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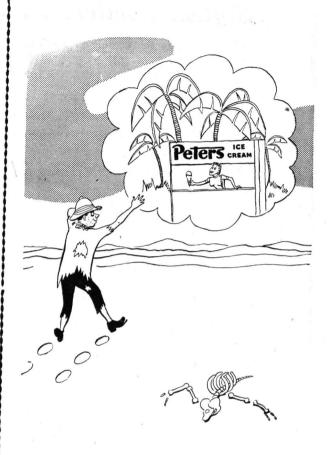
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The Journal of the Sydney University Veterinary Society

CENTAUR

1952

Editors:

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NUMBER FOURTEEN



ACKNOWLEDGMENTS

To all who assisted us the production of "Centaur", 1952, we offer a sincere "Thank you".

Our special thanks go to all these members of the staff who so willingly co-operated with us.

On behalf of all, we would like to welcome our sister magazine, "Aspyrtus", a copy of the first issue of which has been kindly donated to us from Brisbane.

To Mrs. Arthurson and Miss Woodruff we extend our appreciation of the unselfish way in which they put so much work into typing the manuscripts.

Also O. Jonkers for his contribution of blocks. Finally, we would like to thank Miss Gossevski, of C.S.I.R.O., who made such an excellent job of the Fifth Year photographs.

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When one commences to read an editorial one usually expects a slyly concocted story having as its basis a well worn moral which might be anything from "why you should read editorials" to "the virtues of being naughty but nice". Let us break with these traditions and, like the nymphs, gaily skip over the truths, hurts and sorrows of our day. Let us forget that we are badgered by examiners and plagued by facts. In short, we shall turn the editorial into something lighter—just to be different.

Do you recall the spirit that has pervaded the air this year? During the year there have been unmistakable enthusiasms and resourcefulness throughout our ranks, in the ballroom, on the football field, with competition for places in them, while other faculties were struggling to collect sufficient players? Perhaps our feelings have been generated by the realisation that our profession is vital. Perhaps we have been becoming aware of our purpose and that we are no longer relegated to the status of "Horse Doctors".

During the year there has been a startling increase in non-veterinary activities. A new club has sprung into being, and here our appetites have been sharpened by topics such as "Life in China", "The Artist is a Mystic" and "Handwriting and the Psychology and even at the Union Pictures!

Why were our sporting teams at full strength, of the Individual". The debators have been active

and have performed very creditably. It seems, in fact, that the Faculty is undergoing a cultural renaissance!

Nowhere has this zealous spirit been more apparent than on the sidelines at the football matches. Here, every move has been followed by hundreds of pairs of eyes and, often, barracking has been so loud and prolonged that the spectators have looked more exhausted than the players.

We feel that it has been difficult to capture, in this magazine, the atmosphere of such a hive of happy activity. However, its presence is substantiated by the quantity of material contributed by students for publication.

Since it is usual for the editors to fail or receive posts at the end of the year, we might say:

How many an hour might I have been Right merry in the gardens green, How many a glorious day had I Made merry with some study, What noble deeds I might have done, What bright renown my deeds had won, What blessings would have made me glad, What little burdens had I had, What calmness in the hope of praise, What joy of well accomplished days, If I had let these things alone.

Pass or fail, we have enjoyed our work. It has not really been work at all, but, rather, a labour of love for a splendid Faculty.

THE COMMITTEE, S.U.V.S., 1952



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KNOWLEDGE

As falls the rain . Into your cupped hands, So gather The precious waters of experience, To be husbanded, Or to trickle through your fingers And be lost forever.

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1952

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CHANGES TO STAFF, 1952

Resignations

Mr. R. H. Killick, B.V.Sc., who had been acting as Temporary Lecturer in Veterinary Surgery since his graduation in 1950, left the Veterinary School in July to take a position at Sledmere Stud, Scone.

Mr. F. R. Staunton, B.V.Sc., who had been acting as Temporary Lecturer in Zootechny since his graduation in 1950, left the Veterinary School at the end of the year. He accepted the position of Lecturer in Animal Husbandry at the Queensland Agricultural College and High School.

Miss N. M. Butler, B.V.Sc., who had been acting as Temporary Lecturer in Veterinary Pathology and Bacteriology since her graduation in 1949, left the Veterinary School in October to prepare for her wedding, which took place in February.

Miss R. Wildsmith has resigned from her position as Secretary to the Dean, and has moved to Brisbane with her family.

Miss I. A. Oliver has resigned from her position as Secretary to the Professor of Veterinary Pathology and Bacteriology. She has decided to complete her Arts Course as a day student at the New England University College.

Miss H. Hughes, who was married in October, resigned from her position as Secretary to the Professor of Veterinary Physiology in May.

Appointments

Mr. B. R. Thorpe, B.V.Sc.—Temporary Lecturer in Zootechny.

Mr. Thorpe commenced his course in 1946 and graduated in 1950. He accepted the position of Junior House Surgeon in 1951, and at the beginning of this year became Temporary Lecturer in Zootechny.

Mr. K. G. Johnston, B.V.Sc.—Temporary Lecturer in Veterinary Pathology and Bacteriology.

Mr. Johnston commenced his course in 1947 and graduated last year. After graduation he joined the staff as Temporary Lecturer in Veterinary Pathology and Bacteriology.

Miss P. McGruer, B.V.Sc.—Temporary Lecturer in Veterinary Surgery.

Miss McGruer commenced her course in 1942, and graduated in 1946. On graduation she accepted the position of Demonstrator in Veterinary Anatomy, which she held for the following three years. During 1950 and 1951 she occupied the position of Junior House Surgeon in the Veterinary Hospital and Clinic, and after six months' leave has now accepted the position of Temporary Lecturer in Veterinary Surgery.

Mr. E. C. Liefman, B.V.Sc.—Junior House Surgeon. Mr. Liefman commenced his course in 1947 and graduated last year. After graduation he joined the staff as Junior House Surgeon in the Veterinary Hospital and Clinic.

Miss J. Woodruff has been appointed Secretary to the Professor of Veterinary Pathology.

Miss D. Turner has been appointed Secretary to the Professor of Veterinary Physiology.

Miss L. P. Hutchison has been appointed Secretary to the Dean.

Mr. J. Anderson, B.V.Sc.—Junior House Surgeon.

Mr. Anderson commenced his course in 1947 and graduated last year. After graduation he joined the staff as Junior House Surgeon in the Veterinary Hospital and Clinic.

STUDENTS — 1952

Fourth Year

Armstrong, J. M.
Bailey, B. H.
Blogg, J. R.
Brewer, D. N.
Capell, J. W.
Charles, D. D.
Clout, Miss J.
Cooke, A. L.
Curtin, K. J.
Dandy, G. A.
Dickens, R. K.
Dreardon, R. G.
Dysart, T. H.
Edmonstone, Miss D. P.

Knight, P. R.
Lewis, P. B.
Manson, M. B.
Marbach, W.
Mattner, P. E.
McCormack, P. F.
Miner, Miss D.
Neasey, J. T.
Panaretto, B. A.
Parsonson, I. M.
Paull, N. I.
Roberts, D. S.
Scales, P. J.
Shapcott, R. C.

Edmonstone, Miss E. Fenwick, D. C. Foote, O. J. Forbes, L, S. Frogley, J. A. Gant, Miss I. E. Gee, G. R. Gemmell, M. A. Hopcroft, S. Hopkins, J. B. Howard, J. J. Johnston, B. G. Jonkers, O. Keene, K. B.

Street, P. J. L.
Thompson, C. C. E.
Geschmay, J. G.
Gordon, R. N.
Gudsell, K. E.
Hales, R. T.
Hayes, J. J.
Holt, J.
Thompson, J. M.
Thompson, C. W.
Tredinnick, W. B.
Van Gyen, J. B.
Whiting, R. H.
Wilkinson, Miss P. M.

Third Year

Second Year

Barry, R. D.
Barton, B. D.
Beckett, F. W.
Bogdanovic, Miss A.
Bradney, I. W.
Broe, M. G.
Cahn, Miss J. G.
Caterson, Miss J.
Cole, P. S.
Jolly, R. D.
Johnston, D. E.
Leaver, D. D.
Lindner, H. R.
Littlejohns, I. R.
McCormick, G. H.
Martin, I. C. A.
Parsons, H. P.
Pulver, G. B.

Dunbar, W. A.
Dunkley, B. M.
Dunsmore, J. D.
Edwards, A. A. M.
Fielden, E. D.
Graham, J. M.
Handel, W. A.
Hollywood, J. E.
Hyne, R. H. J.

Rakowski, K.
Shalders, M. J.
Stutchbury, G. B.
Tidswell, R. E.
Tynan, D. A.
Waldron, K. V.
Wales, M. G.
Wilson, B. E.
Wootton, Miss J. B.

Bailey, D. A.
Baxter, V. J.
Bonner, R. B.
Christie, B.
Cooper, K. J. P.
Cordes, P. O.
Davidson, G. N.
Donald, A. D.
Dunlop, R. J.
Falconer, A. M.
Ferguson, Miss D. R.
Gardiner, K. B.

Newlands, R. W. Nieuwland, F. Potter, Miss S. Quinleven, T. D. Rahim, P. D. Rees, P. B. Robinson, R. A. Robinson, R. C. Rowland, E. J. Ryan, R. K. Slack-Smith, J. Smith, B. D.

Harris, G. H.
Hungerford, P. R.
Irving, D. V. H.
Ismail, Y.
Jones, D. K.
Kennard, D. N.
Kyle, M. G.
Manusu, H. P.
Matthew, F. H.
Morgensen, Miss R.
Munday, B. L.

Smith, D. D.
Ward, I. R.
Weaver, R. N.
Larsen, R. F.
Leedham, Miss L.
McBride, J. M.
McKellar, C. J. C.
White, M. B.
Wilhelm, Miss B. L.
Wilkinson, F. C.
Williams, R. C.

First Year

Borland, R.
Calley, G.
Cotton, W. G.
Fawcett, R. B.
Gallagher, B.

Lim, A. S. Marrinon, A. D. McManus, K. P. Rahim, A. Ridzuan, R. M. Glanville, Miss B. Gray, J. L. Green, V. J. D. Japp, N. G. Johnson, A. J. G. Smith, I. D. Todhunter, B. P. Vester, R. Wilson, D. N.

PRIZES, 1951

John Gurner and Frederick Ebsworth Prize— Roderick Kennedy Ryan.

Baker and Ridley Memorial Prize— Miss Jill Clout. William Cooper and Nephew's Prize-Robert Bruce Dun.

S. T. D. Symon's Prize for Clinical Subjects— Bede Morris.

J. D. Stewart Prize for Best Essay— Bruce Charles Eastick.

RABBIT DESTRUCTION AND CONTROL

Of interest to all Australians is the rabbit menace. This article has tackled the problem of its control in a commendably clear and practical manner, and we feel sure it will be of great interest to all students—especially those who have had little practical experience in this direction.

To its author, Mr. Hayes, we offer our congratulations on his winning with this article the War Memorial Prize.

With the present day demand for increased food production the spotlight is focused on better land utilisation. Raising the carrying capacity of the land by eliminating the rabbit menace could not only effect an almost immediate increase in both the quantity and quality of stock run, but once the numbers were reduced to a minimal level there would be a considerable labour force free to engage in more productive work.

As future veterinarians we shall be concerned with food production in a general sense, and those of us who may enter the service of the Department as Stock Inspectors will be vitally interested in the livestock industry.

A working knowledge of rabbit destruction and control methods is essential to all who are concerned with pastoral industry. The purpose of this article is to attempt to present some information on the subject which I trust will prove to be of some use.

Since its introduction into Australia some 160 years ago the rabbit has bred and spread with such enthusiasm that at the present day there is hardly a corner of the continent where it is neither seen nor its influence felt. It is not here proposed to deal with its amazing powers of survival under adverse conditions or its phenomenal powers of reproduction, nor to get involved in an argument from the politico-economic point of view as to whether the rabbit "industry" does not offset its disadvantages,

but rather to deal with practical methods of eradication.

The type of country infested is an important factor in control. For instance, rabbits are much easier dealt with in open plains country than in timbered hill country, where natural harbour, such as rocky outcrops, hollow logs, stumps, etc., abound.

In badly eroded land, water-courses and wash-aways provide good cover, as do saffron and cabbage thistles, also briars, blackberries, raspberries and bracken fern. The type of soil, too, is important, more especially if digging out is contemplated, this being a far easier job (and a sounder economic proposition) in sandy and loamy soils than in shale and granite. The actual value of the land is important in regard to the type of eradication measures decided on, some proving much more expensive than others.

The state of the property with regard to fences, pastures, stocking, size of paddocks, and type of farming or grazing engaged in should be considered. In wheat country it is not usual to find small paddocks, rabbit proof fences or gates, but on the other hand, most of the country is cleared and easily accessible.

The type of infestation is also important, i.e., whether the rabbits are the home-grown variety, the neighbour's (often the case, especially when the neighbour is a government or semi-government

body) or of plague origin, such as spread widely throughout the North and North-west in 1947-48-49. If the rabbits have been on the place for some time they are usually well established and a co-ordinated plan of eradication is needed; this may prove to be expensive and prolonged, especially if a source of reinfestation is close by. If plague rabbits, and only recently arrived, extermination may prove easier, as such rabbits are as a rule easier to drive, poison and catch with dogs, firstly, because of the strangeness of the country, and, secondly, the lack of big warrens. This happy state of affairs does not last long, for the bunny is a most adaptable new settler.

The best cure for the rabbit menace, as for most things, is prevention, and heading the list here is fencing. It cannot be emphasised too strongly that if the fences, especially the boundaries, but the netted subdivisions as well, are not in first-class repair, money spent on rabbit destruction is merely poured down the drain, for as fast as they are

destroyed others take their place.

The 42 x 1½ inch 17A gauge netting is the best, but 42 x 1½ is also quite good, and although it is claimed by some that kitten rabbits can squeeze through the larger mesh, anything that gets through is not worth worrying about, both from the point of view of size and numbers. This netting is, as a rule, placed from 6 to 9 inches in the ground, and in rocky hill country may be folded flat on the ground and have rocks laid on it. Foot netting, either 12 x $1\frac{1}{2}$ or 12 x $1\frac{1}{2}$, is available for repair of netting fences where the netting has rotted in the ground or the earth has washed away. And here a word of warning: rabbits can, and will, if desperate and numerous enough, get over a 3 ft. netting fence by a combination of jumping and climbing. This is rendered easier by earth, stones, sticks and logs, etc., lodging against the fence; so keep the fence line clear. If the fence has silted up, a method often adopted is to tack foot netting along the posts above the existing netting.

The fence stays should be placed on the inside of the line, and, if on the outside, should have a cone of netting, with the open end towards the ground, tacked on to them, as a stay provides a very easy

route into the paddock.

Gates should be netted, fit the opening well and be provided with a bed-log and secure latch. If floodgates are used on water-courses they should be substantial, well framed and also fitted with a bed-log or concrete sill. Netting washaways need looking at, especially after rain. The usual method is to lay the netting over with the lap downstream and to place rocks on it. There is no really 100 per cent. effective way of rendering a motor ramp or railway cattle stopper rabbit proof, but deep pits

and small rails help. It is really best not to have a ramp at the boundary, at least in really bad rabbit country. Wombats and porcupines can prove to be a real menace in hilly country, as they either burrow under the fence or just burst through it like a tank; furthermore, such excursions are usually nightly occurrences, and they make two holes—one to go in and one to go out. The rabbit, too, will burrow underneath quite readily. Thus, having made the fence rabbit proof, keep it that way by riding it often and patching holes, filling in burrows and pulling limbs off.

As for actual eradication measures, in my mind there is no substitute for digging out, more especially in badly infested country, and also as a routine measure to keep numbers down. There is, unfortunately, one disadvantage—that is, expense. To be effective, all burrows, big, small, used or unused, should be dug and the ground worked over in a systematic fashion—destroy the cover and then get the rabbits. Dogs are a great asset for this type of work, both for "dogging in" ahead of the diggers and for catching loose rabbits. However a "burrow dog", which smells out the rabbits in a particular turn of the burrow, is nothing but a nuisance, as this practice leads to turns being left undug and the burrows are opened up again. Burrows should be dug cleanly, every turn being dug right to the end, and, if filled in, should be levelled off. Some claim better results if the burrows are left open for a month or more and then filled; this is all right if they are filled, but the usual thing is that filling in is deferred, the ground hardens and you are left with a hole in the ground which is a menace to stock and A tractor with a 'dozer blade fitted is vehicles. quite useful for filling in and levelling. If filling in is done on the same day that the burrow is dug, rabbits can usually be discouraged from reopening the burrow by digging up the mound of dirt they have scratched out and spreading it over the filled-in portion.

A common practice in burrows which go very deep or run under rocks or trees is to dig as far as possible and then fumigate. This can be quite effective if the burrow does not run shallow again distal to the point where the fumigant is introduced. In this case retreatment by either complete digging or fumigation is necessary.

Ripping with a tractor is quite an effective method, but is limited by the nature of the country and again by cost. It is best reserved for really big warrens, and they should be ripped thoroughly with the rippers well into the ground and making runs at right angles to cover the whole area of the burrow. Dogs are really essential for this type of work, both to catch the rabbits thrown out in the process and

the loose rabbits which burrow out afterwards. Horses and bullocks have been used to pull roadploughs for ripping in the past, but are not much used nowadays. Bulldozers are also used in some areas, the whole area of the burrow being thrown up and turned, but here a really big warren is needed to warrant the cost. Both with ripping and 'dozing burrows should be filled in level, and quite a good idea for all forms of digging out is to take advantage of the turned-up soil and broadcast a handful of seed over the area, say, sub, clover, for argument's sake.

Hollow logs and stumps and also fallen trees can be burnt in the spring or autumn. The butts of fallen trees are favourite spots for the commencement of a burrow, and when the turns run amongst the roots and out under the trunks they are very

hard to deal with.

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Blackberries and raspberries, briars, etc., can be sprayed in late summer with hormone sprays, and some treatment of bracken fern is desirable. Burning and mowing only stimulate growth; bruising is needed to kill. If cattle are run, salt blocks may be put in amongst the ferns and the bare areas, produced by trampling, sown down with grasses. A sheep's foot roller seems to give quite good results, and something along these lines have proved very satisfactory on the North Coast of N.S.W.

Burrows in creek banks and water courses present a special problem. They are often too deep to dig and, if dug, may only aid erosion. Shallow ones may be dug and filled in as level as possible, and really bad ones may have to be netted in or

fumigated.

In areas where there are granite outcrops in which there are burrows, often the cheapest and most effective method is to fence the rocky knob off, as it is useless for grazing; and you may dig it again and again and, block it up how you will, the rabbit will still find a way to open up another burrow. Such a fence should be preferably 4 ft. high and the netting well in the ground, and it is a good idea to set traps both inside and outside for the first few weeks.

Fumigation is a method much used for rabbit destruction nowadays. It has the virtue of being relatively cheap and quick, enabling a lot of ground to be covered in one day, and also is reasonably effective. It is the method of choice for dealing with

burrows which it is not possible to dig.

Methods vary from the station truck or tractor with a hose on the exhaust and a few drops of oil in the carburettor to cyanide, carbon monoxide, carbon bisulphide, chloropicrin, sulphur fumes, etc.

The most effective and positive method is calcium cyanide dust (cyanogas) introduced into the burrow with a blower. All entrances are treated, the method being to dig the hole in some distance, insert the hose fill the hole with dirt, blow in cyanide dust. followed by air, and pull the hose out and tramp the dirt. This is one of the few methods which permits the detection of pop holes, which are often hidden in the grass. The dust can be readily seen and smelt coming out of them. With all methods of treatment. if pop holes are left, not only do some or all the rabbits escape the harmful effects of the fumigant, but the burrow is swiftly opened again. When closing the holes it often helps to drop a clod over a piece of newspaper on top of the hole. As with most forms of fumigation, evaniding is much quicker with two men, one to carry and operate the blower and the other to carry the mattock and shovel for digging in. Cyanogas is also put up in flake form: it is introduced into the burrow with a long spoon a tobacco-tin lid nailed to a stick is a good method. This method presents a greater toxic hazard to the operator.

Carbon monoxide generators, working on the same principle as a producer-gas unit and burning charcoal, wood, etc., are available once more. They are used in the same fashion as a cvanide blower. but require a utility truck or spring cart to carry the unit around, and there is a certain amount of fire risk: otherwise they are quite good and very

cheap to operate.

The remaining fumigants are mostly proprietary preparations, and foremost among them is sarvacide. This is a liquid mixture of chloropicrin with tear gas added for the safety of the operator, as the former is odourless. Chloropicrin is put up in bottles and in glass phials by another manufacturer. It may be diluted with sump oil or used straight. Although the bottle with or without a dripping cap may be used, it is safest in practice to use some type of pressure feed dispenser with a long nozzle, delivering 5 or 10 c.c. shots. The gun or syringe should be leak-proof and simple in operation. In using chloropicrin, a varying number, depending on the size of the burrow, of the lowest of the entrances are treated either by squirting directly into the hole or on to pieces of bagging, sticks or cowdung, which are then pushed in with a stick and the holes filled in quickly. When glass phials are used they are pushed in and broken with a stick.

After a burrow has been treated with chloropicrin the rabbits will often burrow out, and they may be found either dead at the burrow or close by. Such burrows have to filled in again immediately or else

rabbits will quickly open them up again.

Other fumigants are very similar in action and application, with the exception of Smokogas bombs, which are pushed into the burrow and lit before filling it. Another incendiary form of treatment is to place a quantity of sulphur in a hole and direct the blast of a flame-thrower on it. Quite good

results are claimed, but the fire risk is too high for use in summer months.

With all fumigants, especially cyanide and chloropicrin, the greatest care should be used, especially in hot weather, when they are much more volatile. Chloropicrin is also corrosive, and a broken bottle or dripping syringe can cause very nasty skin lesions in man and animals. When filling applicators especially, don't bend over the containers.

When infestation rate is high a netting wing or yard is often built along a fence and a drive conducted in order to get as many loose rabbits as possible. Yards with one-way entrances may also be built around a water hole in a paddock, but this method is only of use in hot, dry weather when there is no green feed. When the boundary fence adjoins a badly infested area a wing and yard or pit-trap may be erected on the outside. Such a yard is best fitted with some form of self-setting trap, and should be inspected periodically.

Trapping cannot be regarded seriously as a method of eradication; at best it only thins the rabbits, and has the disadvantage of making them very timid and wary. Further, a professional trapper does not want to see rabbits wiped out, for his living goes with them, and he sets his traps on dunghills and in other places in order to catch as many buck rabbits (with the best skins) as possible. He neither wants nor aims to catch does or kittens.

Trapping can be useful along a fence where rabbits are trying to burrow under, in and around areas which have been fenced off; but for the labour involved the returns in percentage of total rabbits destroyed are small.

Similarly, with shooting, except in connection with a drive, it only serves to reduce the numbers and make them wary, and, as with trapping, the burrows are left unharmed. Ferrets fall into much the same category, for, although the ferrets may permit you to get the skins of the rabbits in burrows which cannot be dug, the burrow is left intact and is soon opened again. Ferreting is slow work, and no matter how good the ferrets they stay in the burrows at times, and a burrow that has been potholed in a search for either the rabbits or a lost ferret is worse than one which has not been touched at all.

It should be pointed out that these remarks about trapping, shooting and ferreting refer only to when they are used as the sole means of eradication and that there is nothing against either trapping or ferreting in conjunction with mere vigorous measures. The pea-rifle is practically standard equipment on most properties and carried on most occasions, and can account for quite a few rabbits

in the course of a year, particularly in a paddock where ewes are lambing and dogs can't be taken in.

Poisoning goes in and out of fashion, some twenty or thirty years ago nearly everyone used the poison cart, which laid a trail of bran and pollard baits poisoned with phosphorus. These phosphorus baits proved highly efficient, killing rabbits, foxes, native marsupials, birds, stock and even snakes with equal impartiality. They also helped to set their quota of bushfires, also stock had to be kept out of the paddocks from 3-6 weeks after phosphorus was laid.

Mixtures of strychnine and raspberry jam were used with not much success, and wheat or oats poisoned with strychnine is used at the present time. Carrots and apples have also been tried as bait.

By far the best bait is the black thistle root, this is also known as the Scotch thistle. are taken when the thistle is flat on the ground and about the size of a dinner plate. The roots should be crisp and juicy. They are cut into small baits of approximately $\frac{1}{2}$ inch cubes. are then washed, strained and shaken up in a tin with strychnine, about 1 oz. per 1000 baits. Icing sugar and various lures, usually a combination of aromatic oils and rum are added and some flour dusted on finally. The baits are laid where the rabbits feed at night. A small piece of ground about 3" x 4" is chipped up with a rabbit setter and the bait pulled out of the tin with a pair of wire tweezers and dropped in the middle of the bare Smoking should be abstained from while preparing and laying, as any strong smell will discourage the rabbit.

If properly prepared and laid, these baits are highly efficient, kills of up to 600 rabbits taken off 1,000 baits are possible. For preference the rabbits should be left unharassed for a month before poisoning, trapping particularly having an adverse effect on the kill. Stock do not touch these baits and hence can be left in the paddock. To get a really good poisoner on the job is one of the quickest and cheapest ways of cleaning up a place.

Dogs are usually of the greyhound type. Purebred greyhounds are the fastest, but are thin-skinned and easily staked in rough country, and have poor scenting powers. Some type of cross is the best, such as greyhound-kelpie, cattle dog, beagle or even terrier. To keep sheep dogs, water dogs, etc., for rabbitting is a waste of good food, for they eat just as much as the fast dogs and will not catch half the rabbits. Likewise, once a rabbitting dog is six to seven years old as a rule it is best to get rid of it, as they get too cunning and will only chase those rabbits they think they have a chance of

catching. The young enthusiastic mongrel that will run till he drops in winter and summer is the ideal.

Myxomatosis has met with varied success throughout the State, and though it has vastly reduced the total population of rabbits, it appears at the time of writing that it is only another method of control, and that some or all of the methods outlined above are still needed for eradication of the pest. It is interesting to reflect that most of the stories of the pathogenic effects of "myxo" in native fauna and domestic animals had their origin from professional trappers, who saw their source of income being depleted.

Although the enemy of sheep men, the fox plays quite an important part in keeping the rabbit population down, and when foxes are plentiful there are very few kitten rabbits which survive. Reynard shows great cunning in pot-holing right on to the

nest where the kittens are in the burrow.

When considering what methods of extermination and control are best suited to your area or property it is well to consider that the rabbit menace is an economic problem and should be treated as such. It is often cheaper in the long run to go the whole hog and put the netting fences, especially the boundary ones, into order, and then attack vigorously, than to go on year after year paying out wages to do the same job over and over again. In short, make sure you are only paying to destroy your own rabbits and keep others out with good fencing.

Digging out is best done in the autumn, winter and spring, when the ground is soft, and burrows can be fumigated in the summer. Poisoning gives best results in autumn and spring. The important thing is to keep at them the whole year round, and, having once got a paddock clean, keep it that way.

STAFF PERSONALITIES

Dr. G. F. HUMPHREY joined the staff of the University in 1942, and instituted in the following year the teaching of Comparative Biochemistry in Australia. In 1947, having been granted sabbatical leave by the University, he worked at the University of Cambridge and was one of two nominees recommended by the Royal Society of London for work at the Station Biologique, Roscoff, France. After spending some time in France he visited the principal biochemical centres in France, Belgium and Holland, and several marine biological and university departments in England. He was appointed Senior Lecturer in Biochemistry in 1949, and in 1951 was the recipient of the second Ph.D. to be conferred by the University of Sydney. His thesis was entitled "The Metabolism of the Adductor Muscle of Saxostrea Commercialis".

Mr. H. J. GEDDES, M.Sc.Agr. (New Zealand), Officer-in-Charge of the McGarvie Smith Animal Husbandry Farm and Garland Senior Lecturer in Animal Husbandry, was born and educated in New Zealand, and has been resident in Australia since 1933. He graduated Bachelor of Agriculture from the University of Otago in 1929, and obtained his Master of Agricultural Science degree in 1930 for a thesis entitled "Sulphur in Canterbury Mixed Farm Economy". After several years as a Lecturer in Agriculture at the Canterbury Agricultural College, New Zealand, Mr. Geddes went to Tasmania. where he was a District Agricultural Officer in the Department of Agriculture. In 1933 he joined the rural staff of the "Weekly Times", Melbourne, as a journalist. He was appointed to the staff of the University of Sydney in 1940.

Mr. D. C. BLOOD graduated Bachelor of Veterinary Science in 1942 with Second Class Honours. Immediately after graduation he enlisted in the A.I.F., and served with the rank of Captain until 1944, when he was released from the Army to take up appointment as Acting Lecturer in Veterinary Science. Before his promotion in 1946 to the position of Lecturer, Mr. Blood visited New Zealand to gain experience in the conduct of clinical veterinary services. In 1949 he was granted eighteen months' leave and went to Cornell University. where he worked in the Department of Veterinary Medicine, and, assisted by a grant from the George Aitken Pastoral Research Trust, engaged in research in the metabolic diseases of cattle. Before his return to Australia he visited a number of leading Veterinary Schools and Institutes in America. He was promoted to the grade of Senior Lecturer in 1951.

Mr. J. D. BIGGERS, B.Sc., B.Sc. (Vet. Science), has been appointed Lecturer in the Faculty of Veterinary Science. Mr. Biggers graduated B.Sc. with Second Class Honours, and B.Sc. (Vet. Science) from the University of London in 1946. In 1945 and 1946 he was part-time Demonstrator in Physiology at the Royal Veterinary College, London. In 1947 he was appointed Demonstrator, and in the same year Assistant Lecturer in the Department of Physiology at the University of Sheffield. Since 1948 he has been Temporary Lecturer in Veterinary Physiology at this University, and has just completed his thesis for the Degree of Doctor of Philosophy of the University of London.

Mr. J. H. WHITTEM has been appointed Lecturer in Veterinary Pathology and Bacteriology. He is thirty-one years of age and an ex-serviceman. He graduated B.V.Sc. in 1942 with Second Class Honours. In 1946 he was appointed a Teaching Fellow and later a temporary Lecturer in Veterinary Pathology and Bacteriology.

Miss V. E. OSBORNE has been appointed Lecturer in Veterinary Anatomy. Miss Osborne graduated B.V.Sc. (Sydney) in 1941 and was appointed Demonstrator in Veterinary Anatomy. In 1947 she

was appointed Teaching Fellow, in 1949 Temporary Lecturer and in 1951 Acting Lecturer.

Mr. L. H. LARSEN has been appointed Lecturer in Veterinary Surgery and Obstetrics. Mr. Larsen is thirty years old. He graduated B.V.Sc. with Second Class Honours (Sydney) in 1945. Upon graduation he was appointed Veterinary Officer in Charge of the Ambulatory Clinic attached to the University Farm at Badgery's Creek. In 1948 he was appointed Temporary Lecturer in Veterinary Surgery and Obstetrics.

SOME HITHERTO UNRELATED FACTS ON THE INCIDENCE OF ECTOPARASITISM ON THE MALE AUSTRALIAN VETERINARY STUDENT

I have a little parasite On my anatomy, No matter where, I can't escape his Epidemiology.

You can't call him a Strongyloid, He's not an Otodect. To call him names makes him annoyed, With dorsal tooth, object!

I bash this bug, his skull I crack From Mudgee to Khancoban, Comes energy to bite me back, On borrowed haemoglobin.

I've tried to learn to auscultate, The sweat stands out in beads, How can a fellow concentrate With this thing in his tweeds?

I take the wog to lectures, I take it to a dance, You can just conjecture How it mucks up my romance.

This fugitive from Arsenates, Seems to think delicious, Mauling with his cutting plates What every host holds precious.

So, parasite, you go to hell, Stop growing long and creamier. Leave alone my red-blood cell (Don't want gluteal anaemia)!

Pupal, Stage IV.

THE AUSTRALIAN VETERINARY ASSOCIATION

D. F. STEWART, Liaison Officer of the A.V.A. with the S.U.V.S.

In the "Centaur" of 1951 an outline of the organisation of the A.V.A. was given, and its aims and purposes were discussed. It was pointed out that, for the student, the natural sequence of events was to become a member of the S.U.V.S., and, on graduation, to become a member of the A.V.A. There is no need to reiterate here the importance of the A.V.A. to the veterinary profession, or to stress again the duty of all graduates to give it full

support.

To those of us located in the big centres, such as Sydney, the advantages of being members of the A.V.A. should be quite obvious, but one of the functions of the Association which might readily be overlooked is the support which as a corporate body it can give to the States where the profession is not quite so strong. This was brought home very clearly to all who attended the Annual General Meeting of the A.V.A. in Brisbane in May of this year. It was the unanimous opinion of veterinarians in Queensland that the Annual General Meeting held for the first time in Brisbane in 1947 gave a tremendous impetus to the profession in that State. It is certainly true that the profession has gone from strength to strength there in recent years.

The profession was honoured at this latest A.G.M. by His Excellency Sir John Lavarack, Governor of Queensland, who opened the meeting. In his address His Excellency said that the profession had set itself very high standards both in animal health and in animal husbandry. At the present time, when increased food production was vital to the world, the importance of the profession was increasing day by day, and its value to Australia and, indeed to the world could not be over-

stated.

A good selection of scientific papers were presented to the meeting and gave rise to interesting and informative discussions. These will appear in full in due course in the "Australian Veterinary Journal". One of the pleasing and encouraging features of these sessions was the fact that many of the contributors were relatively recent graduates.

A highlight of the meeting was the election of four additional Fellows of the A.V.A. This honour is the highest which members of the profession here can bestow upon their colleagues, and is awarded for long and meritorious service to the A.V.A. and thus to the profession. The recipients of this honour were: Professor R. M. C. Gunn, Mr. W. L. Hindmarsh, Dr. D. Murnane and Mr. Grahame Edgar. Under the Articles of Association twelve fellows may be appointed, and this recent election now brings the total to eight. Those previously honoured were: Professor J. D. Stewart, Mr. Max Henry, Dr. L. B. Bull and Dr. H. E. Albiston.

The Lord Mayor of Brisbane accorded the members who attended the meeting a Civic Reception, and on another evening a buffet supper was held at the invitation of the Queensland Meat Industry Board. These functions, together with the regular features of our meetings, the President's Reception and the Annual Dinner, provided amply for the social activities. In addition, His Excellency Sir John Lavarack and Lady Lavarack graciously entertained the President and his wife, together with some twelve representative members of the profession, to a reception at Government House.

It is apparent that meetings conducted on this plane are a great service to the profession, and do much to increase the general public's appreciation of its work. The next meetings is to be held in Hobart, and we look forward confidently to our colleagues in Tasmania achieving as great a success as did those in Queensland.

THE MAD COW

(The Birmingham Gazette, November 16, 1741)

Monday as a mad Cow was driving from Smith-field she ran up the Yard of the King's Arm Inn at Holborn-Bridge, and having drove all the People into close Quarters, she went up Stairs into the first Gallery; but not liking any Room there, broke several Windows, then went up the second Gallery; and after visiting the Rooms there, she jumped over the Rails upon the Shed put up for the Convenience of loading Waggons dry, and with her Weight broke through the Tiling, and fell to the Ground, and by the Fall broke her Back, which prevented further Mischief.

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WOMEN'S REPORT, 1952

When to the sessions of sweet silent thought I summon up remembrance of things past.

Shakespeare.

The walls of the Women's Common Room are heard to moan on occasion as nineteen women squeeze into it to munch their lunch and enjoy the luxury of tea (a favourite Vet. beverage) and rub their shoes on the comparatively new but once pink carpet.

From such a stronghold we have emerged to take part in many and varied activities this year.

In the Floats Committee Isabel Gant very ably did her share and gave us the benefit of her artistic talents, while Pat Wilkinson provided further strong support.

The work entailed in making the dances such a success was, for a great part, due to D.P.E. and Jean Wootton, with their high pressure tactics.

Judy Cahn, Jill Clout and Jan Caterson were the main representatives of Vet. Sc. in the University Fete, collecting the much appreciated donations, and actually selling sweets on the day as fast as grubby little hands could stick lollies in their mouths and hand over the much thumbed coins.

The women also supported the Vet. Dinner by turning up in full force, and actually needed no support themselves on leaving. Under such charming influences a certain person of surgery renown was observed to be drinking orange-ade, much to the consternation of the Bacto. Department, who felt the symptoms pathological.

This year the cultural media, which is usually limited to Lowenstein-Jenson's egg media and such-like, was very commendably broadened in the shape of the Curiosity Club. The club has been strongly supported by the women, but we pass a word of warning to others—mind your p's and q's in the presence of a certain Mr. Roberts!

Women do not want equal rights; they would be dissatisfied with so few.

BIRTHS: DEATHS: MARRIAGES

CROOKE—TYMING: Mr. and Mrs. Mark Tyming resentfully announce the engagement of their only daughter Dawn. No visitors or smart cracks for a week.

The Barbagrog provided all the fun of the fair for those who were able to migrate for the day, and certain of us were in that famous "Noah's Ark" article, artistically grouped round examining the cat. (But which was the cat?)

A few of us have been scattered to the four winds this year. Heather Galloway and her husband left early in the year for England with the intention of doing locum work there; while Peg Goodwin has created a precedent in being lucky enough to be one of the four people chosen to do practical work in New Zealand for a few weeks.

We send our very best wishes to Nancy Butler on her marriage, and welcome Pat McGruer back, taking Mr. Killick's position. Ask her "How is Handsome this morning?" We are very pleased to see Agnia in our midst this year, and are glad her injured knee has recovered.

Once again we can welcome a Melbourne representative with their own weather delights.

Fashion Note: Surgery fashions show a definite "muddy" trend, and the empire waistline will have no hope unless further shrinkage of our bigger and brighter boiler suits can be evoked.

Future Warning: The "rolling pin" used in pill making was very ably wielded by one of our members.

Mat. Med. Melody:

"Who is Cuddles, what is she That all our swains adore her?"

As the main social events of the year have passed and the grindstone begins to flatten our noses once more, we hope that the exam. results will supply the corrective plastic surgery, and the walls of the Common Room will have no cause to moan in February next year.

The modern version of the old attributes of a girl: I am twentyone, I can type, and know how to use contraceptives.—Ex New Statesman and Nation.

SHOTT—GUNN: At the Sydney Registry Office at the urgent request of the bride's father.

FORTIETH ANNUAL REPORT

Ladies and Gentlemen,

In writing this report I feel that it somewhat resembles a preface in a book: read by few and

appreciated by none.

On looking back through previous reports I tried to find something different to write. Perhaps the most pleasing fact is that of the 208 students in the Faculty, 205 are members of the Society. I think that all credit for this is due to past societies which have shown to the student that unification is so fundamentally necessary.

There have been fewer addresses this year than usual, and, whilst all were of a high standard, some

of the talks were poorly attended.

Due to hard work on the part of the Dance Committee, both the informal and formal were a huge success and both functions cleared costs.

The Annual Dinner, held at the Union, reflected the capabilities of harassed students to make such an occasion a grand show. Whilst I practically sold my soul to get 13 First Year students along, it perhaps shows that the Society need not worry for the future, as we have found both First and Second Year are more than usually interested in their Society. It is this spirit that is so desirable.

This year we are again pleased with the presence of a thoroughly capable Sports Secretary. Up to the time of writing this report, we have won the Shooting, Union, Soccer, were second in the Rowing, and third in Athletics.

The text-book scheme is well under way in the efficient hands of Bruce Johnston. This scheme enables students to buy any books at a greatly reduced rate, and is really worth everyone's

attention.

On behalf of the Society and the Executive, I would like to thank Dr. Carne and his staff for their assistance throughout the year, also Mr. Max Henry for his kind advice, all committees, and our very efficient Publicity Officer.

Finally, to all future societies and to all students who are foolish enough to enter the Vet. School, I extend my best wishes, and may you all have success along the road you choose to take.

J. C. HOLT, Hon. Sec., S.U.V.S.

FLOAT COMMITTEE REPORT

Vet.'s float this year, after much discussion, was entered in the Commem. Day Procession, and represented an effort to bring to the notice of the public the necessity for the elimination of Australia's rabbit scourge and the efficiency in this field of the virus Myxamatosis. It was perhaps unfortunate that our assurances of its harmlessness to the human population were blown down before arrival at the end of Science Rd., and that, by the time the city was reached, our main notices were slightly warped by the external environment, but the admirable performances of Rabbit, Vet., Grazier, The Curse and R.S.P.C.A. Official all brought cries of appreciation from the onlookers. The "real live rabbitlook!" lent so kindly by the Physiology Department, and so well attended by Ian Bradney, drew most attention from feminine bystanders, and children gazed lovingly, but whether the public was convinced that Myxo. was "a good thing" or not has not been decided, and certainly the S.R.C. preferred females to livestock and males (typical of the attitude outside the Vet. School!).

The Committee would like very much to extend its thanks to all those who so kindly helped in the assembly of the float, and particularly to Sugar Cartage Ltd. and driver, who, gratis, co-operated at such short notice; to the Physiology Department (Mr. Biggers) for making available one rabbit, alive; to Mr. Keep for his beautiful gold-plated syringe, which was duly returned. The good work of Jean Wootton, Malcolm Shalders and Dave Roberts was very much appreciated, particularly in view of the weather. Dave also provided a good proportion of the inanimate adornments.

Finally, a word of warning to next year's committee: be prepared in advance!

Miss I. GANT,
B. DUNKLEY,
Miss P. WILKINSON,
D. ROBERTS,
I. BRADNEY.

If the derivation of the French "Course-Hippique" is the Greek "HIPPUS", a horse, does it follow that "HIPPOCRATES" means HORSE BOXES?

ANNUAL DINNER

The Annual Dinner of S.U.V.S, this year was held on May 21st in the Union, and the estimated number of 107 guests was exceeded at the last minute by six—a feature which caused much consternation amongst the Dinner Committee and the Union caterers.

Prior to the dinner, many students were given the opportunity of meeting members of the staff and official guests. Amongst the latter were Sir Charles Bickerton Blackburn and Sir Henry Manning, two of a galaxy of prominent people.

The well laid tables carried a wealth of flowers in the colours of the Faculty, purple and gold, these being a botanical gift from an anonymous admirer of the Veterinary Profession. So fresh was their beauty and so magnificent their splendour that even the sister Faculty of Medicine thought it fit to use the same display for their Annual Dinner the following night.

The President of the Society opened the series of speeches with the toast to the Queen.

The first speaker, Professor H. R. Carne, speaking on behalf of Sir Edward Hallstrom, proposed the toast to the University. Dr. Carne took a futuristic step and depicted the University, and the Faculty in particular, in the years to come. A helicopter from the Engineering Faculty was used to pay a "flying" visit to the newly acquired property of "Coree" in the Riverina.

In reply, the Chancellor showed the importance of the University to the country, and hoped that none of the future graduates would forget their Alma Mater, and their responsibilities as citizens in a young nation.

Sir Henry Manning, proposing the toast to the Veterinary Society, stressed that an efficient and large Veterinary Profession was essential to a primary producing country like Australia. Sir Henry also painted a pleasant image of "Coree" and its surrounding district, and expected that the property would fulfill the necessity for new training facilities for Veterinary and Agricultural students.

The President, Mr. P. Knight, replied to the toast. He gave some of his impressions of the same district, in which an "ectopical" local character, by name Percy Buttons, played a humorous note. Some serious thought was given to the part veterinarians have to play in the future, and the President drew analogies from the symbols depicted in the badge of the A.V.A. to illustrate this point.

Mr. M. Gemmell addressed the guests in his

usual laconical and witty manner. He revealed the academic lives of many of the guests (with the notable exceptions of Professors Carne and Gunn!), thereby bravely risking his pass mark in some distant Parasitology exam.

Dr. G. Humphrey, without resorting to his glycogen reserves, replied with a forceful, humorous and well balanced speech. Amongst other things, he ironically stated, after some years of University life, he now felt capable of addressing students on any subject from glycogenolysis in the adductor muscle of the oyster to the Philosophy of Medicine.

The President of the A.V.A., Mr. H. McL. Gordon, in proposing the toast to the "Final Years", sang the praise of "that good bunch of fellows", and managed to convince the assembly of the advantages of always carrying a "pocket-knife with two blades, a screw driver, a bottle opener, and a thing to take stones out of horses' hooves". Mr. Gordon encouraged students upon graduation to become members of the A.V.A., and emphasised the necessity of being active members.

Replying on behalf of Final Year, Mr. J. Hurst towered above the seated assembly, and drew upon the past four years to illustrate that after many anxious moments Final Year was actually a reality. To the seated audience, Mr. Hurst appeared to emphasise the fact that, after all, reaching Final Year was actually a matter of "survival of the fittest".

A touching note was sounded when Emeritus Professor J. D. Stewart, dear and respected by all who know a little of the Faculty's history, made an impromptu speech in which he proposed the toast to the Office-bearers of the Society and Dinner Committee.

Throughout the evening various items were rendered, and notable amongst these were the two brackets of songs rendered by Mr. Harold Whitlock, of the McMaster Laboratories, in his fine, clear baritone voice, the rendition of "The Flea" being very popular. Mr. R. Barry was the able accompanist. Mr. T. Gordon, of Fourth Year, played two compositions by Daley, for which accomplished representation he received warm applause.

The evening ended soberly at 11 p.m. with "God Save the Queen".

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SPORTS CLUB

'Tis time to leave the books in dust And oil the disused armour's rust.

With the roll steadily decreasing, the Veterinary Faculty is still well in the fore for the Penfold Shield. Nevertheless, we have been finding it more difficult to find teams for the lesser sports. Considering the very fine season, there has also been a fall off in enthusiasm, particularly in Soccer. This may be imaginary, however, as we no longer have Bede Morris on the sideline.

Little change is seen in the various sports. Rugby and Soccer are almost taken for granted these days, while Shooting and Rowing are never a surprise. The big factor this year has been the points Arts have taken from Medicine in Athletics, Swimming and Basketball, leaving us in the lead with 21 points to Med.'s 18. Basketball this year takes the place of Boxing. Last year Medicine gained 26 points, Vet. 21, Engineering 21. Our fate depends on whether the Soccer and Rugby points are recognised without the semi-finals and finals being played.

The Faculty is well represented in most fields of University sport. The two crowning achievements of the year were the great efforts of John Holt and Jack Thompson.

John Holt scored a brilliant 280/300 at the Inter-Varsity Rifle Shoot to take the trophy for the highest individual score, equalling the old record. The 39/50 he scored at the 900 yds. was probably due to a large wind change which occurred during the shoot and robbed him of a new record.

Jack Thompson surpassed himself at the Inter-Varsity Aussie Rules in Adelaide. He played really great football to take second place in each game, and this won him the Drinking Cup to be inscribed "Fairest and Most Brilliant" for the tournament. This was all the more meritorious when it is realised he was playing in by far the weakest team. Jack also won the Best and Fairest for the Club itself.

Our heartiest congratulations go out to this pair. In addition, we congratulate all the others who took part in the various University tournaments. These are: Graham McCormick, in the Rugby at Melbourne; Don Tynan, a reserve in the Rifle Shoot, also at Melbourne; Rob Shapcott and D. Rees, at Sydney, between the N.S.W. Universities (which Sydney won); and also the large number at Adelaide with the Australian Rules team. These latter (11) can be seen in the article on that tour.

In ordinary sport, Phil Street, Dave Baily and

Kevin Waldron play for the Seconds in Rugby, Brian Wilson and Quinlivan for the Thirds, and, of course, Graham McCormick for the Senior side. Keith Gudsell makes an occasional appearance for the Firsts also.

Len Cooke, Ward, Newlands, Ismael all play Hockey in the Uni. Fourths. Geoff Gee, Peter Hungerford and Graham McCormick all had successes in the Uni. Athletics Championships, particularly Geoff, who gained ten points for the Faculty at this meet. Dave Smith, Russ Dreadon and Brian Wilson teamed with Geoff to take second in the 4 x 100 yd. Relay.

In a St. John's College tour to Canberra, Colin Thompson, Paul Parsons and Keith Gudsell all had a pleasant trip. Keith Curtin, who has hung up his boots for this year, was, I believe, a great help from the sideline.

No article on our Faculty's "sport" would, of course, be complete without mention of that disciple of fresh air and exercise Stan Hopcroft. One can follow a trail of lost fountain pens, wallets, note cases, tram passes, etc., between Sydney and the Blue Mountains. There are also feminine members of this club, so I believe, so Stan's motives may not be so clear after all.

At this juncture we would like to thank the Staff particularly for their support from the sideline. No one, for instance, becomes more anxious during a close match than Mr. Larsen.

For the future things look quite bright. At the moment a raffle is under way and going quite well. It is in aid of new gear. In 1948 the Sports Editor commented how well the teams looked in their clean, new uniforms. We must have been going back ever since to be in our present "odorous" state. From the players' point of view, Second and Third Years are quite strong, and in First Year are Rahim and Lim, who play in the Uni. Open Soccer team.

We finish this article with the hope that we do well enough in the Tennis and Cricket to take the Penfold Shield, which has been out of our keeping for far too long.

OWEN JONKERS, Hon. Sec.

HOCKEY

The Hockey Club was pleased to welcome the influx of new players, mainly from Second Year, when we tested our first blood in a match against Final Year, in which we were battered into defeat.

By the time the competition commenced we had managed to build up sufficient combination, with the help of a game against Vet. girls, to defeat Medicine 2-nil. We were unlucky to lose to Engineers in a close game, when Engineers scored in the last few seconds of the game.

Due to various complaints, a weakened team, with one short, lost to Architecture, and hence the chance of retaining second place.

Veterinary Science filled fourth plate, the competition leaders being Engineers 1st, Architecture 2nd, and Science 3rd.

The match results were:

Vets. v. Science: Lost 2-nil.

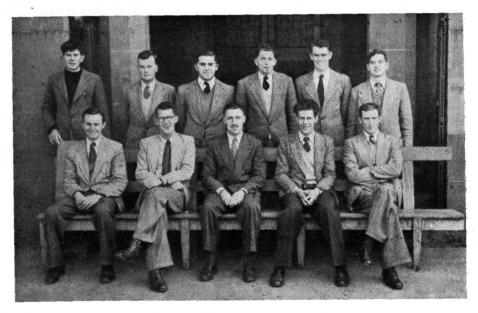
v. Arts: Won on forfeit.

v. Medicine: Won 2-nil.

v. Engineers: Lost 1-nil.

v. Architecture: Lost 2-nil.

Members of the team were: Len Cooke, Bruce Johnston, Rod Shapcott, Peter Rees, Stan Hopcroft, Ian Parsonson, Ron Ryne, Dave Roberts, Peter Lewis, John Armstrong and R. Newland.



Standing: S. Hopcroft, P. Rees, P. Lewis, I. Parsonson, R. Shapcott, R. Newlands. Seated: D. Roberts, J. Armstrong, B. Johnston, L. Cooke, R. Ryan.

PIGEON PIE

And the pigeons as they flew about (Feeding such a large amount)
Were soon to be by means that savour
A pie so full of flavour.

Ethyl 'Opcroft.

ATHLETICS

This year Veterinary Science finally came good in the Inter-Faculty Athletics, gaining third place with 17 points. Arts and Medicine, however, were well in front with 35 and 26 points respectively. As usual, most of the point scoring was done by regular athletes, but a great deal of credit should go to those chaps who entered in events and tried hard without gaining a place. We need more of them.

The outstanding individual performances were:

G. R. Gee: 1st in Broad Jump and placed in five other events.

G. McCormick: 1st in the Hammer Throw.

P. Hungerford: 2nd in the 440 Hurdles.

The Relay team (Gee, Wilson, Smith, Dreardon) also performed well to hold a strong Medicine team until the final change, when Olympian Edwin Carr took over to win clearly, with Vet. Sc. second.

In the Tug-o'-War our reputation had preceded us, and no opponents were to be found capable of or willing to extend us. However, seeing we had enough men for two teams, a 5th Year versus The Rest match was organised, The Rest winning decisively.

Following the University Championships, Geoff Gee and Peter Hungerford were selected in the Sydney team to compete in the Inter-Varsity Athletics at Melbourne.

Now, with regard to next year we hope to do better, but in order to do so we must have more sprinters, distance men and field game exponents—so be in it, start training now or early next year.

An added incentive is that next year the I-V Athletics are to be held in Sydney and a large Sydney team will be selected. Also of special interest to us is the fact that a Hammer Throw will be included in the next I-V meeting and our Grahame McCormick looks a possible winner.

AUSTRALIAN RULES

Although there is no Inter-Faculty competition in Aussie Rules, the code warrants mention here because of the many Faculty members playing for University teams.

More than 50 per cent. of the Inter-Varsity team which journeyed to Adelaide in May was from Vet. They were: B. Christie, G. Davidson, J. Rowlands, F. Wilkinson (II Year); D. Fenwick, O. Jonkers, P. McCormick (C.), J. Thompson (IV Year); J. Arnott, B. Clark, P. O'Connor (V Year).

These players proved very capable both on and off the field, playing as far afield as Windy Point.

The dominance of Vet. was shown in 1951 when the four Blues awarded for Rules all went to this Faculty: J. Arnott, G. Davidson, M. Spittle, J. Thompson. Whilst J. Arnott was judged the Club's Best and Fairest, and G. Davidson Best at Inter-Varsity, these awards went to J. Thompson in 1952.

If further proof be needed of the individual brilliance of Vet. Rules players, let it be stated that the Club's Best and Fairest award has gone to Vet. every year since, and including, 1948, the Club has been in the Sydney competition.

This season saw the retirement from the Club of stalwart champions J. T. Neasey, C. E. Liefman and K. Curtin, who gave the Club service for many years.

Mid-season also saw the retirement of J. R. Blogg after an enthusiastic three half-seasons. Reason for his premature retirement is obscure, but he is still believed to be "kicking on" towards that goal he's been talking about.

Thanks are due from the Rules Club to those Vet. chaps who give the Club assistance at matches. Inspired by efforts of fellow countryman Jonkers, Bob Jolly and Pat Cooper turned out, risking conversion, and were accompanied by Geoff Gee, J. Thomas, R. Hickson and Rob Robinson (now a 1st grader).

Lack of Inter-Faculty Rules hasn't prevented active participation of Rugby players in Inter-Faculty contests, and Pat McCormick, Doug Fenwick and Jack Thompson managed places in Rugby, Soccer and Basketball teams. David Leaver and Bill Dunbar and Owen Jonkers also turned their feet to Soccer.

There is a possibility that there will be no University Rules team next year. We hope this won't be so, and that the Vet. Faculty can uphold the good record it has preserved in the 18-a-side game over the past years.

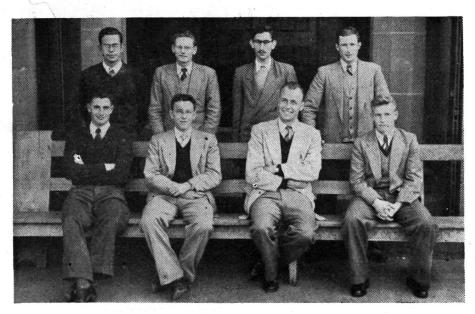
BASKETBALL

Considering the fact that the basketball players could hold no practice sessions, the low standing of the team was no discredit to them. Unfortunately, the practice ball was useless, so the team had to combine practice and their competition.

In the competition, Vet. finished second last behind the following: Med., 21 points; Arts, 19; Ag., 16; Architecture, 15; Science, 13; Vet., 11; Eng., 6. Needless to say, the only game won was against Engineering.

In all the games the lack of practice was evident, as our boys were able to get the ball, but were unable to hit the basket. In general, all aspects of the game were on par with most of our opponents, but the scoring ability was sadly lacking.

Two of the mainstays of the team, Geoff Gee and Doug Fenwick, were Fo rth Year, and the remainder—Rod Ryan, Dick Larsen, Vic Baxter, Peter Hungerford and a few others—were Second Year, so that next year Vet. Sc. should have the makings of a fairly good team.



Back: R. Larsen, V. Baxter, D. Kennard, R. Ryan. Front: G. Gee, P. Hungerford, F. Newlands, D. Fenwick.

SWIMMING

The annual Inter-Faculty Swimming was held in Lent Term at the Coogee Aquarium, Coogee.

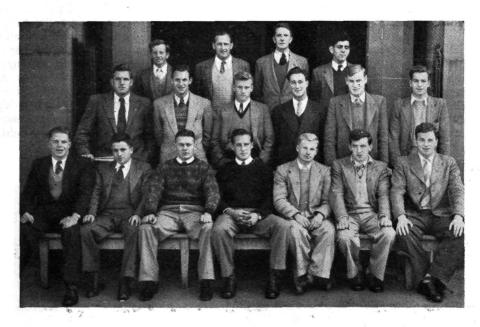
After the fine effort by the Veterinary Faculty last year, when second placing was gained in the competition, it was anticipated that this year's result would be as good and, perhaps, betters. The sports were finally held late in the term, after two or three postponements.

The roll-up by the swimmers of the Faculty was disappointing, and it was only through chaps like Phil Knight and Doug Fenwick, who were enlisted on the spot, that a team was obtained for the relays at all.

Jack Hurst swam gamely in the men's Butterfly Breaststroke to gain second place. This was the only placed performance. Next year it is hoped that a better response from the swimmers will be obtained, and that Vet. will be at or near the top again.

In conclusion, the Swimming Committee would like to thank those members of the Faculty who were good enough to turn up and lend moral support.

RUGBY FOOTBALL



Back: R. Dickens, J. Neasey, P. Knight, B. Panaretto.

Middle: P. McCormick, R. Dreadon, D. Fenwick, J. Thompson, P. Cooper, I. Bradney.

Front: D. Bailey, R. Weaver, C. Thompson, B. Bailey, D. Smith, K. Waldron, D. Quinliven.

Maintaining the traditionally high standard of Rugby Football, the Vet. team again dominated the Inter-Faculty Competition. Undefeated so far this season, we are confident of taking the premiership for 1952.

We began the season with the keenly contested Australia v. New Zealand game, followed by a series of inter-year and practice matches against Agriculture, Science and Arts.

Col. Thompson at half-back was elected Captain, and Keith Gudsell guided the team in training. The stars of the previous years turned out again—Jack Neasey, Phil Knight, Pat McCormick, Rus Dreardon and Jack Thompson, all sacrificing valuable time to represent the Faculty.

The team played particularly well against strong combinations from Agriculture, Dentistry and Law. We defeated last year's premiers, Medicine, 34 to nil. The Dentistry game was particularly exciting, and a thrilling match with Law displayed some

of the fastest football seen in Inter-Faculty games for many years.

The forwards lacked nothing in weight and height, and, together with fast, tight play and amazing rushes with the ball at the toe, proved to be the strength of the team.

The backs were light, but very game—handled well and showed great speed on the wings. Full-back J. Thompson was always at the right place in attack and defence, his brilliant field goals thrilling the large numbers of supporters who were always there to cheer their team.

Newcomers to the team from Second and Third Year will be the nucleus of next year's XV. David Quinleven, Pat Cooper, David Jones, Bob Weaver and David Smith will all be valuable assets in later years.

If the players hold their fighting spirit and the supporters maintain their encouraging interest, our supremacy in Rugby Football will never be supplanted.

D. A. BAILEY.

RIFLE SHOOTING

Our reputation on the rifle range was maintained by old faithfuls and a solitary newcomer. Nevertheless, our interests were well protected by Rifle Club Captain John Holt and Range Treasurer

Don Tynan.

In all the matches throughout the year John justified his place amongst the "greats" in University Shooting. He competed in the King's Prize and all Inter-Varsity shoots, and was Club Champion. In Melbourne he equalled the aggregate record after turning in phenomenal scores, and also captained Combined Universities v. Victoria. Tynan also shot in the Reserves match. Equally as valuable was the efficient control of club activities and the shaping of a Vet. team to regain the Inter-Faculty Crown.

We missed that old faithful Charlie Thomson for the greater part of this year, due to the inroads of examiners and the imminent constraints of Holy Matrimony. Lest we forget, he reaffirmed his ability of late, and we will be sorry to lose him—if, indeed, we must, in the face of his affection for the Faculty.

Hans Lindner, Don Tynan and a newcomer, Max Kyle, represented their colleges. Dave Roberts was noticeably oblivious to the salubrity of Liverpool air—probably due to the counter-attractions of the arts.

Besides actual shooting ability, the Faculty possesses some skilled markers, led by "Poss" Hayes. These stalwarts braved the wilds on the occasion of important matches.

The culmination of our shooting activities was reached during second term, when we competed against six Faculty teams. In pleasant conditions, scores at 300 yards enabled Vet. to take the lead from Medicine, last year's victors, and in the afternoon consistent team shooting confirmed our superiority, the final scores being: Vet. Science 530/600, Medicine 515, Dentistry 506, Engineering 505, Science 498, Ag. Science 492, Arts 434.

As ever in successful teams, individual aggregates differed by a small margin of four points.

It is for the up and coming shooters, plus any newcomers to this intriguing sport, to maintain this supremacy for Vet. Science in future years.

D.T.

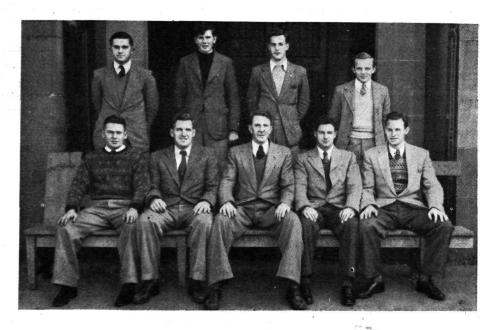


Back: H. Linder, C. Thomson. Front: D. Tynan, J. Holt.

ROWING

This year all the grim excitement of the famous Oxford-Cambridge boat race paled to insignificance beside the great display of oarsmanship and brute force of the Vet. "8". To those keen devotees of this ancient, yet noble, sport little can be said that will supplement in any way the thrill of a race well run. To them, the rhythmic poetry of eight stalwart oarsmen straining to the stroke; eight sweating faces distorted into the fantastic grimness of determination; the flash of eight blades as they

At the beginning of the year that monument of muscle Jack Hurst (5th Year student and proven sire) gathered together a band of potential oarsmen and proceeded to drive them into the rigours of earnest physical training. After weeks of threats, promises, sweat, blood, toil, tears, and that sort of heroic stuff, the day of the great race loomed up and out of the upper reaches of the Sydney Harbour. So that readers may readily grasp the significance of the final outcome of the race, the



Back: P. Lewis, S. Hopcroft, I. Bradney, M. Shalders.

Front: C. Thompson, P. McCormick, P. Knight, D. Brewer, R. Dreadon.

leave the water churned into miniature whirlpools; the hoarse encouraging plea of the "cox", and the graceful, continuous run of the "shell" as it skims swiftly and cleanly through the water are but few of the features which constitute the joyous emotions of rowing. And to those less fortunate persons who know little or nothing of these healthy sensations, that which follows will serve only to introduce to them a new and exciting sport, the limits of which are as wide as the endless sea, for this is not a story but a factual report.

following information is given. Of the crew of eight, only four had previously plied ye olde oar. The four veterans found no difficulty in keeping in time—but such was not the case with what remained of the crew. This unhappy state of affairs was responsible for the high blood pressure of Skipper J. Hurst and 1st Officer P. Knight (the latter taking over from the former during fits of apoplexy), but through sheer determination and strained self-control, Capt. Hurst saw the day when every oar entered and left the water with a crispness which

stimulates the "lub" and "dup" of a normal heart beat. Up till this time "pathological murmurs" had been the order of the day.

It was Easter Saturday and the air was charged The "shell" was polished, seat runners were oiled, Colin Thompson (bow) sucked greedily at a barley sugar proffered by Rus Dreadon (4), Ian Bradley (2) puffed a nervous cigarette, Don Brewer (3) looked wistfuly towards the "Local", Pat McCormack (6), still pale from a bout of "pneumonia", offered words of encouragement to Peter Lewis, who was to take his place, Jack Hurst (5) and Phil Knight (7) spoke in undertones as though in prayer, Dick Coward (stroke) (who holds the enviable records of six years' rowing for the Vet. crew) stretched out in the sun and read the Daily Telegraph, Jack Stewart (cox) practised such stirring phrases as "Bow and 3, you're supposed to be rowing!!", and Malcolm Shalders, who for the greater part of the training period had "coxed" for the crew, said, "You'll have to shout louder than that, Jack-they're deaf too!!" And so, with spirits high, the eight lined up at the starting line, eagerly awaiting the starter's gun for the 1st heat.

It was a great race, and the evening sporting papers published the following: "Vet. Sci 1, Med. 2, Eng. No. 2, 3. But the test of weeks hard training was yet to come. The final heat saw Vet. Sc., Med., Eng. No. 1, etc., lined up at the starting line again. Little did anyone suspect the drama that was to follow.

Vet. Sc. was some four lengths behind Medicine when the cox ordered the rating to be increased. Gradually the gap closed between the two eights as every man plunged with his legs and tensed such muscles as Lat. Dorsi Biceps. Hearts were thumping, blood pounded through dilated vessels, sweat glands worked to capacity, riggers groaned 'neath the power and driving force of the oars, onlookers roared their approval. Then, with half a length still to make up, Dick Coward, uttering the war-cry of his Viking forebears, threw every last remaining ounce of his energy into the swirling fray and broke his rigger! This was sporting tragedy; Meds. held their lead to wind from Vet. Sc., who gained the honour of second place, with Eng. 1 third. The

victorious Med. crew richly deserved their great win, for throughout the race they displayed the polished form of a well trained crew. Had Dick had one lump of sugar less, or had his battery not functioned as well as it did, so that his rigger might not have snapped 'neath the strain—the result would have been the same. Meds. would have won, but only by a nose. Such was the outcome of the Annual Inter-Faculty Rowing.

Special mention is extended to Jack Hurst, who made by the Leichhardt Rowing Club in lending Vet. Sc. their best "shell" and extending to the crew the privileges extended to their own members. Special mention is extended to Jack Hurst, who trained the crew to its comparative high standard in a matter of but four weeks, and to Mrs. Hurst, who afterwards held a festive gathering in honour of the crew. Phil Knight and Dick Coward did a grand job by contributing much to the success of the crew. Rus Dreadon should make a worthy member of 1953's crew, this being his second performance for Vet. Sc. Colin Thompson, Ian Bradley, Don Brewer and Peter Lewis were the new-chums, who heartily recommend rowing as a good sport. Their remarks after the race, viz., "Phew, Hell!", etc., speak for themselves.

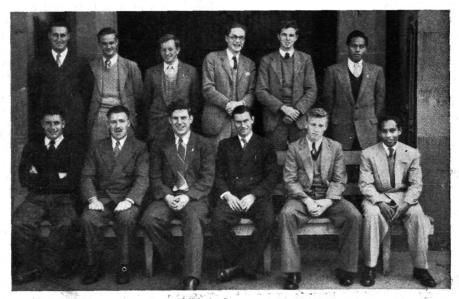
Stan Hopcroft trained with the crew, ready to bend his back had a member of his weight been unable to row on Easter Saturday. He claims that since training with the crew he has been able to walk much faster and carry a heavier pack on his week-end bush walks. McCormick is lining up for the 1953 event, and hopes that by then he will be rid of the malady that this year reduced him to the rank of onlooker. Malcolm Shalders, who steered the crew to victory in 1951, had commitments elsewhere this year and found an able substitute in the form of Jack Stewart, who, in a matter of a few hours, assumed the responsibility of "cox" with all the concomitant "oaths" that go with this essential role.

Next year training will start early and earnestly. Recruits of stout heart are wanted so that the sporting traditions of the Vet. Faculty may continue to press forward in the same splendid manner as they now so enviously do.

Overheard on football field:

- You're all over the place like a dog's breakfast.
- Stop scratching around there like a lot of headless hens.
- 3. (After half-time): Hey, Ref., they're running the other way now.

SOCCER



Back: J. Thompson, J. Capell, R. Dickens, M. Gemmell, D. Fielden, A. Rahim. Front: G. Gee, B. Johnston, J. Hopkins, D. Charles, D. Fenwick, A. S. Lim.

The Soccer Club is about to complete another very successful season, having suffered only one defeat, by Medicine; total points for, 10, and against, 3.

This year's games have been much better than last, team members having obtained more experience. Three useful additions have been the Malayan boys Lim, Ridzaun and Rahim; the Faculty hopes to see more of them in the coming year.

The fact that the Rugby Union selectors at last recognised the talent in the Australian Rules players left us short of a very valuable full back.

As the competition stands, semi-finals and finals

are yet to be played off; the weather at the moment may make this impossible.

Again this year lack of administration in the competition is in evidence: firstly, in the season's late start and, later, in the organisation of the finals. Hand-to-mouth organisation, as carried on at the moment, is not good enough. We trust the basis of the competition and schedules of play will be determined well ahead of time and adhered to by those concerned next year.

It but remains for the retiring committee to thank all those who took part in this year's games, and to wish their successors the best of luck for the next season.

TENNIS

A very successful tournament was conducted this year, but the semi-final and final matches are still to be played.

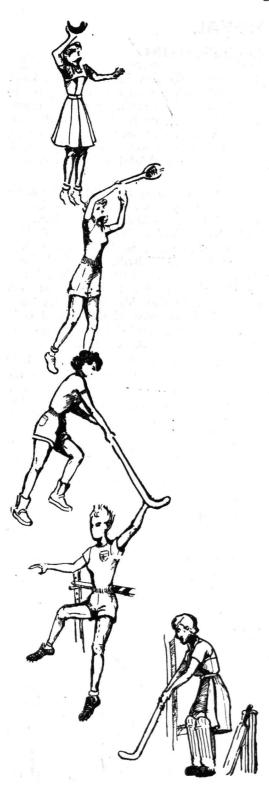
The Inter-Faculty Competition had not commenced at the date of writing, but the probable team is B. Dunkley and I. Bradney; J. Christie and G. Pulver, of whom the former pair have been showing wily courtcraft in the current tournament.

CRICKET

In the 1951 Inter-Faculty Competition the Vets. were unfortunate in being beaten in their first match by the strong Dentistry team. This year we hope to do better.

The usual match between Final Year and the Staff was held in First Term and won by the Staff.

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WOMEN'S SPORTS NOTES

Despite some drawbacks as far as members, weather and times go, the Vet. women (like the Vet. men) have always been one of the keenest faculties taking part in sports of all kinds, although just managing to find enough people to make up a hockey team.

This year we were very pleased to welcome Russell Morgenson from Melbourne, who has proved to be a great asset to our sporting activities.

Our congratulations go to Elaine Edmonstone for being chosen as goalie for University 1sts Hockey team for the third successive year. Also to Jill Clout and Dorothy Edmonstone, who have played hockey with the University 2nds this year.

Rowing.—Dorothy Edmonstone and Jill Clout started off our sporting year by representing us in

the women's pair rowing.

Basketball.—Our team, Del Ferguson, Russell: Morgenson, Loretta Leedham, Barbara Wilhelm, Jan Caterson, Jean Wootton and Judy Cahn, played Arts II, the result being an overpowering win for Arts.

Well, at least we tried. In fact, the Arts team was quite stunned when a Vet. team was produced.

Hockey.—Isabel, Dorothy, Barbara, Jean, Lorrie, Del, Russell, Pat, Sue, Jill, Judy and Elaine made up our team, which played the men. Even the addition of two extra players didn't help much, but we actually got near enough to the goal for Russ to bring our score up to one. The game ended one all. Thank you, Vet men, we thought it was great fun.

The game gave us some practice for the forth-coming Inter-Faculty match to be played with

Medicine, so here's hoping!

Athletics.—Things brightened up considerably at the Women's Inter-Faculty Athletics, Vet. coming third, with Science first and Physio second.

Jean displayed great talent to fly into first place in the sack race, with Jan a close second. (Comment overheard from the sidelines: "Never have I seen such bags move so quickly!!")

In the wheelbarrow race, Jan and Judy were first over the finishing line, but unfortunately Barb and

Jean collapsed not long after the start.

Russell, Jan, Jean and Judy were our relay runners, but we didn't quite make the grade.

Del and Barbara, however, gained more points for us by being placed third in the "thread the needle" race.

Tennis.—Is to be played in third term.

Altogether we have enjoyed ourselves this year and are looking forward to an even better year next year!

THE BATTLE ROYAL

A SHORT HISTORY OF COCKFIGHTING

Many primitive nations sought to learn from the stubborn valour of the fighting cock.

Thermistocles is said to have revived the courage of his soldiers by the example of the two cocks festivals to which lads were directed to attend in order that they might learn courage, a course approved by Socrates and Salon. The Romans followed this example.

Of the more primitive peoples, the earliest Chinese records mention cockfighting. In India there are records dating to 1000 B.C. and the Persians practised it for centuries before the Greeks.

Cockfighting has also been traced amongst the Phoenicians, and some Jewish authorities believe that the Assyrian war god Nergal was symbolized by a fighting cock.

Cockfighting may have been introduced into Britain by the Romans unless it was introduced earlier by the Phoenicians, because Caesar says that "Britons kept fowls for pleasure and diversion".

The first authentic record of cockfighting as an English sport dates to the reign of Henry II, but it mentions the sport as fully recognised and carried on at public schoools on Shrove Tuesday, a regular fee being collected from pupils to provide the cocks. This surely indicates that there was in England, as in Greece, a deliberate purpose of inspiring youth of the country to a spirit of valour. Nevertheless, it was for sport that Game cocks were mainly bred, and a treatise upon their breeding, feeding and management is found in the early editions of "Hoyle's Games".

Now that cockfighting is a matter of history some details may be of interest.

For seven centuries cocking was a national sport in Britain and though prohibited by Edward III, Henry VIII and Oliver Cromwell, Henry VIII built a private cockpit at Whitehall wherein to enjoy this royal pastime.

On the other hand, many kings encouraged cockfighting, so that it has been called a "royal sport". James I and Charles II were among its royal patrons. So popular was this sport that in old deeds tenants were required to raise so many fighting cocks for the use of the lords, and in corporation (county council) accounts of expenses, large sums are recorded as being used to entertain various dignitaries with cockfighting.

In the Easter week of 1822, in one pit alone, 188 cocks were matched for sums of upwards of £6,000.

English Game cocks were bred in many colours, but no particular colour predominated the pits. In Queen Anne's time a noted sportsman named Frampton had the best strain of cocks of the day; they were grey, with a brown tawny wing. Greys, Yellows and Red Piles were also highly prized, and Bradbury's Duns and Whites fought their way into notoriety.

In the eighteenth century Hugo Meynell and Sir C. Sedley bred Greys with black legs, beaks and eyes; these birds were seldom beaten. Then followed Mr. Nunis' Yellow Birchens, the Earl of Mexborough's Duckwings, Sir F. Boynton's Duns and Col. Mellish's Dark Reds. Lowther's Light Reds with yellow legs cut down everything before them; a Mr. Elwes bred a Red Dun that won twenty-seven battles; then Vauxhall Clarke came into the royal pit to carry off the Annual Gold Cup with his Greys; he bred different colours, and beating him was out of the question.

The Cholmondelys bred Smocks and light Cheshire Piles that would frequently electrify the pit by dropping their opponents stone dead in a severe battle with the odds against them. Dr. Wing, of Leicestershire, bred and won with all colours, and Lord de Vere's Blacks were famous throughout the land. Weightman, with his famous Parkhouse Reds, beat the best in Lancashire for the highest stake ever fought for—over £1,000 each battle and £5,000 for the "main".

Dr. Bellyse reared a thousand cockerels a season and was generally invincible. It is said that once a nobleman offered him £50 for a setting hen, whereon he lifted the hen off the nest and put his foot on the eggs, and on his lordship remarking that he had bought the eggs too, Dr. Bellyse replied: "If you had, I would have charged you a thousand."

The standard for a fighting Game Cock is: keenness of aspect, richness of plumage, cleanness of feet. He must have a good boxing beak, very big, either crooked or hawk shaped; large, full, fiery eye, tapered head, not too long, for if the head is long and beak straight he loses much holding power when taking hold to strike; long strong neck, flat, broad body, tapering wedge shape to the tail, strong, long wings so that when clipped the quills are of a powerful description, muscular, round, short thighs, legs white, carp or yellow, preferred in that order. The cock must be hard of bone with well bent hocks to give good spring when rising, legs in line with the body, not out or straddling, spur set

low, clean thin feet and toes, long open back claw; he must be light, but firmly fleshed, and looking large for his weight.

The best birds were inbred, and it is said that attempts at cross-breeding, even between two outstanding strains, always failed.

Coathe's famous birds were inbred for forty years, yet were seldom beaten and showed no sign of degeneration. Game cocks were reared at range with a few hens, and, although never starved, were never heavily hand fed in case they became heavy and inactive; cocks were given as much exercise as possible to make them agile and active in battle.

Birds fought at two years of age, prior to which they were placed in the feeder's care to reduce the bird's weight and improve his health. Diets used by the feeders were kept secret, at least until the mideighteenth century, when several recipes for "cockbread" were published; typical of these was the recipe of J. Macdonald, M.D., which was used to feed cocks for the four days immediately prior to battles, and by the use of which 93 out of the 100 battles were won. Dr. Macdonald's cockbread consisted of millet flour, rice, barley, vetches, cochineal, whites and some yolk of egg, mixed with ale, and baked for four hours.

Cocks in training were weighed, and their match colours noted three days before the fight; at weighing in birds were produced as light as possible, then "steamed up" for the fight. They were purged, then fed cockbread, leather muffles were placed over their spurs, and then they were allowed sparring as exercise to keep them in good wind.

Prior to fighting, wings were clipped from the first rising feather slopewise upward, hackle and cloak feathers were shortened, sickles cut off, and feathers around the tail, vent and along the belly cut short. Spurs were cut to $\frac{1}{2}$ inch, and long silver or steel spurs strapped in place in line with the outside of the hock, just below the natural spur.

Spur-making was an art carried out mainly in Cockspur St., London; the leading makers of silver spurs were the Clays (father and son), Gregory, Smith, Toulmin and Vincent; the latter employed twelve workmen at the time of his death in 1797.

Smith's silver spurs were so famous that he received mention in a poem by Hallam, called the "Cocker", wherein Hallam said:

"As curious Artists different Skill disclose, The various Weapon different temper shows, Now curving Points too soft a Temper bear, And now too hard their brittleness declare; Now on the Plain the treacherous Weapons lye, Now wing'd in Air the shiver'd Fragments fly, Surpris'd, chagrin'd the incautious Feeders gaze, And Smith alone ingenious Artist praise."

A pair of Clay's silver spurs were presented to Charles II by Nell Gwynn. The usual price of a pair of silver spurs was two to three guineas; steel spurs sold at $50/\cdot$ to $60/\cdot$ per dozen pairs, popular makes being those of Singleton, of Dublin, and Watling, of Exeter. Spurs ranged from $1\frac{1}{2}$ to 4 inches in length, had a loop which fitted over the natural spur, and curved upwards from below the natural spur so as to give greater "heel".

English spurs bore points only, whereas some Asiatic spurs had razor-sharp edges.

The Cockpit Royal, Westminster, was initially the chief place for this sport, but there were many public pits, and several of London's famous theatres were originally used for cockfighting, including Drury Lane. The actual pits were 20 feet in diameter, surrounded by seating accommodation.

Matches consisted of, say, 21 pairs of cocks, matched according to their weights; an odd number of pairs was always used to avoid drawn matches. At Westminster 61 pairs were weighed, colours noted, then three days later birds that were within one ounce of each other were matched over three or six days' play, the lightest birds beginning the match; this was called a "long main". There were also matches in which each side obtained a certain number of the largest cocks available and matched them without weighing. The proverbial "Battle Royal" was a mass match in which each man put up a given stake and produced a cock of a stipulated weight; all birds were released in the pit simultaneously and the last bird remaining alive won the stake. No cocks over $4\frac{1}{2}$ lbs. or under 3½ lbs. were allowed to fight in regular mains. In the Welsh main 16 cocks were matched in pairs by weight, then the winners matched again as in successive heats, the ultimate winner having fought four battles.

Such, then was cockfighting. It is unnecessary to declare its cruelty. However, the brutality did not lie in the actual suffering of the birds; in fact, the original promoters of the R.S.P.C.A. specifically exempted cockfighting from their strictures because the cock was kept in comfort until the day of the fight and then fought by natural instinct; but the fighting instinct was developed by selection by man to such intensity that cocks fought to the death, and, if a bird yielded, he was duly consigned to the pot—a vengeance not inflicted by Nature.

The Game cock would undoubtedly, if able,

choose to fight rather than have his neck wrung, and was conscious of little beyond the joy of combat. Metal spurs were not an added cruelty because they shortened the combat, many birds being instantaneously struck dead; however, individual blows would be more sharply felt, since some birds would fight stubbornly in a natural condition, but would not "stand steel", and others that fought well in steel flinched under the longer battle in the thicker silver spurs, which did not cut such deadly wounds.

The difference is that in most other blood sports the suffering is incidental, unnoticed or forgotten, whereas in cockfighting every fresh injury to either bird was eagerly watched and recorded in the betting. The suffering of every bird had the rivetted attention of every person engaged; the spectators were thus habituated to disregard the constant sight of blood and pain in the excitement of the contest and of glambling upon it; that is, the moral evil consisted in finding pleasurable excitement in the actual circumstances of blood shedding, suffering and death.

At the end of the nineteenth century cockfighting was finally stamped out in Britain, except for occasional illegal secret battles which are known to have persisted at least in the first decade of this century, and, I am told, still persist in northern N.S.W.

The Game cock is now bred only by poultry fanciers and for their excellent table qualities.

References: Lewer, S. H. (1911): "Wright's Book of Poultry", The Waverley Book Coy. Ltd., London.

J. A. COLLARD, Vet. Sci. V.

Two old spinsters, having become fed up with life in general and all things male in particular, invested their life savings in a little farm, which they proceeded to turn into a paradise for all female animals. Theirs were the best cared for cows, ewes, hens, nanny-goats, bitches and cats for miles around, and reigning queen supreme over these idyllic acres was Bella the pig, over 1,000 lb of pampered Berkshire obesity.

Unfortunately, it came to pass that the receipts from this worth project failed to balance the costs, and as they were rapidly verging on insolvency, they reluctantly sought the advice of Bill Smith, their neighbour. His counsel was that, as pork was booming, they couldn't do better than to breed Bella. Horrified, they recoiled at the thought, but eventually they were forced to agree that if they

were to keep the wolf from the door, Bella must hear the patter of little feet and swiftly, too.

So, on the appointed day, Bill Smith arrived to convey Bella to his boar, a husky, tusky, virile, spud-grubbing Tamworth. As Bella had gone on a sit-down strike, he loaded her into a wheelbarrow and trundled her up the road, returning at nightfall to restore Bella to the bosom of the family.

The following morning the sisters were up bright and early to prepare a tempting breakfast as a salve to Bella's outraged feelings. When, however, they reached the sty—no Bella! Panic-stricken and overcome with remorse, they searched everywhere, but in vain, until finally, in front of the house, they came upon Bella—— You guessed it. Yes, sitting up in the barrow.

LOGIC IN VETERINARY SCIENCE

The more one learns, the more one knows.
The more one knows, the more one forgets.
The more one forgets, the less one knows.
The less one knows, the less one forgets.
The less one forgets, the more one knows.
So why learn anything?

(Don't you believe it.—Eds.)

A shoulder strap is a device for keeping an attraction from becoming a sensation.

It was planned to present him with a nurse containing the funds.

THE OUEEN OF THE CANNIBALS

Once upon a time there was a tribe of fighting women who ruled and conquered by strength of arm and who, by a high amputation operation, gave Bond's athletic freedom to their right arms. But it is not about these that I wish to write, but about a cruel husband-killer, christened by the Greeks the Mantis.

Theocritus describes it by saying: "It always holds up the fore-feet like hands, praying, as it were, after the manner of the Diviness, who in that gesture did pour out their supplications to the Gods. . . . They resemble the Diviness in the elevation of their hands, so also in likeness of motion, for they do not sport themselves as others do, nor leap, nor play, but walking softly, retain their modesty, and show forth a kind of mature gravity. . . ."

I would say, however, that the only thing the Praying Mantis is praying for is something to prey upon.

In spite of the terror and ferocity portrayed by this creature, it is harmless to man and beast. But in its own world, that of the insects, it is a veritable ogre. From the day of its birth it is a killer. Nothing escapes the gaze of its black, button-like eyes as it stands motionless, arms folded in an attitude of prayer, waiting for an insect to come within reach. Then, suddenly, out snap those long, saw-toothed front legs to snatch to its doom a butterfly, bee or bluebottle. Only one insect—the ant—fails to attract this miniature "garden dinosaur".

Let me tell you the reason for this. This single antipathy dates from the day of the Mantid's birth, when scores of ants wait to devour the soft shelled creatures as they emerge from their cocoons. A day or two later the war would be one-sided as the new babies have developed a tough armour plating. Nevertheless, these two insects remain enemies for life. Apart from ants, the Mantis will not hesitate to do battle with cat or dog, birds, lizards or frogs.

From the time it enters the world as an egg until the autumnal cannibal feast, the life of this curious creature is a sequence of surprising events.

The "egg-basket" which the female attaches to a twig is one of the world's strangest containers. Whitish and fragile, the nest is composed of nothing more than a solidifying frothy substance which she exudes as she clings, head downwards, to her nesting site. This froth is squeezed from her abdomen like icing from a cake decorator's tube, while her rotating feelers mould it into intricate corridors and caves, in which, at regular intervals, she deposits her eggs. At no time during this process does she venture a backward glance at her handicraft—because she is a good soldier, I suppose.

During the winter this papery case becomes hard and horny and changes from the original pure white through rich honey to a deep chocolate brown. But this is not always a safe home for the embryological Mantis. There's a nigger in the woodpile. A tiny parasitic wasp, having located an adult Mantis, settles on its back, sheds its wings and waits. She's out of luck if she has read the signs incorrectly and has picked on a male or a female which has already laid her eggs, for what she required is a gravid female so that she can lay her eggs with her host's that her children may have eggs for breakfast.

However, if all goes well, spring will find the baby Mantids emerging from their winter home and nursery, each a replica of its parents, with golden bodies struggling to free themselves from the silken threads which secure them to their nursery bed. These bodies become dark green or brown and are soon lost in the concealing undergrowth. I understand that some species have reached great heights in the camouflage by likening themselves to exotic flowers and lichens, not only for securing their prey, but in protecting them from birds and other enemies.

The female is the cannibal! Aren't they all in one way or another? Apart from its outside enemies, the male Mantis has one within his own ranks—his wife, or, in some cases, fiancee. He is destined to come to a sudden and ignominious end at the "hands" of the female during matrimonial activities which can only be described as scandalous. The male may form a wedding breakfast for his wife: he may be consumed even during the delights of the honeymoon. But there is worse to follow, for, having despatched her first mate, females have been known to mete out the same undignified treatment to eight or nine husbands in succession. She, like Syngamus Trachea, hates being separated from her mate.

What a hypocrite this Praying Mantis is! Its air of pious devotion has surrounded it with folk-lore and legendary good works which it does nothing to merit.



JOHN EDGAR HOLLYWOOD 1926-1952

"To live in hearts we leave behind— Is not to die."

OPEN LETTER TO SOCIETY MEMBERS

In setting out to write the "Open Letter to Society Members" for 1952, I wish to thank each and every one of you as members of the Society for the honour and privilege conferred upon me as President. Such a position carries with it many responsibilities which, I always feel, would be far better entrusted to hands more capable than mine; and thus it is with some trepidation that I commence this letter.

1952, though successful in many ways, is also a tragic one for many of us. I refer to the sudden and untimely death in Trinity Term of John Hollywood. Those of us who knew John only slightly will remember him for his enthusiasm as a member of the Rugby and Cricket Teams. We wish at times like these we could turn the clock back and perhaps help each other more than we have done, in the many ways one student can help another throughout an anxious course. To Mr. and Mrs. Hollywood and John's fiancee, we extend our deepest sympathy and understanding.

During the past year, upon several occasions, discussions have arisen as to the future of our Veterinary Profession, and in particular into which branch of the profession it would be advisable for the recent graduate to enter. Broadly speaking, there are four main branches which lie open to the graduate, viz.: 1, Practice; 2, Research; 3, Extension, and 4, Control and/or Quarantine. impossible to completely separate any one of these groupings. For example, a Departmental Veterinarian would be called upon at some stage or other to devote some portion of his time to perhaps Field Research or Extension. Likewise, a practitioner would be well advised to carry out some minor research relating to the problems of his or her own particular district, in between clinical treatment of cases. The branch of the profession a graduate is to enter will depend upon numerous factors, most of which he alone can assess and decide. Here, the older the graduate, the more likely he is to have commitments which will prevent him from perhaps disregarding the pure economics of the choice. To younger graduates this consideration should not be necessary. Whatever be the choice, the following quotation from the minutes of the N.S.W. Division of the A.V.A. of Friday, 1st August, is worthy of commendation. I quote: ". . . The veterinarian had two major responsibilities: one, the eradication of disease, and, two, the maintenance of production." If we accept these responsibilities, I feel sure that the future of the profession will be assured and there will be no

cause for concern for those who now hold its future in doubt.

1952 has been somewhat transitional in that the majority of office bearers of the Society have been non-servicemen, and therefore somewhat younger than those of the past few years. This, to my mind, is a further step towards post-war normality, and, whereas the older members may add sage and sobriety perhaps, the younger bring with them much needed enthusiasm and energy. The initiation of the Curiosity Club under the auspices of Dr. Carne is a noteworthy step in this regard, and the practice of student members addressing the Society is one which should be encouraged in future years.

With the curriculum as full as is ours, in all Society affairs consideration of the time element always rears an ugly head. If this factor is ever to be overcome, more members than the present few stalwarts must be prepared to devote at least a portion of their time towards furthering the Society's interests. With decreasing Faculty numbers the esprit-de-corps which holds Veterinary Science's name in awe on the sporting field must be cultivated within the Society. How this is to be attained is still an elusive answer.

Due to the efforts of the Past President of the Society and the 1951 Editor of "Centaur", the magazine goes to the press this year under contract arrangements, and for the first time in many years, if not the first time in history, "Centaur" has five editors, each with a specific section of Faculty life to cover. We wish the editors every success.

The social activities for the current year were planned to allow the latter half of the year for uninterrupted study. The Dinner and Dance Committees are to be congratulated upon their untiring and unselfish work, often at the expense of their studies, and the results of their efforts spoke for themselves to all that attended either the Informal, Ball or the Dinner. The Annual Dinner, now held in Lent Term, allows all of Fifth Year to be present, and I would like at this point to thank the members, and in particular the members of the Staff, who turned up and wholeheartedly supported what was a very successful evening. It is hoped that future dinners will allow more time after toasts for informal gatherings.

Due to the many lunch hour sporting activities in Trinity Term, we decided to hold meetings at 4.15 p.m. on Wednesdays. This proposal allows more time for interested people to question a speaker, and it was hoped also to hold at least one evening meeting. The ugly head of "Time" once again crept into the picture and such decisions

are as yet untried. At times there were two, and sometimes three, functions progressing at the one time. This was unfortunately unavoidable, even

though annoying.

Within the Faculty, with the number of students getting smaller, the necessity for a common room is still as real as ever. The main barriers are financial ones, but once normality in numbers is again reached perhaps the inclusion of such an essential part of University life may be listed in the budget for the benefit of our children, whom we hope will also be veterinarians.

În conclusion, I would like to thank the officebearers of the Society, in particular the Executive, upon whom I have so heavily leaned, for their assistance and discussion. I would like to congratulate the various Sporting Committees for what we hope will be the award of the Penfold Shield, and thank also the Society members for their support. On behalf of the Executive I would like to express our appreciation to the Dean, Prof. Carne, for his wise advice, counsel and help, and to all other members of the Staff who have helped in one way or another the affairs of S.U.V.S. throughout 1952.

Yours sincerely,

P. R. KNIGHT

THE EPIDEMIOLOGY OF EXAMINITIS

Once every year there occurs a major outbreak, followed in some cases by a second outbreak a few months later. There may be minor outbreaks at intervals during the year.

The disease takes a wide variety of forms, and the victims suffer in many different ways. Morbidity may be about 100 per cent., mortality is by tradition 50 per cent. Immunity develops slowly, and in some cases never develops at all.

Let's be serious for a few minutes before considering some curious manifestations of examinitis.

An examination should be a test of two things: the efficiency of teaching and the education of the taught. Education is used in its very widest sense and includes experience, savoir faire, and method of approach and attack on a problem as well as an understanding of the principles and practice of the special subject under consideration and its relationship with other subjects in the curriculum.

Perhaps the best examination is a lengthy "viva", with "practical" material as "spots" or examples. Time and number of examiners preclude this type of examination. Where there is close association between teacher and taught during the course there may perhaps be no need for an examination at all. Most examinations now experienced are substitutes for something better and suffer accordingly.

There is art and skill in setting, just as in answering, examinations. It is not easy to make an examination comprehensive, clear, unambiguous, searching and last, but not least, stimulating. An examination should be a test of ability and skill as well as memory, and as such should be regarded as a kind of challenge—examinee v. examiner—and should have all the excitement and stimulation of a contest.

Many examinees appear to be obsessed with the

possible tricks of examiners. I believe that there are very few examiners who deliberately set out "to trick" their examinees, and the majority of questions are clear and straightforward, though some may not be perfectly unambiguous. In a "viva" there are opportunities for every aspect of the technique of cross-examination and search for knowledge, but no necessity for trickery on either side. The way in which a question is phrased or presented may possibly sound like trickery when in reality all the examiner is doing is attempting to put the question in a different way to stimulate the examinee to demonstrate whether he or she has a different method of approach, or can look at a problem from other than the usual point of view, or to provoke the application of several more or less distinct aspects of a subject, or even to find out whether the examinee recognises the significance and relationships of several subjects.

If a question sounds like a trick or appears ambiguous, the examinee should in a "viva" ask for clarification, or in a written paper state his difficulties in interpretation, and if there is more than one answer, give both or all. Most examiners are human beings and still recall their own difficulties.

In answering questions, written or oral, be brief, be clear and keep to the point. A good flowing style is pleasant to read, but may take two pages to give an answer which could be given adequately in a half page. Padding wastes the examinee's time and annoys the examiner. Oxometry should be reserved for the informal occasion.

"Tipping" is an interesting pastime that often leads to posts. By all means select the important, the obvious, the current experiences of the year's work and, where known reliably, the particular fads, fancies and foibles of the examiners for special atten-

tion, but not at the expense of the rest of the course.

In descriptive and differential comments be explicit and do not assume that the examiner "knows it, anyway". Perhaps an example or two from the parasitological field may be useful. Expressions such as "the egg is typical", "the worms are long and stout", "the egg is characteristic", "the lesions are obvious", "the worms are found in the alimentary tract", and so on, are not satisfactory and are useless answers.

From time to time "howlers" appear, and while they may entertain as well as exasperate the examiner, they are generally assumed to be examples of careless thinking and writing. Their meaning is usually clear and the perpetrator may not be penalised, but they do not make for confidence in the examinee.

The parasitology papers during the past few years have provided some interesting examples, which are quoted below, not solely as entertainment, but also perhaps as "horrible" examples "pour encourager les autres".

Clean but Deadly Dipping! "Animals entering the area from Queensland have to be treated three times within 5-10 days, and the last dip has to be a clean one and the animals have to pass out within 24 hours of it."

Tick Control Hard Boiled Eggs. "... the birds on slats over water or disinfectant on concrete for 10 days so as all the larvæ drop off and then place in treated yards or clean yards—nests should be put in boiling water."

Clear as Mud! "Surroundings should be treated."

Give the Young Ones a Treat! "The mature worms are very hard to treat, and there is virtually no treatment for them."

Boots and All. "Pigs should not be fed off the

ground, but in troughs.'

Production Managers Ahoy! "The latter (Diphyllobothrium) produces a severe anæmia in man due to the production of an artificial lack of intrinsic factor."

Mites in Disguise have the Shakes (Oscillating Octodectes). "It is a large mite and can be seen crawling around as a little white dot, and if the ear is examined the mites will be seen to be very numerous and moving or oscillating very rapidly."

Rex v. Echidnophaga. "It is now restricted to

an extent by the law."

Even the Mange Mites. ". . . 2nd nymphal or pubescent female—mating takes place and this is the stage when infection is liable to occur."

Who Does What . . .? "The intestinal mucosa may show marked ulceration caused by the ingestion

of large parts of it."

Bloodless Box Demand Fœcal Frugality. "In the case of pigs anæmia may be seen—diarrhæa may also be present and the animal is unthrifty."

Hard to Entertain. "This is a very difficult tick

to treat."

Echidnophaga "on it" in Queensland. "Spots in Queensland.

Something Coming Up! "It is greatly confined in the southern states."

One looks forward to what November and February may bring forth!

H.McL.G.





Taking a firm Holt of things.

DANCE COMMITTEE REPORT

Our two customary social functions—an Informal in Lent Term and the Vet. Ball in Trinity Term—were held as usual this year.

The Informal was held in the Union Refectory on Tuesday, 6th May, and proved to be a very successful affair, socially and financially. We regret the inability of our Dean to attend and also the other members of the staff who found themselves otherwise engaged on the night. However, there was a very good student roll-up from all years, and, under the auspices of Harry Collins and his band, things got away to a good start and never looked back.

Entertaining interludes were provided by Don Brewer at the microphone, who was determined not to be bluffed and pressed on regardless. We were also treated to a delightful little bit of close harmony by certain members of the Faculty, and the

one thing that baffles the writer is: what are the words of the last three verses? Phil Knight came into the open and let us all into the big secret he's apparently been keeping dark for some time—congratulations and best wishes to Phil and Anne. Of course, there was the inevitable haka, performed with gusto by all Kiwis present, and watched with fear for the Union foundations by M. Baggie and his boys.

Also deserving of brief mention are: Lin Spier's leg in the Novelty Barn Dance, Roger Berry's marathon performance in the reel, and the "invasion of the hall by various exalted members of the profession and the subsequent swift compounding and dispensing by one distinguished gentleman of a potent mixture, which we have on good authority from another VIP is a very efficacious vermifuge and general tonic.

The Vet. Ball was held in the State Ballroom on Thursday, 19th June, and although the student response was not as good as anticipated, members of the staff and students rallied various of their friends and we managed to muster 241 at the final tally. We were very pleased to see our Dean and Mrs. Carne present, and trust that they had a pleasant evening. Had Profs. Emmens and Gunn been able to be there they may have observed some interesting advances in anæsthesia and surgical technique when our ataxic bull made its debut later in the night. Bede Morris starred with his anecdote of El Torenzo the Toreador, and thereby kept up his reputation as an entertainer of note.

It was regretted that Prof. Cotton and his cohorts were unavailable to check the blood pressures of certain of the company when Mme. Roberta and her lovelies made their sensational parade of coming fashions. It is rumoured that there is a photograph extant which, if it fell in the wrong hands, could certainly precipitate divorce proceedings.

Two engagements were announced during the evening, namely, of Dudley Johnston and Pam McIver, and Tom Dysart and Alison Scott. Best of luck, girls! You'll need it!

In the absence of representation from the Zootechny (conformation) Department, a sterling job in judging the Belle of the Ball was done by two of our leading anatomical experts, Messrs. Gordon and Webb. The lucky lass was Sue Snelling, and the prize was presented by Mrs. Webb.

We found as the night progressed that we were reluctant to leave, and the show finally finished at 1.30.

Questions still worrying us are: What is THE BLONDE'S name? What are the words of the Vet. farm song? And where did John Wilson get that pipe?

In conclusion, we would like to thank all those students and members of the staff who helped to make both functions a success, both by their help in decorating and organising solid support. To strike a sober note, we would beg to point out

that, with our ever-decreasing numbers in the Faculty, future committees will have to count on support from all members of the student body if our dances are to continue to be the successes they have been in past years.

DOROTHY EDMONSTONE, JEAN WOOTTON. POSS HAYES.

I crept upstairs, my shoes in hand, Just as the night took wing— And I saw my wife, four steps above, Doing the same darn thing.

HOT TRAILS

So you saw someone crawling on his hands and knees up the stairs, eh? Was he carrying a pack? Well, my friend, you have seen a bush-walker. Yes, folk, we're back again this year, not without a little experience over the long vac., and just yearning to get lost.

Sad to say, our numbers are again small this year. Why, oh, why, when such a joyous pastime awaits them?

Perhaps it's the food; no, it couldn't be that—nothing but the best dried spuds and peas. Or could it be the sleeping facilities? Surely not. Mother Nature yields her softest earth for us to sleep on. Could it be that people just don't wander these days . . . what is over that hill, anyway?

Legs are a wonderful idea! What a thrill to feel the earth glide past under you, to bathe in a rippling creek in the sun, or watch the birds as they flutter in search of foods, or ants as they busily meander! (Oh, my!—Eds.)

Nature offers countless such experiences to you. Surely there are more people in the Faculty who

would like to go for a walk, just for walking's sake. Perhaps there are some keen botanists or geologists who must necessarily wander in order to further their studies.

Nothing seems to bring people together more than when they are in the bush: song, dance, discussion are all included in the activities of any bush walk. So, my friends, shake the dust out of those rucksacks and come for a walk!

I might mention that caving holds possibilities for you. What lies inside such a small cavern? Who is going in first? Caves offer a world of difference, atmosphere. You see things in a cave that are just not present above surface.

Last year we were quite active. One trip of particular interest was to the Warrumbungle Ranges. The party succeeded in climbing Bellagery Spire (only climbed twice before).

Another of note was that to Kosciusko, where the Alpine Club is building a hut.

S. HOPCROFT (IV).

At length the years their havoc wrought, From doing things they shouldn't ought.

FIRST YEAR NOTES

First Year is, again this year, small in numbers—19 men and one woman only commencing the Lent Term. Despite the lack of numbers, we can lay claim, geographically speaking, to a fairly wide representation, our members coming from Scotland, Estonia and Malaya, as well as from Sydney and other parts of N.S.W.

During Orientation Week we were shown about the Vet. building and given a demonstration in the Physiology Lab. We were also given a welcome by the Dean, Dr. Carne, who gave us a few tips on how to study and listen to lectures intelligently, and gave us an outline of the course before us.

Of the social functions put on by the Society this year the Dinner proved to be the most popular for First Year, since the majority were too shy to attend the Informal and the Ball. Also it gave us an opportunity to meet some of the chaps from the other years, and to see something of the members of the staff with whom we shall come in contact in the years to come, providing, of course, we are successful in the exams. at the end of the year.

During the year we lost Dave Marrinon to the R.A.A.F. Dave expects to enter Point Cook early

next year. To compensate for this loss we gained Jan Hobson from Agriculture. Welcome to the Faculty, Jan.

Midway through Trinity Term we participated in a zoological excursion to Harbord, where many profound observations were made, apart from dodging the waves and studying the scenery (?).

At Easter many of us attended the Show, whilst two of our more intrepid members, namely, Betty Glanville, who, being the only woman in the year, has a lot to put up with, and Jan Smith, were out there in the cattle pavilions.

Congratulations to Lim Ah Soo, Abdun Rahim and Raja Ridzuan, who are our sporting representatives. All three, besides being in the Faculty Soccer Team, turn out for the University 1st Grade side. Nice going.

In conclusion, we extend our best wishes to the other years, especially Fifth, in their examinations at the end of the year.

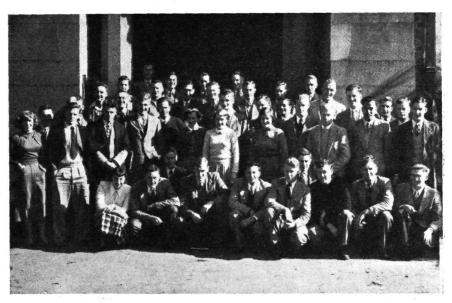
Let it be known that those of us who are involved are looking forward to National Service Training.



Back Row: K. McManus, R. Ridzuan, V. Green, D. Wilson, I. Hotson, D. Teed. A. Rahim.

Front Row: R. Vester, N. Japp, Miss B. Glanville, A. Lim, J. Gray.

SECOND YEAR



Sitting: Miss D. Ferguson, R. Dunlop, C. McKellar, R. Cooper, P. Hungerford, D. Cordes, R. Weaver, G. Harris, R. Robinson, B. White.

Standing—Front Row: Miss L. Leedham, B. Munday, G. Davidson, B. Christie, M. Kyle, J. Slack-Smith, Miss S. Potter, Miss B. Wilhlem, Miss R. Morgenson, A. Doland, D. Smith, Y. Ismail, R. Bonner.

Second Row: J. McBride, I. Ward, R. Larsen, J. Rowland, D. Irving, R. Williams, F. Nieuwland, D. Quinliven, A. Falconer, P. Rees.

Third Row: R. Robinson, D. Jones, D. Kennard, V. Baxter, R. Ryan, K. Gardiner, P. Manusu.

Back Row: F. Mathews, R. Newlands, B. Smith, D. Bailey.

To those who have come from other States, New Zealand, and the New England University (Good old Cactus!), we say "Welcome!"; to those who stayed behind to enjoy our company, "Hullo!"; and to the examiners, "Look out! Here we come."

There are forty-six of us altogether, and here's wishing one and all the best of luck and a speedy entry into Third Year.

At last we are beginning to realise we belong to the Vet. Faculty, Last year all we had was a common time-table to keep us together. Now we have, in addition, the Vet. School (our headquarters), strong bonds of friendship, and sharing of common experiences, and the Faculty spirit.

This realisation of our part must be rather evident to the rest of the Faculty by the way in which our year has supported the various Vet. functions and teams. No social event has taken place without a goodly roll-up of our members. No

team takes the field (with the exception of Soccer) without quite a fair percentage of Second Year students. Here's hoping there are a few amongst us who can prove to the rest of the Faculty and the staff that we are just as interested in, and enthusiastic about, our studies—and we think there will be more than a few who will do just that.

It is a pity, but of course unavoidable, that we had to be split into three groups for our sojourn at the farm. That is the place you really get to know your fellow students; and, speaking on behalf of the first group (the old hands), during our stay we had a wow of a time. The things that happened up there! . . Yes!

The stay out at the Show for those able to attend was another success, and much valuable information and experience gained. Many students also secured jobs as holders at the Sheep Show and added further to their knowledge of Zootechny.

The girls of the year, five in number, have formed rather a "solid" anatomy group of their own. So long as they don't carry out their threat of splitting up in the near future and going to other anatomy groups, I suppose we can put up with them. By the way, congratulations to Barbara Wilhelm on taking out a championship ribbon with her Welsh Corgi at the last Royal. That effort is surely worth an article in "Centaur" or a talk sometime, Barbara!

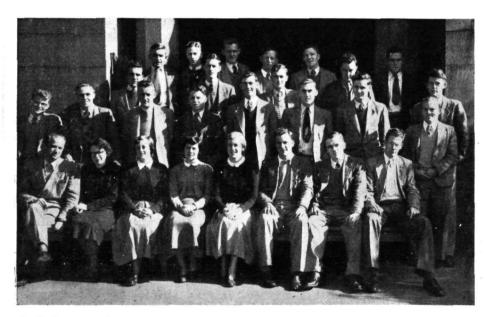
Congratulations also to Peter Hungerford on his inclusion in the University Athletic Team that visited Melbourne in the May vac. Well done, Pete!

Our sporting members are too numerous to mention individually, although "First Try" Smith alias "Crocodile" (see Fresher Ismail for interpretation) deserves mention for some really good runs along the wing in the Football Team. And also those chaps, B. Christie, J. Rowland, F. Wilkinson and G. Davidson, who represent University in the 1st Grade Australian Rules Team. Of these, Geoff Davidson was awarded a Blue for his play last year—a very fine effort.

At this stage we would like to thank those girls of the Women's College who so kindly came along with many of our chaps to the Ball, and helped make it a really good night. There were some rumours that one of the chaps—he's young and wears glasses—was seen plucking petals from daisies for a few days after. Wouldn't it?

Most of us have found the work this year quite a change—a pleasant one, too—from that of First Year, and we all hope we will be in a position next year to extend this comparison so as to include Third Year work.

THIRD YEAR



Back Row: B. Barton, P. Cole, G. Pulver, D. Leaver, D. Johnston, P. Parsons.

Third Row: W. Handel, D. Tynan, R. Wales, J. Poland, A. Edwards.

Second Row: I. Martin, J. Dunsmore, M. Broe, F. Beckett, R. Barry, B. Wilson, G. Stutchbury, M. Shalders.

Front Row: J. Rakowski, Miss A. Bogdanovic, Miss J. Caterson, Miss J. Cahn, Miss J. Wootton, I. Bradney, B. Dunkley, R. Hyne.

This year is becoming smaller, with 37 students. This enables more individual attention to us, especially in practical classes, but we always regret leaving behind so many less fortunate students in First and Second Year.

To join our ranks this year we have four students from overseas. There are John Poland, ex-R.A.F., and Heath Chandler, ex-R.N., both from the Royal Veterinary College in London. From Poland we have "Joe" Rakowski, who graduated from Warsaw in 1932 and has been three years in Australia, and from Latvia our new member is Agrija Bogdanovic, who formerly attended Hanover University in Germany. And from our own shores we have Mr. Bob Tidswell, whom we must congratulate on his appointment, regardless of all opposition, as S.R.C. representative, and also his ability with film projectors must be mentioned.

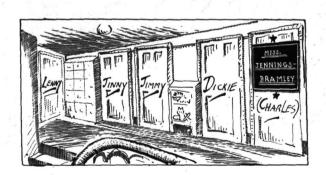
And now, as well as these interesting members, we have a formidable representation in the extracurricular activities of the Faculty. In the Union team we have such worthy notables as Kevin Waldron, Bob Jolly, Brian Wilson, Grahame McCormick, Paul Parsons, Ian Bradney, Heath Chandler (I'll call him Jeff yet) and Frank Beckett. Incidentally, Grahame is a member of the University 1sts, and another member of the year, Dave Leaver, is a very promising player in the 1st Aussie

Rules Team. Des Fielden is a capable member of the Soccer Team. Hans Lindner and Don Tynan shot very well for the Rifle Team, and George Pulver, Bruce Dunkley and Ian Bradney are our tennis enthusiasts.

Of course, we must not fail to mention our female members, all of whom ably represented in the Basketball, Hockey and Faculty Athletics. Among the less strenuous activities, the Debating Team made up of Ron Hyne, Don Tynan and Malcolm Shalders did very well in their narrow loss to Economics, and Des Fielden, Mal Shalders and Ron Hyne lent their capable experience to the Executive Society. The other big society is the Genetics Society, ably managed by Messrs. Tidswell and Shalders.

Now, having reached Third Year after two, and in a few cases three, years of hard work, we seem to have attained at last the road to becoming members of our chosen profession. Up till now our only connection with the Veterinary School was in the subjects of Anatomy and Zootechny, but this year our course is more specialised and is thus more interesting.

With last term and exams. creeping nearer, we wish Final Year, and the other years as well, the very best of luck.



FOURTH YEAR

Due to an oversight on the part of the examiners (or was it hard work?) in the last year's exams., "our year", together with several who thought Fourth Year interesting enough to do again, has become the largest in the Faculty, with 56 members.

We launched enthusiastically into the work of Fourth Year, and are now rapidly approaching the Beeches' Brook of the course—the Fourth Year finals.

So far, despite several exams., the Vet. Informal, Ball and Barbagrog—to say nothing of the efforts of "Handsome—we seem to be surviving—even thriving—ask Tom Dysart, who has gotten himself engaged, and that stalwart of the Faculty Charlie Thomson, who went one further step and married in August and spent his honeymoon out where life depends on stopping that cold quick. In this direction also we offer all the best the year can

offer to Phil Knight, who brightened the Informal by announcing his engagement on that night.

Holding ranks within the S.U.V.S. this year, we find Fourth Year predominant—with Phil as very able President, Ian Parsonson and Col Thompson as Vice-Presidents (not presidents of vice), and John Holt as energetic Secretary. Many others are in the various social, sporting and executive committees within the Society.

In the field of sport we show quality in such performances as Jack "Field goal" Thompson's "Fairest and Best" in the "Rules" Inter-Varsity trip; John Holt's outstanding success as Captain of the University Rifle Team, when he equalled the Inter-Varsity record; and Geoff Gee's gallant efforts in the athletics. From our year also are drawn the bulk of the various teams playing Inter-Faculty—the Rugger team being headed by Col (Whip) Thompson.



Back Row: G. Ceschmay, P. Mattner, D. Charles, J. Howard, B. Bailey, J. Capell, C. Thompson, R. Dickens, H. Van Gyen, I. Parsonson, B. Panaretto, J. Hopkins, D. Brewer.

Second Back Row: J. Thompson, G. Dandy, K. Keene, L. Cooke, J. Holt.

Second Front Row: S. Hopcroft, R. Dreadon, O. Jonkers, L. Forbes, R. Gordon, G. Gee, P. Lewis, D. Roberts, T. Hales, O. Foote, P. Knight, D. Fenwick, M. Gemmell, B. Johnston, P. McCormack, I. Paull.

Front Row: Miss E. Edmondstone, Miss J. Clout, Miss P. Wilkinson, J. Armstrong, Miss D. Edmondstone, Miss D. Miner, Miss I. Gant.

Poss (just call me "Cruelty") Hayes, besides devising a new method of "blistering and firing", with the aid of the strawberry blonde from Dubbo did a sterling job in making both dances the success they were; whilst the complaints of two members of the year resulted in an alteration of the infusion process of preparing non-alcoholic beverages in the Union—ask Jim Capell.

Dave (call me "Culture") Roberts has done a good job as advertising manager for the Society, his signs, always so eye-catching, being often in evidence.

Stan (do you want to come caving?) Hopcroft should be all set for an H.D. this year in Mat. Med., with his solid basic knowledge of the dose rates for owls.

A certain combination in the year has been noticed selling tuberculous meat to members of the staff—no doubt with ulterior motives—but no lecturers or examiners seem to have succumbed yet, but keep trying, boys!

In conclusion, to one and all is extended the best for the November trials.

IV Year Lecturer: "Glad to see you've got these women bluffed" (?).

Wee sleekit cow'rin' timorous beastie, Is that a falsie in thy breastie?

R. Burns.

IT'S ALL SO EASY

Those who have had the time to read the daily tabloids of the last few weeks cannot have failed to notice the outcry from all sections of the community about the decline in our national productivity. More production has been suggested by many as the solution of our economic ills, but ways and means are confounded by disputes amongst interested parties.

On one point there is unanimity—primary production provides the key to an internal and overseas balance of economic power and social structure. Beyond this point no one in high places, nor even the humblest labourer with an opinion, can hope to influence the man who supposedly holds the key to Prosperity—the farmer. Impressive statistics and emotive appeals to patriotism are not the cogent arguments that their authors envisage; even economic enticements have doubtful value when so little is proffered, and so much demanded in the way of a rural revolution.

But some believe that effective ideas can be brought to the farmer in the form of weighty recommendations on aspects of his Agriculture and Husbandry designed to increase efficiency. In the field, the Agricultural and Veterinary graduate is qualified to speak, and his position as an official or unofficial extension worker presents a wonderful

opportunity to influence the outcome of this crisis. The Stock Inspector is on the spot, Veterinary Officers have a ready-made introduction to the farm, and the cowyard rail is as fit a forum as the House of Representatives, and a farmer will at least listen when you speak with authority and good sense. A little effort by everybody will go far towards decreasing such wastages as the 10,000,000 sheep that died in 1951-52.

To co-ordinate interested bodies within the University there has recently been founded a National Development Society: the aim—to encourage an interest in the conservation and development of Australia's resources, as something of vital concern to us all, and transcending the gross distinctions of politics. Veterinary students are especially invited to share their ideas with other students whose vocations are not so directly involved. It is only by the active participation of students and staff that the aims of the National Development Society can be achieved; then, and only then, will graduates of this University be able to bear away concrete ideas on the future of this lands of ours.

It's all so easy?

D. TYNAN,
Publicity Officer.

Extract from literature recently received from our African Zootechny Correspondent:
". . . the elephant eats, roots, shoots, and leaves. . . ."

THE QUEENSLAND AND SYDNEY VETERINARY SCHOOLS — A COMPARISON

The former President of the A.V.A., at the Annual Vet. Dinner, remarked during his speech that there was no one more fitted to evaluate the course than those who had recently passed through it.

Taking this as my authority, I shall, having by no means passed through the Sydney School and after spending only my second year in the Queensland School, attempt to draw a comparison between them.

As I start this article I seem to recall, from my secondary school days, the somewhat hackneyed phrase that "comparisons are odious". However, at great personal risk I shall pen on.

When I first arrived at Sydney I was often approached by students, who asked me somewhat incredulously, "What is Brisbane like?", "Could it possibly be as hard as here?" Similarly, on the couple of occasions I have returned to Brisbane, the same question has been put to me, this time more in awe, though on one occasion a brave "Not as good as here, I'll bet" was added.

Sometimes I had more than a sneaking suspicion that some were cherishing hopes of renegading themselves to the North, should the going get too hot or the weather too cold for them in Sydney. To dispel any false hopes, I must say that I do not consider Brisbane is academically "easier" than Sydney, though which University offers the more attractive course from the student's point of view is for the reader to judge.

Anyhow such questions can't be answered adequately in an article of this length. I intend to put down only a few of my impressions and let the reader judge for himself.

The Vet. School of the University of Queensland is situated at Yeerongpilly, about five miles out of the city on the road to Toowoomba. The Vet. Science subjects such as Zootechny, Anatomy, etc., are taken here, and the more scientific subjects such as Chemistry, Physiology, Biochemistry (bless it!) and Physics, so dear to our initial years, are taken at the old University in Brisbane proper or at the fabulous new University at St. Lucia. Geographically speaking, then, the course is a mess. This state of affairs is gradually being rectified as more and more subjects are being taken at Yecrongpilly, and I understand the Vet. School will eventually be transferred to St. Lucia.

The School itself is mainly of new wooden struc-

tures, being intimately related to the old Vet. School, which was taken over by animal health people. When I visited the School last May I was impressed with the progress that had been made since I studied there two years ago. Lecture theatres, laboratories, library, stables, kennels are all new, and, indeed, the only stigma from the past is the Anatomy dissecting rooms that are situated, appropriately enough, at some distance from the main The library there, by the way, would make ours retract its rostellum. It is about three times as large as ours and is (believe it or not) equipped with a good range of up-to-date text books. The common room is also worthy of mention, an excellent little place, with all mod. cons., where the students can congregate during their lunch hour and which, I understand, is available for the occasional "huly".

The emphasis as regards training appears to be more on the practical side of the course. Practical work is given a thorough dubbing. I have many fond memories of practical Zootechny of Second Year days. Here we marked lambs, threw horses, watched operations, discussed improper subjects, and generally carried on in a manner that made one think that perhaps Vet. Science wasn't such a bad course after all. In Sydney, of course, sheer weight of numbers and lack of space inhibit such goings on. The Faculty is also equipped with a truck. With the lecturer in the cabin, and the students, most inappropriately, housed in the cattle crate, we often set off on excursions, examining studs, piggeries, tanneries and so forth.

While visiting the surgery last May I was somewhat aghast to see one of my former classmates efficiently (apparently, anyhow) administering an ether anæsthetic during an ovariectomy. I think that in Brisbane considerable onus is placed on the students. Talks with various members of Fourth Year bore this one. Whether this is a good thing or not is not for me to presume; certainly it appears so from the student's point of view. What the animal thinks must, of necessity, remain obscure.

Turning to a lighter view, no picture of the Queensland School would be complete without stating that the course is blessed or cursed (according to one's taste) by the almost entire absence of females. However, Yeerongpilly is not entirely arid in this respect. The Animal Health Station (so I'm told, anyhow) is always to be relied upon.

The subjects taken are much the same as here, except that Zootechny is taken in First Year as well as Second. The School doesn't seem to be concerning itself very much in research as yet. It is a small school, well set out and equipped, and concerned mainly in the training of a small number of graduates with a high degree of efficiency in the more practical side of the subject.

The Sydney School needs scarcely any introduction to the majority of readers. My impressions are that, despite the overcrowding and the student "mor-

tality", the standard of lecturing and demonstration is high, and that we have the benefit of men who are expert in their various subjects. I think we shall leave Sydney fitted for Veterinary work in any field, and that, although we will not have the benefit of a great deal of practical training, we are not greatly handicapped.

49

In conclusion, I hope that these few impressions may help us down here to gain some appreciation

of our younger brother in Queensland.

L. S. FORBES, IV

THE LADY VET.

I'm a maiden o'forlorn Since I'm a lady vet. To cut ze cats I have been sworn, Not cook ze pies with etiquette.

To cast ze horses I do excel, And P.M.s are a sheep delight. To bake ze cakes, oh not so well! And never do I take afright.

The fashions fair are not for me, Or knit, or sew, or scrub, or woo, I like ze blood, ze squelch, you see, Not things that women do.

To scrub a floor I'd look askance, But not P.R. a hog, Or wash the dishes rave and dance, But not destroy a dog. . . . For I'm a lady yet.

Anonymous (due to fear of a technique so alarmingly well developed in certain 4th Year lasses.)

POULTRY ON DEEP LITTER

Many people in the suburban area keep a few hens. Among these people the average designer (if "design" is the word) of backyard poultry yards seems to favour allowing the maximum room but the minimum of shelter for the laying stock.

Very often, after rain, the muddy yard area could hardly be classed as pleasant to eye or nose, and, moreover, it is suggested that under such conditions hens will not reach a high production rate.

Last year, whilst engaged on practical work, the advantages of running poultry on deep litter were seen.

(a) It was proposed to try to run the poultry at home on deep litter, and an attempt was made to

build a yard which would be suitably placed and dry enough for deep litter. The poultry house faces north and is well protected from the south. The complete floor area of the house is about 27 square feet.

(b) The additions to the existing house were made with motor packing case sides purchased for 30/. The concrete floor (necessary for dryness) already existed.

Material for Deep Litter.

The foundation of the litter was straw from packing cases. Then rain-damaged wheaten straw was used. Currently, very poor lucerne hay is being used. The lucerne stalks were very old and yellow, but were soft and readily made up into humus. No attempt was made to chaff the material

as the hens rapidly broke it up by scratching. The bale of lucerne hay cost 6/6, and has lasted two to three months, being added gradually as the litter is taken as garden humus. Stock.

At present in the yard are 10 laying hens (5 Barr-rock x Langshan, 4 Australorps and 1 Langshan). All are in their first laying season as they were bought as day-olds, the first batch in August and the second batch in early October, 1951. Feeding.

The daily ration is approximately 2 ozs./bird/day of both wheat and mash, together with green feed.

As the yard was getting very little sunlight during the winter, "Vetemul" has been included in the ration since early June.

Monthly Feed Bills.

Wheat and laying mash cost about £1/13/- per month. (Currently, the value of eggs produced exceeds the feeding costs; however, any decisions about the economic value of the hens at this stage would be premature—later months of the year may show very poor egg production.)

Results.

(i) Production: The hens commenced to lay in January and February in respective groups. No records of production were taken until May, when, instead of egg production falling off with the approach of winter, it persisted.

Week.	Daily	Average
May 11 to 17	***************************************	5
May 18 to 24	***************************************	4
May 25 to 31	***************************************	3

,	June	1	to	7		5
					***************************************	7
	June	15	to	21	***************************************	7
	June	22	to	28	***************************************	7
					y 5·	7
	July	6	to	12	***************************************	8

Total production for 9 weeks (11th May to 12th July) equalled 379 eggs, or, overall, each hen layed every second day or slightly better.

(i) The low average period, May 18th to June 7th, indicates a period where it was necessary to feed double rations in the morning and give no feed at night. Little green feed was given in this period.

(iii) It is too early to predict the consequence of a prolonged winter laying period. However, the birds are in good condition and plumage, and are showing no apparent ill-effects from being intensively housed.

Summary.

- 1. Intensive housing of poultry on deep litter is possible and probably desirable in the suburban area.
- 2. In initial cost the yard described was cheap and little maintenance is needed.
- 3. It is shown that, given warm, dry conditions and adequate (and regular) feeding, hens will continue to produce well into the winter. (Whether the production figures for June and July are final indications of normal winter production is, naturally, not known. We look forward to next winter.)

I.M., Vet. III.

THE LAMENT OF THE ARTIFICIALLY INSEMINATED COW

I have just given birth to a calf, Sir, And of motherly pride I am full, But please do not laugh, and pray do not chaff, When I tell you I've not met the bull.

The farmyard's the dreariest place, Sir, The paddock's no longer so gay, Since the one spot of fun, in the year's dismal run, Has by Science been taken away.

No bull has embraced me with passion, I've not had the chance of a binge; I haven't been loved, but ruthlessly shoved By a Vet. with a sterile syringe.

You may think that it's all very well, Sir.
There are some things a cow cannot say,
But these unthinking Vet.s, when out with their
"pets",
Still believe in the old-fashioned way!

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PHARMACOLOGY—A SCIENCE OF THE TWENTIETH CENTURY

By PROFESSOR R. H. THORP

Pharmacology, one of the youngest of the sciences, dates from the late years of last century. A wide and extensive interest has always been taken in drugs and medicinal substances, it is true, but it was not until about 1830 that the alkaloids were being isolated and described. This period, the period of cataloguing and description, came almost to completion early in the present century simply for the need of more drugs to isolate and examine.

In 1872 the first Chair of Pharmacology was founded in Strasbourg, and Oswald Schmiedeberg, who was the first occupant, transformed the old-fashioned materia medica into an independent

science—modern pharmacology.

To Strasbourg came students from all corners of the globe, many of whom have become pioneers of this young subject. Synthetic chemistry, so well established in the late nineteenth century, provided ample material for study, and the literature of this period abounds with careful descriptions of the properties of innumerable new drugs. So rapidly, in fact, was this phase pursued that the future of pharmacology was almost jeopardised by the very thorough and assiduous studies of this early period. It seemed, in fact, possible that the field might well be exhausted until a change of approach and a maturity of outlook in the nineteen twenties altered the whole picture. At this time, stimulated by discoveries like that of Loewi and Narratil, who showed that physostigmine acted by interference with, then enzymic destruction of, acetyl choline. a much greater interest was taken in the fundamental mode of action of drugs. The classical description of Ehrlich's search for anti-syphilitic drugs typifies this new approach, and it is this aspect which today dominates our pharmacological interests.

No longer is it sufficient merely to describe the properties of a single drug, but the relation between its action and chemical structure has fully to be explored. A pioneer in this field was A. J. Clark, who in 1933 published a classical work entitled

"The Mode of Action of Drugs on Cells", and it was he who realised that drugs must act by entering into some sort of chemical association with cell receptors. Clark studied the quantitative aspects of drug action, and showed that a simple mathematical law must relate the amount of a drug fixed by cell receptors and the response thus produced.

Classical mammalian pharmacology is by no means dead. It is, in fact, the essential preliminary to the clinical application of any drug, but the

fundamental studies of drug action are handled more and more by biochemical methods and the approaches of the physical chemist. Prior to World War II in most great countries were to be found extensive pharmacological laboratories, usually owned by commercial manufacturers, where the search for new drugs was the avowed objective. Usually these methods were highly empirical, for we are still far from the day when a new drug can be designed from the study armchair, yet the major advances of therapeutics today largely stem from this approach, and, costly and rare though success most certainly is, it is real and undeniable.

To the student, pharmacology can be a boring catalogue of apparently unrelated facts, lightened in the more established departments by the unpredictable vagaries of the practical class, or it can be a vitally interesting subject merging into biochemistry and physiology on the one hand and forming the bridge to therapeutics on the other. The realisation that an hour in the laboratory is worth a term in the lecture theatre is especially true in the case of pharmacology, with its varied techniques of surgery, physiology, biophysics and biochemistry, and the student with an interest in techniques and experimentation will find a galaxy of attractions before him.

Modern pharmacological research is concentrated into several main lines. The study of the chemical transmitters of the nervous system, a province jealously cherished by the pharmacologist, is even now the subject of tremendous activity. In England several university departments have this as their major interest, and by the adoption of the techniques of other sciences have been able to achieve results which a few years ago would have appeared ridiculously ambitious.

The study of the substance responsible for the transmission of the sympathetic nerve impulse is a case in point. Until some ten years ago the idea that sympathin, a substance rather like adrenaline, was the responsible agent was pretty well the sum total of our knowledge. Today we know that noradrenaline is in fact this substance. We can separate adrenaline from noradrenaline by filter paper chromatography, cut up the paper and elute each drug separately for biological assay. Precise and sensitive biological methods have been developed for this purpose, and even the clinical significance of this work in cases of abnormal development of the suprarenal medulla is the provision which it gives

for the estimation of these chemicals in the blood and tissues. The enzyme which destroys the sympathetic transmitter is also the subject of study, and it has been shown that, by analogy with the parasympathetic endings, the sympathetic nervous system depends upon the efficient destruction of the transmitter by this enzyme amine oxidase for its efficient behaviour.

Another aspect of pharmacological research better suited for the industrial laboratory than the University Department is the study of chemotherapy. Here the experimental methods require the use of large numbers of animals, a costly item, but the prize for a chemotherapeutic agent efficient against virus infection, tuberculosis or the pathogenic fungi is big indeed.

Our knowledge of nervous biochemistry and the impact of drugs upon it is well established, but our studies on muscle are only rudimentary. Many drugs, the steroids particularly, act directly on muscle, and here may lie the key to their understanding. Apparently functionally unrelated, drugs such as digitalis and the sex hormones may well have a similar mode of action, and here at least is a growing point in pharmacology.

The days when the pharmacologist was interested only in drugs for their value in medicine are long since past. Almost every technological advance brings problems for the pharmacologist. The industrial hazards of new insecticides, the possible harmful properties of plasticisers, and the safe use of food preservatives are but a few examples. The most comprehensive pharmacological study of recent years was in fact a consequence of modern technology. As part of the development of atomic weapons in the United States it was essential to know the toxic hazards of uranium and its salts, quite apart from radiation hazards. This study is published in several volumes dealing with the toxicology and pharmacology of uranium, running into many hundreds of pages, and it presents a vast amount of knowledge upon all aspects of the influence of this chemical upon living systems.

Unfortunately, many drugs which have been in use for centuries are far less completely understood, and our formularies still list many drugs and preparations for which the basis is more faith than

pharmacology.

The existence of toxicology as a separate entity is no longer warranted, since most of the problems this subject entails are simply extensions of the properties of a substance already known from its pharmacology, but the day is rapidly approaching when hospital pharmacologists should be appointed in parallel with the pathologist, since many of the health problems of the future may be the results of unusual responses to drugs or chemicals with which we make daily contact.

Have you ever heard the story of how Ireland first arrived?

Don't listen to the legends that the Irish have contrived.

They're all a lot of balderdash, as you will shortly see,

For here's the truth an honest English Angel told to me:

Sure, a little bit of garbage fell from out the sky one day,

And landed in the ocean with a splash of muddy spray,

And when the angels saw it, sure, they looked a bit

Then said, 'Thank God, we've managed to get rid of it at last."

So they sprinkled it with bull-dust, just to make the blarney grow.

You'll never hear the likes of it, no matter where you go;

Then they picked some rebel angels, who were getting out of hand,

And banished them for ever—to inhabit Ireland.

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"THE WAY"

There is a tide in the affairs of men Which, taken at the flood, leads on to fortune;

On such a full sea we are now afloat; And we must take the current when it serves, or lose our venture.

Shakespeare.

Today there will be 55,000 more mouths to feed, and there will flow down into the sea to be lost for ever the topsoil from 2,000 acres of arable land. To the careless thinker these figures are but a mere bagatelle. It is no concern of theirs.

To those engaged in the blind hurtle through their veterinary course the ultimate is to earn as much money as quickly and as easily as possible.

They are fully aware that there are many lucrative, and some perhaps not so lucrative, but quite easy, positions awaiting them.

Yes, this money, the guide to success and position in the community. Yes, indeed, money is the end in all. But wait. Once upon a time there lived a man with the golden touch. Yes, everything he touched turned to gold, even his food.

His food. Nothing to eat. He was faced with the same position that three-quarters of the population of the world is faced with at the moment.

The tide of declining food production is enveloping the world. Its insidious spread is being catalysed by the enormous increase in population. And here, in this school, are the people who can help prevent what Vogt described as "rush down a war-torn slope to a barbarian existence in the blackened rubble".

No matter how the politician screams, no matter how the war arsenals increase the country's "strength", we, together with the agricultural scientist, the farmer and the conservationist, are the people who can prevent the spread of absolute poverty and starvation which faces the world today.

You and I are standing at the crossroads of life. We shall be tempted to turn down the road to lucrative, non-essential pastimes. On the other road lies the way to research, work on dairy and beef cattle, pasture improvements and nutritional studies of animals for foods. To choose the latter must involve sacrifices. The remuneration will not be as great, the hours will be long, and the work often tedious. The results will not often be evident. We may hesitate, but deep in our hearts we will know that we are aiding in the greatest venture that man has ever engaged in.

To those who scoff and remain behind, we can but say:

"My thoughts are not your thoughts, neither are your ways my ways. For, as the Heavens are higher than the earth, so are my ways higher than your ways, and my thoughts than your thoughts."

Come, before it is too late, we must begin.

J.C.H., IV.

Horse-sense is that added sense a horse has that keeps him from betting on people.

Those that follow horses usually find that the horses they follow follow other horses.

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FILM COMMITTEE REPORT

Your Film Committee in the past twelve months has striven to make films an important adjunct to lectures by introducing topics in an entertaining and easily assimilated way. The Faculty teaching staff have recognised this and have introduced films themselves (at the farm). They and we recognise the poor quality of films in general, and subsequently the Committee has made every effort to find new and better films. Films at present help to "break the ice" on any topic, and, particularly by animated photography, make basic points clear.

Our appreciation goes to Imperial Chemicals and Australian Wool Board for their magnificent productions, to the N.S.W. Film Council for their generous help, to the University Faculty Staff, and to the many film organizations which made screen

ings possible.

In the past year over fifty films were screened. Some good, most—we wondered why so much money was wasted in their making. Continuous screening was introduced this year to give a full lunch-time programme.

Future plans will lead us to improve the value of the programmes. A full length screening of selected films may be made in Wallace Theatre early next year to promote a better realisation amongst students of the status of the Veterinarian in the community.

K. GARDINER,R. TIDSWELL,J. MARRINON.

DEBATING

After a lapse of three years, Vet. Science once again fielded a team consisting of Ron Hyne, Mal Shalders and David Bailey in the first round of the Inter-Faculty competition.

Against an Economics team our reps. denied "That Nations get the Governments they deserve." Notwithstanding the shortness of notice and the inexperience of the team, only a narrow margin

lost us the decision to an experienced team.

This augurs well for next year, when it is hoped to restore debating as a Faculty activity, making use of the very competent summing up given at the conclusion of this year's debate.

D. TYNAN,M. BROE.

LAPSUS LINGUAE

When the calf is born, the first thing to ensure is breathing—this can be encouraged by Artificial Insemination . . .—F.W.

Mr. X, now in his 80's, gave up breeding 10 years ago.—F.W.

FIGURES ON FOOT AND MOUTH DISEASE

By W. MARBACH

Reports on the outbreak of Foot and Mouth Disease (F.M.D.) in Canada and precautions taken by the local Quarantine service, make it worth while to examine the statistical part of the great epidemic of F.M.D. in Europe from 1937-1947.

At the beginning of 1937 only a few districts in Europe reported localised outbreaks, and the authorities were full of hope that before the end of

the year Europe would be free of F.M.D.

In April, 1937, an extremely severe outbreak in North Africa was reported. In the meantime a consignment of North African pigs had been landed in Marseilles and had been brought to the abattoirs in that city. By a fatal mistake and negligence some pigs had been diverted up to a town in the French Alps. The result of the introduction into the

hitherto relatively unexposed animal herds was catastrophically quick and severe.

The following data give an idea of the rapidity of the epidemic trek.

or the epiden	IIC tick.	
Date	Reported in.	Distance in Miles
April, 1937	Oran	
M ay, 1937	Southern Fi	rance
July, 1937	Belgium	450
	Holland	520
August, 1937	Switzerland	300
September, 19	937 Germany	600
November, 19	937 Poland	1,200
Y 1 1	.1 .	1 (1 000 1

In barely seven months a trek of 1,200 miles (distance Sydney to Cairns) had been covered, bringing devastation to the livestock of the adjoin-

ing countries. Even with the strictest precautions possible on land borders and with all livestock movements prohibited, the epidemic appeared in:

May, 1938: Austria, Hungary, Czechoslovakia.

September, 1938: Denmark, Sweden.

November, 1938: Norway.

December, 1938: Turkey, Greece.

In one and a half years an area corresponding approximately to one and one-third times the area of Australia had been covered by the epidemic.

The records on the epidemic could have been complete but for World War II and the different statistical systems chosen by the different governments. The obvious method would have been to count the number affected, the number of dead and slaughtered, and the farms diseased. But due to the above mentioned reasons only incomplete figures are available. However, I tried to compile some of the available figures in the following table, mentioning farms and animals recently reported as diseased on the dates showing:

following values:

Price of dead animals (for meat and stud). Loss of weight of diseased animals.

Milk production lost by:

- (a) Death.
- (b) Diminished production.

Perhaps this calculation could be augmented by adding the relief money the different governments had to pay to the farm workers who lost their jobs due to reduced production. In these statistical calculations it is usual to assume a weight of 500 kg. for cattle and 100 kg. for pigs and a yearly milk production of 2,100 litres per dairy cow.

The average loss in weight due to F.M.D. is calculated as 125 kilo on cattle, 40 kilos in pigs, 10 kilos in sheep and goats. The diminished milk production for one lactation period is calculated as 35%. Based on these figures there were 1,757,197 affected farms in Europe in 1938, giving a loss of £A330,000,000. From 1938-1947 there was a loss of approximately 400 million pounds sterling. This

	1938.	1938.	1942.	1942.	1946.	1946.
Country.	Farms.	Animals Diseased.	Farms.	Animals. Diseased.	Farms.	Animals. Diseased.
Austria	38,746	200,000	_		28	125
Belgium	101,700	1,900,000	272	6,263	4	81
Czechoslowakia	229,270		1,999		171	
Denmark	98,307		213		29	
France	160,411	5,399,500			_	· —
Germany	670,729	3,000,000	145.000		_	
Switzerland	11,028	248,000	_		_	

The mortality, expressed in percentage of diseased animals, varied from approximately 15% in 1937-38 to 1.5% in 1942, and 0.4% at the end of the epidemic in 1947.

That the epidemic lasted fully ten years is not astonishing if one considers the tremendous troop and civilian movements in Europe from 1939 to 1946.

The losses each country had to bear due to F.M.D. were tremendous, and can best be expressed, apart from the feeling and years of hard work a farmer devoted to his livestock, in terms of a stable currency, e.g., Australian pounds. The loss caused by F.M.D. is calculated annually by adding the

is five times the loss the Australian Animal Industry suffered in the same period from the following parasitic diseases:

Cattle Tick and Tick Fever, Internal Sheep Parasites, Fluke and Black Disease, Blowfly Strike, estimated to be £A8,000,000 per year.

References:

Flueckiger: Swiss Archiv for Vet. Med., 1942. Gordon: Notes on Parasitology, 1951. Hecke: Viennese Vet. Journal, 1948, Jan. Ostertag: Lehrbuch der Fleisch Beschau.

There are two approaches to this course, but the net result is usually the same. To learn more and more about less and less, or less and less about more and more, so that in the end you know nothing.

FIFTH YEAR

"That time is past,
And all its aching joys are now no more,
And all its dizzy raptures
. . . . for I have learned."



MISS M. GOODWIN: Peg, the "dinkum" cowgirl, who has tried her hand successfully in many ventures. Was amongst the first to join the W.A.A.F.s. Although possessing a vehicle, she has an uncanny knack of always arriving late for morning lectures. That happy disposition should take her a long way.



R. V. HICKSON: Not among the quieter members of the year, especially at Vet. dinners. Product of Shore and resident of Paul's. Col. has represented the Faculty in cricket, football and tennis. Has been getting about on a "devil wheel" without ill-effect. A really keen type, he has a promising career in the N.S.W. Department



B. P. SETCHELL: The baby of the year, Brian comes from Punchbowl. Often seen with his one true love—his 'cello. His artistic pose is a result of looking at his 'cello instead of the photographer (compare with Noel H.). Brian plays the said 'cello with the Pro Musica String Group. One of the few bright boys of the year, Brian plans to spend eighteen months in England before "serving his time" with the Department.



J. D. STEWART: Jack comes all the way from Hawkes Bay, N.Z. A keen footballer, he has played every year for the Faculty. His greatest upset was to be knocked hors de combat on the side line by a fellow Vet., and a girl at that, to wit, "Killer Kate". Jack, being a great believer in selected importations, recently married an Australian lass. When his time is served, he hopes to settle for a large animal practice.



J. H. ARUNDEL: Happy Jack is a departmental cadet from Victoria. Claims that 10 hours' sleep a night is essential for maintenance. Has, however, outstanding organising abilities, and has managed in his waking hours to get himself engaged, to be Secretary of S.U.V.S. in 1951, be Assistant Secretary and Publicity Officer of the Australian Rules Club, and to even play the game. Exams hold no terrors for Jack, and he has produced good results with monotonous regularity.



L. W. SPIERS: Lin is a refugee from Perth, W.A. An ex-serviceman, he served with the Army in New Guinea; here he was pursued by a Jap bullet and, due to an oversight, he failed to cover his retreat; one might almost say, "stern" reminder to be more careful. He has represented the Uni. in Aussie Rules, but in another sphere his vital capacity is undetermined as yet. Lin is the proud father of a daughter and is married into the bargain. On completion of the course he is returning to W.A., where he hopes to set up in private practice.



J. M. WILSON: Hails from Wahroonga. Mick spent part of his youth at Barker College, which may account for his fondness for dogs (guess who wrote this?) He maintains that he remembers when the Roundhouse was being built, but frankly we don't believe him. Mick has served on the Float Committee for several years, and has represented the Faculty in swimming. Unmarried as yet, he is sufficiently ensnared to be engaged. The future—nicely taken care of by the Dept.



P. F. TAYLOR: One of the four Peters of the year, he may be distinguished by the hirsutial adornment of his upper lip. Belying his youthful appearance, Peter spent some time with Faculty of Engineering and then toured the world with the Navy before sailing through Vet. Sc. with equal aplomb. He comes from Berrima, and he is married, with one son. The future—depends on what is offering. He could always get a job selling Vet. instruments or writing poetry.



R. G. COWARD: "The Mighty Stroke" started Vet. Science after three years in the Army; has since been known for his broad grin and the broader middle part of his hair. Answers quite satisfactorily to the name "Podsol". In former years believed half an hour ample time to line up a "sort" for social functions, but of late found wending his way consistently to Crown Street. Hopes to go into general practice on graduation.



J. P. WILSON: From Dunedin, and after doing 1st Year at Otago University joined the Faculty in 1949. Incurs the censure of football referees in Inter-Faculty matches for his rabbiting tactics in loose scrums; claims that batching is the only way to manage in Sydney, where his taste for pigeon pies, white rabbits and ox livers can be satisfied without invoking the wrath of landladies. Club Practice in the South Island will claim his attention on graduation.



N. J. HELEAN: The original blue light boy; thousands seen floating up from Point Piper at exam times. Fighter pilot, R.N.Z.A.F., spent some nine months in France hiding from the Huns and irate French fathers. Well and truly settled, with two offsprings. First post-graduate activity appears to be determining the effect played by uric acid on the weathering of foundation stones.



P. S. GREEN: From the headwaters of the Manning. Served with the Pathfinder Force of the R.A.F. during the war. Breeds and shows cattle dogs. Says he has made more "dummy runs" over the Vet. School than he did over Germany. Married, with one son. His future is obscure, but appears to be mixed up with horses and cattle.



R. JACOBS: Ran hails from the town with the most pubs/population in N.Z. Known to the Aussies as Ran, Ranji or Randi. Was asked to leave Horowhenua College in 1945. Was deported from Victoria College to here, where he leads the 1st XV on the field and in the bar. Despite this has passed with credits every year. Doomed for Club Practice in N.Z., but a bright future is assured.



J. A. MATHERS: An interstate from Sale, Victoria, and an Aussie Ruler when in the mood. A quiet worker who always figures in the print a few days before Christmas. Can usually be found in the library when not profounding something profound or buying a new tie. Allan's present intentions are to dance his way into private practice in the Southern State.



MISS M. A. ("Margo Plicatus") McKINNEY: Joined the Faculty in 1948, and is an old girl of Fort Street. Exams are just something that come at the end of the year for Margo. Did a sterling job for two years on the Dance Committee, and represented us at Women's Rowing. Thinks a grass skirt brings the most out of a man, while she breaks hearts almost as regularly as a chef breaks eggs. Private practice should be her forte.



N. F. COURTNEY: Alias "The Actual Courtry". A product of the Koo-Wee-Rup Swamp, "Cour" is best known to us for his very fine caricatures, his aversion to the fair sex, and his partiality to a pint. We feel that his career as a veterinarian may be somewhat tainted by a love of post-mortems; and, whilst he has left his appendix in Sydney, his heart and future lie back among the dairy cows of Koo-Wee-Rup.



J. C. ("Culture") HURST: From Tientsin, China, and educated at a North American School; hence a smooth Yankee accent. Five years with the A.I.F., he always managed to dig his fox-hole deep enough. Represented the Faculty at rowing, swimming, basketball, Dinner Committee and Year Rep. 1952. One of Prof. Cotton's original "guinea pigs", he has also represented the University at rowing, as well as being an open belt holder. Won highest award in Histology and subsequently produced a daughter.



P. H. ("Polyphoto") MALONE: Hails from Dunedin and Wellington College. Peter abounds in energy and organising ability. Editor of "Centaur", 1951, and Secretary of the Sports Club, he has represented the Faculty in hockey, table tennis and soccer, besides training and driving Robert Don to victory at Harold Park. Knows the right places in which to pick up the odd keg. Been engaged to a photograph since he entered the Faculty, and looks like going out in a similar status. Peter's future in Club Practice seems very bright.



R. G. CUMING: "Blondie", ex-bomber pilot, took off his wings after four years in the R.N.Z.A.F., and has since served the Faculty as Year Representative, Sec. of the Genetics Society, footballer, and President of the N.Z. Students' Society. "Bondie", are you really the confirmed bachelor that your cloak of innocence suggests? The height of his career lay in his portrayal of the original ape-man whilst swinging from the Union rafters at the Informal, 1950. His future lies in N.Z. Vet. Club work.



K. R. CONSTANTINE: One of the more reserved types as regards his student activities, which probably belies his extra-mural pursuits. On graduation he hopes to go to England, where he will develop his interest in the world of ballet and music . . . and perhaps do an odd locum to earn a crust. When questioned on matters matrimonial, the answer was uncertain.



A. H. BROOK: Of European origin, Andy came to Australia in 1937, and has since had a most variegated career. After gaining a Hamburg Agricultural degree, and spending two years in the army, he decided Vet. Science was the ultimate, and has proved an asset as a hockey and soccer player, Treasurer of the Society, 1950, and a Vice-President in 1951. Claims that, as a result of a slight mishap at the November high jump in Third Year, his extra-mural activities have been curtailed until graduation. We wish him luck in this regard, and with his future large animal practice.



R. B. DUNN: A long streak, from Coff's Harbour, Bob has achieved fame as the intrepid cyclist, on whose bare legs fell the eye of authority. Up aloft he keeps a mighty brain, winning with no apparent effort the annual steeplechase for two successive years. Is attached to the Department for two years after graduation, but on interrogation revealed a secret yen for carpentry—or something.



J. A. COLLARD: One of the bright boys from Vic., Jules joined the Faculty after five and a half years in the Army, collecting en route a wife, two children (so far) and a store of dubious jokes, gaudy jumpers and colourful neckwear. He served a year's hard labour in the form of Year Representative, 1950, and has as his main academic interest the sex life of the Argentine ant et al. The future for Jules is ensured with the Department, where he will spend four years before looking for something better.



MISS J. C. KATER: An old girl of Frensham, Mittagong, who doesn't know what a "post" is yet. As a representative of the Dance Committee, Women's Hockey and Assist Editor of "Centaur" Joan has played her part in Faculty affairs. What with private practice, the breeding of Galloway Cattle and maybe a husband to "boot", Joan's life on graduation should hold more than the normal amount of interest.



N. S. JONES: A departmental led from Lismore, and the dark horse of the year, Norm joined us from Armidale. A quiet character, whose thoughts probably run to other things besides swot. Practices his belief that lectures should commence at ten past nine, but let's hope she is either a blonde, brunette or redhead.



D. M. HELWIG: A keen thinking type, who tackles everything with equal efficiency. Dave is a product of North Sydney High and Hurlstone Agricultural School. His ready smile and pleasant manner should take him a long way in any community.



A. K. ("The Kid") LASCELLES: A local lad and product of North Sydney Boys' High, Arch claims renown as a tennis player and terror of nocturnally minded cats. Academically, his writing has been a handicap, but posts really bring the best out in him. Very interested in a country practice, in which we predict a bright future.



R. H. LANE: From Keas, North Auckland, and expilot in R.N.Z.A.F. Bob is always willing to lend a helping hand. Has represented the Faculty in swimming. Believes in safety in numbers (females), although his unexplained nocturnal absences would suggest otherwise. Set on private practice, after a year or two in a Club practice, is his great aim in life.



E. N. BOLAS: Norm is fond of large squares on his garments; any resemblance to a bookmaker is purely coincidental. Known to concoct a home-brew guaranteed to anaesthetise an elephant. Reported to haunt dark night clubs, especially one located in Pitt Street, from which unsuccessful attempts were made to eject him. Nevertheless, found time to marry a redhead, build himself a house, and produce a son. Norm is an ex-serviceman, and his future is safely in the hands of the N.S.W. Department of Agriculture.



W. J. ARNOTT: Jack ("Call me a gentleman and a scholar") is yet another Victorian cadet. Flew high to be crowned best and fairest Rules player of 1951. Is reputed to be torn between two loves: a motor bike kept for the purpose of pulling it to pieces and sometimes putting it together again, and a certain redhead whom we don't know how he treats. Has represented us in Inter-Faculty sports in high jumping and basketball.



R. W. BERRY: Roger ("Isn't he loovely?") is a New Zealander from Hutt Valley. Has had his appendix removed recently, and it is feared that this may interfere with his vital capacity. Found the hospital visiting hours inadequate to segregate the flow of female admirers. Always an enthusiastic participant in social functions, he is leader of "Cardinal Huff" and the Haka. Roger has played football and cricket for the Faculty, and last year was captain of the football team. His future is bound up with Club Practice in New Zealand.



P. F. O'CONNOR: Pete comes from Melbourne, but don't let his fresh complexion and boyish smile mislead you; some P.A. nurses could tell you plenty about him. As befits his origin, Pete plays the Victorian style of football; in his spare time he plays tennis and golf as well as indulging in a little swabbing. His future lies with the Vic. Govt. Incidentally, Pete reckons going from post to post is a dog's life.



MISS M. E. WILSON: One of our fairer members, Margaret comes from Tottenham, which, we understand, is "out Bourke way". Noted for her classic hair-do, even the lecturers were disappointed when she changed its form one day. Margaret created a precedent last year by being the first girl to control the Society's purse strings; this may account for all the levies this year. Very reticent about her future plans, Margaret has admitted that a partnership is an ideal set-up; so here's hoping she makes good use of the time at her disposal.



J. H. THOMAS: Another local lad, "Tomo" comes from Parramatta. Normally very quiet, he is a changed person when his inhibitions are removed with a little alcohol. It is rumoured that Parramatta nurses can tell some hair-raising stories about him. He has been seen removing a lady's shoes, but who put them under his bed? Tomo is trying his hand playing Aussie Rules for the Uni. this year. His future is obscure, but if consistent hard work is any help, he'll get by without any trouble.



B. L. CLARK: "Medulla" follows the veterinary tradition of showing a keen interest in P.A. nurses, and finds our climate invigorating. Bruce comes from Tasmania, and is the only representative from that land. Has played Australian Rules, and claims to be Champion University Weight-lifter and the sole contestant in that sport. We wonder what sort of reception Bruce is going to get from the Tasmanian rabbits?



B. W. BOOTES: "Cyanide" disappointed a high-ranking member of the staff by refusing to die of cyanide poisoning during a prac. physiology class. Bruce comes from Lismore, with a dairy background, as can be judged by his cross-examinations of H.G. Although married, has never been known to hurry. An ex-service-man, Bruce will be a Departmental man, for a time, anyway.

FAMA SEMPER VIVAT!

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VETERINARIAN'S CREED

- "To regard my profession as something more than a means of livelihood;
- To value character more highly than reputation and truth above popularity;
- To be merciful and humane, preventing needless suffering among dumb beasts;
- To be faithful and zealous, preventing needless loss to those I am called on to serve.
- To guide my conduct by sober judgment and my judgment by a never sleeping conscience;
- To be modest and open minded and thankful for every opportunity to increase my knowledge and my usefulness;
- To be a co-worker with my fellow practitioners by the mutual interchange of counsel and assistance;
- To be true to myself, measuring my success by the value of service I render rather than by the fee I receive."

R. R. DYKSTRA,

Dean Emeritus of the School of Veterinary Medicine, Kansas State College.

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ZOOLOGY I AND THE VETERINARY COURSE

By P. D. F. MURRAY, Challis Professor of Zoology

In most universities throughout the world it is the experience of students starting courses in such professional subjects as Medicine, Veterinary Science and Agriculture that they are forced to spend their first year in the study of subjects whose relevance to their professional career they have difficulty in seeing and which is not explained to them. In this University Vets. have to study Physics, Chemistry, Zoology and Botany. Today, I imagine, the relevance of Physics and Chemistry would not be disputed by even the most ignorant of students, but that of Zoology might not seem so obvious.

Broadly speaking, Zoology is put into the first years of these professional courses for two reasons. One of these is that students in their first year at the University are still hardly ready to undertake the more directly vocational parts of their work. In Sydney, particularly, many students come up with their minds still too little developed for them to be admitted at once to such difficult disciplines as human anatomy and physiology if they are medical students or veterinary anatomy and physiology if they are Vets. Something seems to be needed to make a sort of bridge which will carry the schoolboy from the school into his professional work. Much of the material in first year studies, such as parts of Zoology, is included less because of its relevance to later professional studies than because of its cultural and educational value. Nothing very much is lost if the student forgets it. It is important to realise what this sort of "forgetting" really It means that a year or so after leaving the Zoology Department the student would not be able to remember the names of the mouth parts of the cockroach or the cranial nerves of the stingray, but it does not mean that the student would have been unaffected by the course in Zoology through which he has passed.

It is hoped that the first year course as a whole influences the mind of the student, firstly, by revealing to him the existence of a number of studies and of a number of phenomena of which he was previously in ignorance; secondly, by teaching him techniques which will be of direct value in later years (such as dissection and the like), and, thirdly, but perhaps most importantly, by introducing into his mind some knowledge of such great intellectual achievements as the Atomic Theory and the Theory of Evolution. Knowledge of these may not help in administering a drench to a cow or in getting the puppies successfully out of a greyhound bitch, but they do provide the mind of the Vet. with intellectual furniture and help to change him from a

man who is merely a technologist into a man who is both a technologist and a man of culture and therefore probably a better technologist.

To say that a man is a better technologist because his mind holds a wider culture may seem a doubtful proposition, but such a man does have real advantages over technically as competent but culturally narrower colleagues. He gains in three ways. Firstly, the range of his interests is wider because the experiences of his professional life are seen against a larger background (the horse is a more interesting animal if seen as a product of fifty million years of evolution than if seen merely as a sick beast to be cured). Secondly, culture enlarges the pleasure of life. The simple joys of the world and the flesh are great, and are equally available. more or less, to us all; no prolonged education is needed for their enjoyment. The pleasures of music, literature, the graphic arts and scientific knowledge are no less great to those fortunate ones to whom they have meaning, but their full enjoyment is usually, though not always, limited to the educated. Thirdly, if a man's education is wider than his speciality, he is the better able to see his speciality in relation to the rest of life, and to all the other activities of the society of which he is a member. He is, therefore, the better fitted to become a leader of his profession, whether in clinical work, in research, or in administration.

All this may seem pretty remote from teaching Zoology to first year Vets., but it is not really as distant as it seems. The fundamental biological sciences are perhaps those best fitted to build a bridge between the special culture of the Vet. and the general culture of the society in which he lives. After all, Veterinary Science is an applied branch of Zoology, and it is natural that the branch should be related to the soil in which it grows through the trunk which bears it. It is through that trunk that one of the rather small number of really fundamental concepts upon which the thought of modern man is based, that of evolution, is transmitted to the veterinary student.

The second reason for the inclusion of Zoology in the first year Vet. course is more vocational. The great majority of students entering the Faculty have no biological knowledge whatever, even of such elementary notions as the nature of respiration, excretion and so on, or even of the true nature of reproductive processes. One of the functions of the Zoology I course is to send into the Faculty students

who have as much understanding of these basal matters as is required of them by lecturers in more advanced courses.

In conclusion, I would like to point to a phenomenon which is probably not obvious to students: the rapid disappearance of the lines dividing the biological sciences. Fifty years ago a medical man might have smiled at the idea of research of medical interest being done in a Zoology Department (except, perhaps, in parasitology), but today Zoology has become "animal biology", a science which includes the study of all the phenomena occurring in animals, and which is, therefore, fundamental to all the Medical and Veterinary Sciences

and to those parts of Agriculture which are concerned with animals. A good example of the relation of Zoology to these other sciences is provided by cancer research. It is more and more widely recognised that the direct attack on the cancer problem has failed, and that new attempts upon it can probably best be made by investigating the normal phenomena of which cancer is an abnormality: the growth and differentiation of cells. The problem of differentiation, of what happens when a cell of embryonal type turns itself into a differentiated "adult" cell like a muscle fibre or a bone cell, has been the almost exclusive preserve of zoologists.

He who learns from one occupied in learning, drinks of a running stream. He who learns from one who has learned all he is to teach, drinks "the green mantle of the stagnant pool".

THE CURIOSITY CLUB

This year marked the beginning of what, it is hoped, will be an important activity in the life of the Veterinary School. I refer to the "Curiosity Club", which was formed in Lent Term by certain people with the very valuable assistance and advice of the Dean, Professor Carne.

It was felt that something was missing from the Vet. School, something that any University student might expect as his privilege. The Americans have attempted to remedy the situation in their technical faculties and institutes by compelling students to study and be examined in a course of "humanities" or humanistic studies. Their experiments do not appear to have achieved very satisfactory results.

Where they have failed we hope to succeed by substituting curiosity for compulsion. The use of compulsion tends to make one regard such an activity as something unpleasant, but necessary, like a bitter dose of medicine. It drowns the irresistible fascination which leads one to what only Omar Khayyam could describe:

Then to this earthen Bowl did I adjourn
My Lip the secret Well of Life to learn:
And Lip to Lip it murmured—'While you
live
Drink!—for once dead you never shall

Drink!—for once dead you never shall return'."

The activities of the club so far have consisted of talks by guest speakers, followed, in each case, by an informal discussion held a few days later. Interesting as have been the talks, it is the discussions that have been most enjoyable. While the talks have aroused our curiosity and introduced us into various fields of human activity, the discussions

have, in addition, provided us with the opportunity of standing up and expressing ourselves to a group of people of University standard. However, we have been criticised by certain people whose opinions must be respected. We feel that certain of their criticisms should be answered.

It has been argued that the chief essentials of a satisfactory life are singleness of purpose and striving for achievement. This has been followed by the opinion that the broadening of our activities, which results from participation in the Curiosity Club, is a distinction from singleness of purpose and that it tends to produce the proverbial "Jack-of-all-Trades, Master of None".

To state that we should graduate from the Veterinary School "Master of None" is surely a grave and unjustified charge against the training provided by the Veterinary Faculty. We have been convvinced that nobody who is "Master of None" could possibly graduate from this school.

We firmly believe in singleness of purpose, but we are handicapped by the fact that we are not aware of what is an intelligent single purpose. We do not want to experience the discovery, at the end of our lives, that we have spent our stay on earth in pursuit of a purpose that isn't very significant or worth while. Moreover, we are convinced that, so long as we confine our thoughts to the relatively narrow channel of our science, we shall fail to acquire that wisdom and perspective which is necessary if we are to make such judgments intelligently.

The best example of this idea is the life of Albert Schweitzer, Doctor of Philosophy, Doctor of Theology, Doctor of Music and Doctor of Medicine,

Schweitzer himself said: "I settled with myself that I would consider myself justified in living till I was thirty for science and art in order to devote myself from that time forward to the direct service

to humanity." His "direct service to humanity" has consisted of building, organising and maintaining a hospital in tropical Africa, chiefly for the natives, and of monumental research into tropical diseases.

TRAINING SHEEP DOGS

Possibly the most important points to be considered when training any dog—in this case, the sheep dog—are its breeding and the performance of its ancestors. Although any other breed of dog can be taught to work sheep fairly successfully, the time and energy spent in training such a dog might well be devoted to training a sheep dog, whose natural tendency is to work sheep. By "sheep dog" I include all our common breeds in Australia, from the Border Collie to the Barb, and, as a follower of schools, believe that "good dogs are born and seldom made".

Assuming we have a suitable pup, the following remarks will briefly illustrate one method of training it.

Primarily, patience is essential, as are perseverance, repetition and self-control on the part of the trainer. A flustering or bad-tempered person seldom trains any animal successfully.

When young the puppy should be allowed complete freedom, with ample room for exercise, and should be carefully watched during its playtime, because it is often possible to judge its individual style and temperament by so doing. It is absolutely essential to foster and encourage the dog's individuality; therefore, at all times in its early training allow the dog to work alone. By doing so it is not given the chance of becoming a "stand-in" for some older dog it may copy. Bad habits are just as readily picked up from older dogs as are the more desirable ones.

When is the puppy old enough to commence training? Climate, breed, locality, season, time of the year, etc., all influence this factor. Possibly, at a tentative guess, anything from six to twelve months.

Training begins by chaining the pup. From this stage onwards it should be treated as an adult dog in that its freedom is restricted (some allowance must be made for the dog's age, however), and it is taught obedience. Ideally all training should be carried out immediately the pup is taken from the chain, allowing only a brief preliminary run. Unchecked racing about before training is bad, and, once lessons begin, short periods, often repeated, are better than long, tedious, infrequent lessons.

The puppy should be given only light work until it has matured, and its pads have hardened, otherwise it may become stale or cunning. Keep it fresh and only train when it is fresh. After training, allow the pup to run about freely and unchecked until put on the chain again.

Next, teach the dog to sit down on the word "sit". This can be achieved by running the lead under one's foot and pulling the pup to the ground and calling "sit" as you do so. For dogs to be used on large mobs, some short, characteristic whistle is best substituted for the word "sit", and if dogs are to be worked as a team precede the whistle with the puppy's name. Here a word of warning might be in place re the selection of a name. Short, sharp, clear names, such as "Dot", are often best; in any case, only the perfect dog is always called by its name. Consider naming puppies with different sounding names if they are to work together in their adult life.

To teach the dog to "stay behind", if, when walking, the end of the leash is held in the left hand at the left side of the body, and the dog is made walk on the right rear, with the lead running across the front of the thighs, the dog will soon learn to walk at the trainer's heels. A light cane can be used to lightly touch the dog's nose should it walk in front, saying "behind" when doing so. Should the dog hang back, the jerking action of the lead running across the trainer's thighs will soon encourage it forward.

Having taught the dog to sit, and stay behind, it should be taught to "come behind", also to sit when at a considerable distance from the trainer. These lessons are easily taught by using a long, light cord attached to the dog's collar. During this phase teach the pup to sit and remain "sat" until told to move, regardless of distractions.

The initial obedience lessons over, the puppy is now ready to be taught what is required of it with sheep. Using an older, reliable dog, run a mob of about thirty reasonably tractable sheep into a mob, sit the dog some distance away from them, and release the pup from its leash. Let it run wherever it likes, using the older dog to control the mob when necessary. Usually, a good pup will circle the sheep and run round and round them.

Allow the pup complete freedom with the sheep for the first three or four days. Fifteen minutes per day is ample—even less at first may be necessary with high spirited dogs—or it may be necessary to chain shy, timid or disinterested puppies somewhere where they can watch, but not help, other dogs working sheep. The latter type of pup is usually harder to train than the former, and emphasis is here again placed on the first paragraph of this article.

Try and allow the pup to meet sheep only when fresh, or, if too high spirited for control, tire the dog slightly beforehand; but never attempt to train an over-tired dog. If possible, keep young dogs away from sheep yards in which other dogs are working, and they should be only used in yards after they have been sufficiently trained, when they can be taught to force, without damaging any sheep. As a general rule, good yard dogs are seldom good paddock dogs, and by observing a puppy's style it is often best to train it for one or the other—seldom both.

The dog, being now interested in sheep, as apart from its juvenile interest in poultry, will look forward to chasing or working them, so carefully restrain the dog by making it sit when on the side of the mob, remote from the trainer. At all times, in this early training, the trainer should endeavour to keep the mob between the dog and himself. The pup will soon learn to remain behind the mob, and a few words of praise at this stage will reap a harvest later on.

Next is the "cast". If the mob be run together about twenty to thirty yards away, and the dog sat behind the trainer, the latter can then cast the pup by making a move towards the desired wing, at the same time whistling a characteristic whistle, or saying something which is to always mean "cast". Practise casts to right and left equally. The dog should not be allowed to cross between the mob and the trainer at any time, and the discriminate use of pebbles is helpful in this regard. The dog should always be brought behind before casting to either side. To obtain direction, gradually lengthen the distance between trainer and mob, and cast the dog out at right angles to a line drawn from trainer to the centre of the mob. Individual dogs will vary in this regard, some being naturally wide casters, others working in straight lines. By perseverence the

Mrs. 'iggs rang up Mrs. 'arris to inform her that her cat was behaving strangely. "'e rushes into my back yard, stays about two minutes, and 'e's gorn. Then I sees 'im in the yard next door, but 'e's gorn again like a shot. The next I sees 'im 'e's in the next block—gorn clean mad 'e 'as."

"Ah no, luv, hits alright, you see, we took 'im to the Vet. yesterday, and 'e's just cancelled all 'is engagements."

latter type of dog may learn to cast wide and gather the mob up from behind rather than bolting straight to it and around it. Should the dog cast in the wrong direction, it should be whistled to heel and recast.

It is essential in all early training to have conditions as near as possible to perfect, so that the young dog can concentrate on its work. Make training periods short and regular, if possible, and always finish the period with a successful piece of work by the dog, for which it should receive warm praise.

At this stage the dog can be taught to bring the mob up to the trainer by sitting the dog whenever it gets out of position, and soon it will learn how to control, direct and move a mob to wherever the trainer so desires.

Whenever the dog disregards an order, the trainer should persevere until the order has been obeyed, and, if punishment is necessary, a few well chosen harsh words or a smack with a hat or newspaper is usually sufficient. The dog should not be hurt. If it is intelligent, pain should not be necessary. If the dog is to be belted, it is advisable for the trainer to whistle it to him and to hold it after punishment, otherwise the dog may run away frightened and become hard to catch. If it is not possible to chastise a dog on the spot, on no account punish it later, because the dog will associate the pain with whatever is nearest in its memory.

The foregoing remarks have many limitations both in practical application and in the availability of time and space, but the underlying principles are sound and are worthy of consideration when training any breed of livestock. Many dogs break themselves in, and by far the greatest number of paddock dogs come under this category.

It may be argued: "Why train a dog at all if good dogs will train themselves?" In answering that question the would-be trainer must decide whether he is to adhere to the "good dogs are born" school or to the "good dogs are made" theory. Whichever way he turns, the adage "Like dog, like master" will be found to contain less ambiguity.

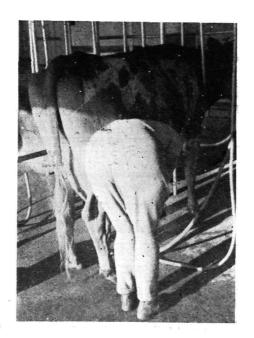
P.R.K.

It was only a small flock of ewes, and when the lambing season arrived there was not a single lamb dropped. Two old ewes were heard discussing the phenomenon:

"Strange thing no lambs this year."

"Yes, I guess the wether's been up against us."

I was going to write an article on student apathy, but I just couldn't be bothered.—R. J. Knowles, IV.



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