twee afgestaan wanneer sprekers van elders verskillende referate lewer of probleme bespreek van belang van veeartsenykunde in die breë, of nagraadse studente lewer seminare, of verteenwoordigers van verskillende departemente bespreek 'n probleem uit verskillende gesigspunte. Hierdie lesings word genoem Interdissiplinêre Dieregeneeskunde. Op een dag gedurende die week word hierdie periodes beskikbaar gestel aan die departement Soötegnologie gedurende waarvan hierdie gebied globaal benader word.

Die ander helfde word weer in twee verdeel. Een van hierdie helftes bly aan die Fakulteit verbonde, maarword uitgeneem nabuite-instansies, by probleemplase verkillende tipes boerderye, navorsingsinrigtings ens, ens. Telkens vergesel deur een of meer betrokke dosente.

Die ander groep gaan uit na sekere praktyke spesiaal vir die doel goedgekeur en wat moontlik nie meer as tien sal beloop nie. Die studente sal 'n maand by 'n praktyk bly en dan na 'n volgende praktyk gaan om sò drie maande by die praktyke deur te bring. Hierdie praktyke sal hoofsaaklik plattelands wees en sal uitgesoek word met moderne metodes, apparaat en fasiliteite. Hierdie geakkrediteerde praktyke sal dan kan reken dat elkeen een of meer studente vir elke dag van die jaar het sodat die student as wisselende praktykspersoneel beskou word.

Bogaande in breë trekke is wat voorsien word vir die laaste twee semesters. Tyd sal ons leer om moontlik verbeteringe aan te bring.

Ons groet julle, vriende

Ons is baie mense wat 'n lang pad saam met julle gekom het, sommiges verder as ander, maar almal darem vir 'n deel van die trek deur die lewe saam met julle.

Ongetwyfeld dra ons almal iets van julle in ons, veral nou. Die vriendskap met jou deur die vergaande jare word nou skielik baie kosbaar. Net jammer dat 'n mens eers moet betaal (en soms die hoogste prys) eerdat ander die werklike waarde van 'n vriendskap kan besef.

Ons het stil geword.

Deur stilte wil ons ons dank betuig aan julle. Julle was voorgangers vir baie van ons in baie opsigte. Julle het dikwels die regte ding gedoen, lank voordat ons daaraan gedink het.

Vir oulaas was julle nou weer die voorganger van ouds. Julle het gegaan voordat enigeen van ons daaraan gedink het dat ons almal vroeër of later sal moet gaan.

Julle het vir ons op die harde manier geleer hoe kosbaar die lewe, ja elke dag en minuut daarvan, is.

Die herinnering aan julle sal ons soos 'n kleinood bewaar.

As julle dink dat ons julle vriendskap waardig was, aanvaar dan ons wens om, getrou aan die ongeskrewe beloftes tussen mense, saam met mekaar die langpad eindpunt toe te loop.

Ons vertoef dalk nog ietwat langer hier om ook 'n eerbare bydrae tot die lewe te probeer maak, maar sal gewillig volg as dit eenmaal van ons ook gevra word.

IN MEMORIAM - IN GEDAGTENIS

Marius Fourie Eugen Louw Gilbert Prigge Injectable or powder, infusion or o ral, topical, spray, or feed additive—there's a complete range of Pfizer Ethical Veterinary products to help maintain the growth and health of ranimals in your care.

ORAL **FORMULATIONS**



Terramycin Animal Formula Soluble Powder 200g. & 500g. Terramycin Soluble -Powder with Vitamins 200g. Terramycin Concentrate Soluble Powder 100g. Neo-Terramycin Soluble Powder 200g. Terobiotic Soluble Powder Concentrate 500g Terramycin Antigerm 77 200g, Liquamycin Capsules 5000's. Neo-Terramycin Scours Treater 90ml. Nemex 500g. Delta Cortril Tablets 500's. Neo-Terramycin 20/20 Premix 10kg. & 25kg. Terramycin TM25 10kg. Terramycin TM50 45,4kg.

PARENTERAL AND TOPICAL **FORMULATIONS** Eftolon Eftolon

Combiotic 40ml. Delta Cortril 1/M 10ml. & 50ml. Demadeth 100ml. Liquemycin "100" 100ml, Liquamycin Violet Spray 142 ml. Mestalone 10ml. Terra Cortril Eye/Ear Suspension 4ml. Terramycin Ophthalmic Ointment 3.5g. Eftolon 100ml. Penicillin 10ml, 50ml & 100ml.

WHITHER THE MODERN VETERINARY GRADUATE?

W.L. Jenkins

"For men are prone to go it blind Along the calf-paths of the mind And toil away from sun to sun To do what other men have done

They follow in the beaten track And out and in, and forth and back -And still their devious course pursue To keep the path the others do"

(From "Calf-path" by Sam W. Foss)

We are today living in a world of dynamic change. One in which extraordinary scientific and technological progress is occurring at an ever-increasing rate and, precisely because of this progress, a world which finds itself compromised in many sociological and political areas. Somewhat unexpectedly, veterinary medicine has suddenly found itself in the mainstream of mankind's advance, having been swept off its staid and traditional pedestal. As a result, the profession is currently going through a period of prefound soul-searching and critical self-analysis in order to establish what roles it should play in both the modern world and, perhaps even more importantly, the world of the future. The evidence for this development is obvious when one peruses virtually any recent veterinary journal. Articles and addresses with titles such as "Mankind's most basic needs - how can the veterinary profession more meaningfully respond", "The role of the veterinarian in the modern world", "Veterinary medicine and agricultural adjustments", "The veterinarian's role in the livestock industry", "Veterinary medicine - quo vadis?" and so on clearly illustrate the intense interest which the profession has in its own future. This is good, because as Socrates noted about 400 years B.C., "The uncontemplated life is not worth living".

With this sudden commotion and debate reverberating around the academic halls of veterinary medicine, one senses that a degree of uncertainty has crept into the minds of the undergraduate student about what the future holds for him in the whole scheme of things. Particularly at this time, it would seem that the student is not only concerned about the future opportunities in his preferred career in veterinary medicine but even about the possible shortage of any positions of employment. This feeling is fairly widespread thoughout many countries today and has led to a very real sense of despondency amongst communities of veterinary students. However, I firmly believe that such an attitude is not justified in the South African context and it is thus in this vane, and in the spirit of the lines taken from Foss' poem, that I should like to address a few remarks to the future South African veterinary graduate.

Throughout many parts of the globe, increasing, and sometimes very difficult demands are being made on the veterinary educational institutions. They are required to contend with overwhelming numbers of interested and often highly-motivated students, Moreover, these colleges need to produce a graduate who, in the broad sense, is 73 per cent practitioner, 11 per cent veterinary officer, 6 per cent researcher, 5 per cent academician, 3 per cent commercial and 2 per cent otherwise. This training needs to keep pace with a profession which, rather uniquely, is constantly growing in breadth as well as depth and a perennial shortage of highly-trained teachers does not make the task any easier. Many veterinary colleges must today also accommodate an explosive interest in post-graduate training and continuing education programmes. Not withstanding all the pressures, the ultimate aims of veterinary education remain unaltered, namely to produce a supremely competent graduate for any chosen field of endeavour, who has an inquiring

mind with an appreciation of scientific method, and one who accepts as a lifelong obligation the continual improvement of his professional knowledge and ability.

In an memorandum prepared in 1975 by the South African Veterinary Association entitled, "A review of the state of the veterinary profession in the Republic of South Africa with special reference to current and future educational requirements", it was predicted that provided all the considered factors remained equal, the short fall of veterinarians in 1980 would be about 250 and by 1985 would be about 500. The projected figure for 1985 in the United States is a net shortage of 7000. However, two important points must be borne in mind. Firstly, Lord Robbins in a recent address, at the University of Pretoria, emphasized the inherent dangers of projecting the future needs for professional graduates in any country. So much can change so swiftly in the modern world that the demands and needs within a society can alter almost overnight. For instance, who would have suggested in 1973 that South African architects and quantity surveyors would have very little to do in 1977. Thus the figures quoted earlier may be subject to at least some change - either way! Secondly, one must acknowledge that in certain countries a relative overpopulation of veterinary graduates is taking place. However, in many instances this is a result of socio-political systems rather than of sound academic judgement.

I personally believe that it is quite fair to accept a conservative and considered point of view on the issue of the current and future requirements for veterinary manpower in South Africa. Ample professional opportunities will continue to occur in the foreseeable future but the competition for such openings may well become more strinent and postgraduate training or appropriate experience will play a much greater role in determining who will be a successful practitioner, researcher, veterinary officer and so on. This will actually be a very healthy development for the overall well-being and advance of the profession. In addition, I believe that the scope and number of professional opportunities can measurably expand into related medical, agricultural and other scientific fields and it is in these directions that I would hope the future veterinary graduate will be able to move for the benefit of the related professions and of mankind in general.

Veterinary medicine is the most broadly based, versatile and pivotal profession in the world. It deals with all aspects of a dozen or more domesticiated animal species, the enormous range of non-domesticated species and a host of laboratory animal species. In reality, veterinary medicine deals with all vertebrates with the exceptions of Homo sapiens, and as noted earlier still continues to grow in breadth as well as in depth.

For the sake of our discussion, I shall simply list the potential careers available for current graduate veterinarians:

1. Private Practice

Food animal practice Companion animal practice Mixed practice Limited or speciality practice Consultant services

2. State and municipal service

Regulatory veterinary medicine Veterinary public health Diagnostic services Advisory services

Research

Research councils (CSIR, MRC, AEB, etc) Research

4. Educational institutions

Veterinary colleges Medical colleges Dental colleges Agricultural colleges Science faculties Technical colleges

5. Commercial employment

Pharmaceutical companies Chemical companies Feed companies Agribusiness enterprises Al co-operatives Breeding establishments Consultant services

- 6. Armed forces
- 7. Laboratory animal establishment
- 8. Zoological gardens/wild life reserves
- 9. Mariculture/fish farming

10. Miscellaneous fields

Information retrieval Nuclear medicine Pollution control etc.

The above represents an impressive and rather diverse group of career opportunities for any graduate and should provide an area or areas in which any veterinarian can find a rewarding, satisfying and interesting career for him- or herself. Everyone is, of course, familiar with this list but we are fully cognizant of what role a veterinarian can play within any one of these careers? Besides the obvious clinical fields and the areas related to animal production, many other disciplines are open to the veterinarian because of his unique training. Thus one could easily become a pharmacologist, toxicologist, physiologist, biochemist, histologist, cellular biologist, microbiologist, parasitologist, radiologist clinical pathologist, geneticist or nutritionist and so on. Moreover, the veterinarian's academic background places him in a very favourable position to quickly attain administrative status. He can and should become invaluable to other professions and disciplines as a planner, organizer, integrator and advisor. Yet as a profession we are not yet recognized or appreciated in any degree remotely approximating our potential. Why is this so? In large part the profession has only itself to blame and it relates to the image we ourselves have created over the years in trying to be all things to all people.

The veterinary profession is still small in South Africa and the limited numbers have achieved truly remarkable heights in many spheres over the course of the last cent-

ury. However, we are on the threshold of a new era in which expansion must be the order of the day. Expansion into all areas where veterinarians can and must play a positive and useful role and these fields need not be "calf-paths" but spheres of activity where members of the profession are either currently making important initial contributions or which have not yet enjoyed our attention. Areas such as agribusiness economics, military veterinary medicine, laboratory animal medicine, nuclear medicine and mariculture urgently require dedicated attention from veterinarians in South Africa.

There are several aspects in this regard about which I personally feel very strongly and would like to simply note at this juncture. A profession can only progress in a country at a rate which is very much determined by the basic research efforts of its members. Moreover, these advances must be introduced into the training programmes as early as possible. Another feature which deserves comment concerns the related areas of production and reproduction, herd and flock health management and the whole concept of preventative medicine. We are all aware that these aspects deserve our fullest attention today but it is of little use just to recognize the fact — we must practice what we preach! This takes effort and a degree of courage but the modern veterinary graduate is well equipped to handle this vital challenge. Finally, because of the perennial shortage of veterinary manpower, a number of fields which traditionally fell within the domaine of the veterinarian are now rapidly being taken over by other animal scientists. A good example of this is artificial insemination with the related controlled breeding programmes. It is no good crying over spilt milk at this stage and the veterinarian must simply reassert himself in his appropriate role by providing an excellent and economicallybeneficial service and thus make his contribution really worthwhile and noteworthy. It is only in this fashion that he will be able to regain the confidence and esteem of the stock farmer.

From the above discourse, I would like to conclude by noting that the graduate veterinarian is a health science professional for whom there will be many opportunities available in South Africa, both now and in the future, Besides the more traditional avenues of activity, some of which must now enjoy careful and devoted attention or else they will be lost to the profession, many new and exciting horizons are also becoming evident. The response of the new graduate to these challenges is critical for the future well-being of the veterinary profession in South Africa and even the world. He must be confident and competent, positive in his approach, inquiring by nature, dynamic, forceful and must possess the will and drive to expand his fields of interest. In addition, he must be an accomplished veterinarian and scientist in all senses and must be in a position to contribute actively to the livestock-production of this country. Finally he must be ready to accept the challenges with which he is presented and must clearly understand the roles which he is in a position to play in the maintenance of the well-being of the animal and human populations of South Africa as we move into the final years of this century. We must go forward as a profession with the firm belief that we will succeed in all our tasks and we could perhaps adopt the motto, "Unity and strength in our diversity of endeavour"



ENDURANCE RIDING

Sue Murray

Although a recently established sport in South Africa, endurance riding began in America in 1955 when Wendell Robie, with four other riders, set out to prove that the modern horse is as tough as the mounts that carried the mail on the old Pony Express route. They rode from Tahoe City, Nevada, to Auburn, California following the same hazardous trial over the Sierra Nevada mountains that the Wells Fargo Riders used. This event has been repeated each subsequent year is now known as the Western States trail ride and is considered the toughest ride in the country.

In South Africa the sport is still in its cradle but its popularity is increasing over the whole country.

The National Endurance Ride is preceded by a number of pre-rides. Held throughout the country, they usually cover a distance of 80km., to be ridden in one day. At the end of the first 30km, there is a compulsory rest of half an hour and after 60km, a rest an hour. The horse is required to undergo a veterinary inspection before the start, at each checkpoint, and after the ride. A horse may be disqualified by the veterinarian for a number of reasons, among which are lameness, heart and respiration rate above 60 and 80 respectively, or thumps. Horses are penalised for sore backs, heatbumps, stiffness, filling in the legs and nicks and cuts generally attributed to tiredness or poor gait.

Any horse being considered for training as an Endurance horse should be thoroughly examined for any conformation faults, especially those pertaining to the feet and gait. Many minor faults, of no importance in the average riding horse, are greatly magnified by the trails and rigours of the endurance trail and subsequently give rise to many problems, both before and during the actual ride.

To be successful then, one needs a horse that is sound of limb, and wind, with sufficient chest room: to ensure adequate provision of oxygen, a sound heart and, very important, a horse with a good appetite. A poor eater is normally a poor performer too. Over and above this, one needs a willing horse with a suitable temperament.

The rider himself must be aware of the horses capabilities and sensitive to its needs. He should always be considerate of the horse's health and soundness before his own desire to win.

Having found a suitable horse, it takes many months of patience and hard work to bring a horse to endurance level of fitness. The long period of training and the many hours spent with the horse as sole companion tend to produce a much closer understanding between the horse and rider. The meticulous and successful attention to every detail of exercise, feeding and shoeing, work and rest can in itself be a rewarding experience.

Each year, Onderstepoort sends a panel of vets and students to Fauresmith to assist the local veterinarians with the all important health checks. Onderstepoort is not only represented by this group however, but also by certain members of the staff and students who attend as competitors. In 1976 at the Halfway House pre-ride, Onderstepoort came

2nd, 3rd and 4th, and in 1977 at the same venue gained 3rd place as well as the award for the fittest horse on the ride. The last-mentioned is calculated by means of a formula taking into account the time taken to complete the distance, the heart and respiration rates at each checkpoint and any penalty points awarded for signs like dehydration or stiffness.

The riders have to complete at a minimum weight of 73 kg, and are weighed before they leave. Junior riders do not carry extra weight but they must be accompanied by an adult rider for the entire distance.

The peak of fitness of both the horse and rider should be reached in July, when the National Endurance Ride takes place at Fauresmith in the Orange Free State; This ride extends over a period of three days and covers a total distance of 210 km. The trail leads through rivers and veld and also includes road work. The rider is permitted to dismount at any time except when leaving or entering a checkpoint or at the Start and Finish Lines. Many riders run next to their horses when going down a steep gradient and some even "tail" uphill — that is, the horse goes on ahead while the rider holds on the its tail!

Prizes are awarded to the first horses to finish, as well as to the fittest horse, only the first ten horses being eligible for the latter.

This sport is well within the scope of the average horseman with a suitable horse, given intelligent training. Inevitably, problems arise through inexperienced riders making excessive demands of unsuitable horses. For this reason, those wishing to take part in endurance riding would be wise to start with good basic material. It has been repeated proven that Arab and part-bred Arab horses have an overwhelmingly higher success rate than any other breed of horse although thoroughbreds and other types have been known to do well.



ANSWERS TO CROSSWORD

Radial; 2. Tag; 3. Cat; 4. Ley; 5. Mandible; 6. Red; 7. Copper; Nucleotide; 11. Stuart; 13. Aspirin; 16. Kerry; 19. Warfarin 20. Zinc; Bovine; 22. Pandas; 23. Enzyme; 26. Lime; 27. Tail.	.01
Reticulum; 6. RVC; 8. Acne; 9. Dog; 12. EDTA; 14. Abduct; 15. Sheep; Bemegride; 18. Rig; 22. Pyrimidine; 24. VFA; 25. Analeptic; 28. Histamine; Ester.	.71





ONE FLEW OVER THE HORSE'S STABLE

"Want to be a vet? Going to Onderstepoort?" Our local practitioner gasped incredulously and sat down with a shocked expression on his face. "My dear fellow, you've gone bananas."

I couldn't quite understand the good man's reaction to my youthful ambitions. In fact, when that fateful telegram arrived, telling me that I was eligible to register at Onderstepoort, I understood them even less. Visions of grandeur floated before my eyes — the smell of stables, the lowing of cattle, and the old lady looking tearfully on as the gallant verterinarian saved the life of her beloved doggy. Little did! know what horrors lay in store!

There is, I believe, a vague and nagging suspicion among the students at Onderstepoort that the Zootechnology department was created to impart these facts: Did you know that there are 486 000 horses in South Africa? Or that a pig eats for 20 minutes per day? Rest assured, these facts are absolutely indispensable to the veterinary practitioner. "Any handling," our notes tell us, "should be with minimum manual activities but practised before will make each grip firm and the animal better under control," so on this admonition I will leave Zootechnology!

"And if you don't know it, you will fail! You must appreciate that!" thundered the lecturer. We groaned, and bent our backs lower over our dissections. Ligamentum nuchae, omasal laminae and cerebral cortices tumbled and turned our minds — where would it all end. "And here is the injection site for the fetlock joint," intoned the lecturer as he bent down next to the young horse. We could scarcely conceal our mirth as the animal bent down as well, and deftly took a mouthful of his hair.

My alpha receptors were falling out one by one, I was sure of it. The professor roared relentlessly on. "Today we will discuss —" (I braced myself) — "hypovolaemic SHOCK!" I picked up the tattered remains of my composure and prepared myself for the next cataclysm. Physiology is a rare stinker — such volumes of work! But, after all that, only four people from our class did supplementary examinations in that subject, while at one time, we were all pretty certain of suffering that fate. Perhaps we vet students aren't quite so thick, after all.





The saga of the overalls and boots was the subject of endless jokes among the fellows of gay O.P. Firstly, it was white overalls and black boots. Within a few weeks, however, it was white overalls and while boots. And then, as the next hapless batch of students entered the Faculty, the elusive overalls have become green while their partners, the boots remained white in colour. Oh well, difference is the spice of life — vive le difference.

I grunted with frustration as I tried to push the collecting needle into the sheep's jugular. "Go gently now," crooned the lecturer, standing over me. "Don't fiddle — just shove it in!" demanded the young demonstrator standing behind me. I threw caution to the winds, and the needle ploughed into the poor animal's trachea. There was a hiss of excaping air and the sheep's eyes rolled heavanwards. Better not do that in front of Farmer Giles ...!

The happy bunch of innocent young nurses strolled unsuspectingly past our lecture room. The first intake of Veterinary Nurses at O.P. was well into the first semester. The equally unsuspecting pathology lecturer carried on about the causes of thrombosis. "Of course, it is also logical that a thrombus may be caused by — jislaaik! Poor fellow — his eyes had caught sight of the nurses.

And so it goes on, interminably, Fact follows fact, generation work-weary and disconsolate students slogs on enthusiasm of the first month in South Africa's Veterinary only dies unceremonious death in the results of the first an osteology test. The proud shoulders drop, and we sink into a morass of notes.

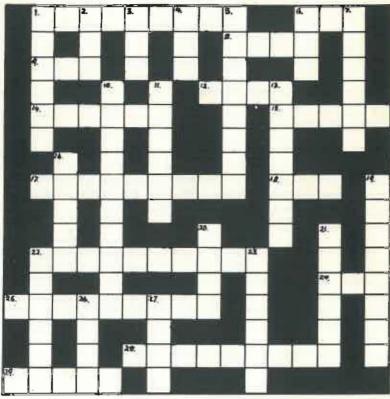
ask, will I do after finishing with what. might vou to invest in a wardrobe pedagogical monstrosity? That's easy. I'm going of white and safari suits. insist that everybody wears pink overalls and offer next Deanl olive boots. mv services as areen ANONYMOUS, II vr.

FOWL PLAY

There was a young vet from near York, Whose morals were lighter than cork, "Young chickens," said he "Have no terrors for me — The bird that I fear is the stork!"

ANON

VETWORD by Stephen Lister - Royal Veterinary College



ACROSS

- Honeycombed tripe (9) 1.
- A vet. College (3) 6.
- 8. Skin disease (4)
- Domesticated carnivore (3) 9.
- 12. Calcium chelator (4)
- 14. To kidnap a limb, perhaps (6)
- Polygastric ruminant (5) 15. 17. An example of 25 across (9)
- 18. Cryptorchid (3)
- Cytosine is one (10) 22.
- 24. Acetic acid, for example (3)
- Medullary stimulant (9) 25.
- 28. I hit names, and produce a
- triple response (9)
- 29 Chemical structure of lipids (5)

DOWN

- A very extensive nerve (6) 1.
- Tip of animal's tail (3) 2,
- 3. Another domesticated carnivore

- 4. Temporary pasture (3)
- 5. Jaw (8)
- 6. Colour of non-pregnant corpus luteum (3)
- 7. Deficiency causes swayback in sheep (6)
- 10. Building block of D.N.A. (10)
- Factor ten in blood coagulation (6) 11.
- Acetyl salicylic acid (7) 13.
- Black Irish dairy cow (5) 16.
- Rodenticide (8) 19.
- 20. Secondary element in soil fertility (4)
- 21. To do with the cow (6)
- 22. Rare animals that might be Dans Pa (6)
- 23. Catalytic protein (6)
- 26. Calcium source for pasture (4)
- 27. Cauda (4)

Answers on page 29

LILLY MEDICAL STUDENT GIFT PROGRAM

Since the introduction of the Lilly Medical Student Gift program in 1965, some 8,511 4th-year medical students have benefitted.

At the beginning of each year, 4th-year medical students at the Universities of Stellenbosch, Cape Town, O.F.S., Pretoria, Natal and Witwatersrand receive a stethoscope and clip board. This year 885 medical students as well as 90 veterinary students from Onderstepoort were presented with stethoscopes.



Margatet Donald, Industrial Relations Associate for Lilly Laboratories, with the 1977 Third Year Veterinary Student Class Captain