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# CENTAUR

The Journal of the Sydney University Veterinary Society

Number Six

Editor: W. N. Freeman.  Asst. Editor: C. Irvine.

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Faculty of Veterinary Science, 1943.
LEISURE! WHAT IS IT?

You may well ask "What is it?" in the times of these hectic four term years and five year courses. Not only are we attempting to assimilate a greater amount of this "Learning" but also an increased volume per unit time. Thus, in a technical faculty, which should have the finer workings of its interior lit up with an aura of culture, is fast becoming a murky shop where one crams, in the shortest possible time, the thoughts of others—if we pause to think for ourselves a moment—our minds should turn to "leisure."

This applies to all sectors of the community. Such speeding-up is necessary in time of war—never-the-less, for complete efficiency, sufficient leisure time must be provided. When the economic position is such that a reasonable number of hours are provided, it rests then with the individual to see whether he will use the time provided for in worthwhile pursuits. As far as the student is concerned there is no place for over strain and over dosage with stereotyped work, for this is merely wasting potentialities.

The education for leisure is becoming more and more necessary as the power of the economic world makes it possible to reduce the number of working hours. In the past, when there was not enough to go round, leisure was the ornament of the privileged minority. To-day, as far as the economics of the matter are concerned, it can be made if we please a common possession.

However, with the necessity for specialisation, the Veterinary student is likely to forget or become indifferent to the fact that "education must become an adventure continued through life." He is isolated because of the practical nature of his work from the pursuits and ideas of a cultural world. To quote Ruskin: "It is not what men suffer that fills me with sorrow, but what they miss."

It is because of this that the Vet., while carrying on his valuable work of the day, must also point the way to the future of a new humanism with music, drama and the other arts, as its central pillar.

The individualist will not wait for "The New Education" or for any other organisation but will call up all the richness of his own soul and the fire of a worthy purpose. The universe is his temple and those who are alive to it can not help but feel endowed with an inner strength and a greater admiration for the art of living. All may contribute something to enrich the lives of others, providing all choose to do those things we like most and to do them well.

The New Year needs the will for leisure as well as the will for work if men are not to become mere automatons of a materialistic world but the bearers of the standard of Liberty.

— W.N.F. (Editor).
Sydney University Veterinary Society.


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Asst. Hon. Secretary: G. Skillman.
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Dinner Committee: B. L. Reid, J. Fearn, R. Irvine, C. Irvine.
Debates Committee: J. McNiven, A. Juleff, E. Brough.
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Editor of Centaur: W. N. Freeman, C. Irvine.
Librarian: Miss P. Stuart.

30th ANNUAL REPORT, 22nd JANUARY, 1943.

Mr. Chairman, Members of the Faculty, Ladies and Gentlemen.

It gives me great pleasure to present this, the 30th Annual Report of the Sydney University Veterinary Society for the year ending January 22nd, 1943.

In keeping with a changing world this Society has had to change its policy and its outlook, and this has meant that during the year just ended the general scope of activities of the Society was considerably restricted. Our ranks have been further depleted by numerous enlistments and members of this Society are now serving with all arms of the fighting forces.

To these members who have forsaken their careers to defend their country we wish the best of luck and a safe return. In this connection we would like heartily to congratulate Ted Dampier-Crossley on his winning the D.F.C.

We would further desire to extend our sincere condolence to Sir Frederick and Lady McMaster upon the loss of their son, Capt. Ian McMaster, who was killed in action in the Middle East.

Meetings.

Besides the Annual General Meeting three Ordinary General Meetings and two Combined Meetings with other Societies were held during the year.

The number of meetings held has decreased from the numbers held in previous years, chiefly because of the difficulty of obtaining suitable speakers and a slackening of Student interest. I would like to stress here that if the Society is to continue functioning at all a great deal more interest and effort will have to be shown, especially by members of the earlier years. Under the present accelerated curriculum these members will soon find themselves with executive positions in the Society’s committees and with but a very poor appreciation of responsibilities involved, and the course of action requiring to be taken to maintain the Society’s activities. I have no doubt that an active participation and interest in the affairs of
this Society has enabled many of its past members to assume with confidence and success positions after graduation outside of immediate technical importance, and has added to their capacity to lead fuller and more consequential lives. Individual effort and sacrifice will be necessary if the Society is to carry on.

At the combined night meeting held in the Botany School by the Veterinary Society, Dr. Still addressed the Biological, Agricultural and Veterinary Societies with a very interesting talk on Trace Elements and Substances in Biology.

The Annual General Meeting was held on April 10th, 1942, and the following office-bearers were elected:—

Patrons: The Honourable the Minister for Agriculture, the Dean, Professor I. Clunies Ross, Professor J. D. Stewart, the members of the Staff.

President: R. I. Taylor.
Hon. Secretary: H. Biron.
Hon. Treasurer: N. B. King.
Executive Committee:
Asst. Hon. Secretary: J. H. McDonald.
Hon. Grad. Secretary: H. Pile.
Dance Committee: Miss Helen Racklyeft, Messrs. J. Steel, R. Hoskins, G. H. Wright, Petherbridge.
Debates Committee: Messrs. T. Officer, D. Rennel, I. Barrett.
Year Representative: 5th Year, J. Steel; 4th Year, G. H. Wright; 3rd Year, J. West; 2nd Year, J. Woodbridge; 1st Year, George Stillman.

At the ordinary General Meetings held throughout the year the following addresses were delivered:—

May 8th: Mr. W. Downing, M.R.C.V.S., "Experiences in the Live Stock Industry of the Argentine."
July 3rd: Mr. Max Henry, M.R.C.V.S., "Work of Division of Animal Health in N.S.W."

**Annual Dance.**

The Society's Annual Dance was held in the Union Refectory on the night of July 15th, in aid of the Australian Army Veterinary Corps' Comforts Fund, which benefited to the extent of £11/13/8. The enthusiastic support of the members for this worthy cause and the zeal of the Dance Committee require commendation. Ticket sellers in the raffles did a great job and were aided by the fact that they had good quality items to raffle. We would especially like to thank Miss Van Lenning who generously donated to us the proceeds of the sale of the Setter pup which she won in the raffle and which amounted to £2/2/-.

**Centaur.**

The Editor and Sub-Editor are to be commended for producing Centaur under still more trying conditions than applied in 1941.
These gentlemen put much of their private time into reading, organising and producing the magazine and the Society is duly grateful to them.

Library.

It is recommended that the incoming executive take further steps to try and make available to students literature which pertains to Veterinary Science and which is located within the University and which is not readily accessible to students.

War Savings Certificates.

During 1942 there was a revival of the purchase of War Savings Certificates and it is recommended that the groups be maintained and extended in this excellent cause.

Enlistments.

As you know, a list of members who have joined the Forces is posted on the notice board. The list is not complete and it would be very much appreciated if members knowing the details of any enlistments would make these available to Dr. Gun by medium of the Secretary.

Before moving the adoption of this report I would like to thank the office-bearers who by their efforts made the Secretary’s position more easily tenable.

I hope that individually you will give the incoming Executive Officers your fullest support and co-operation as has been always available in the past.

I wish them and yourselves every success for the coming year.

This ladies and gentlemen, completes the report and I submit it for your consideration.

HENRY BIRON,
Hon. Secretary, S.U.V.S., 1943.

TREATMENT OF PARALYTICA MENTIS.

Exercise 1.

“Protein and vitamin have I few,
What would I be in an Irish stew?”

Work this out three times: (a) by Algebra; (b) by Euclid; (c) by Carb. Soda, and prove your answer by Oxometry.

Exercise 2.

“The tangles at the base of a rhinoceros’ bangle are treacle.”

Can you beat it? (Ed.—Even with the help of the pure science).

Exercise 3.

Memorise the following:—

“For deep in curtained cloisters
    And long luxurious bars,
The fat men eat their oysters
    And smoke their huge cigars.
But the little lone fried fish shops
    Look upward to the stars.”  —Evoe.

Exercise 4.

(a) Take hot bath—open pores.
(b) Plunge suddenly into cold bath—shut pores.
Repeat this until able to open and shut pores at will. —E.S.
SECOND YEAR NOTES.

The month of January this year saw thirteen students on the "second rung of the ladder." We lost some from our fresher days, but our small number was made up by some less fortunate than ourselves.

Our year was well represented in the Vet. Football XV., five players being selected, and the coach also came from our small numbers. Our share of the brawn was D. McConnell, Rex Hartwell, J. Macadam, W. Thompson, G. Skillman and the coach, J. P. Woodbridge.

During the March Vac. we were at the Farm. A wide and varied experience was gained and no doubt Second Year knows how to make silage. A little lizard added greatly to our amusement, didn’t it, girls? The boys declare that the Land Army was a good invention, even if it was only to let them do all the work.

June vacation saw us all at Hawkesbury College on different sections of the Farm. The boys, through no fault of their own, received additional practice at bed making, whilst a certain section received some long wanted practice at stacking cards.

The Year wishes to congratulate Miss H. McVicar for winning the John Gurner and Frederick Ebsworth Scholarship. Good work, Helen!

Lo and behold, our Hag turned twenty-one during the year, so she is really not so old if it is first time she has reached that age—Wee Willie from Victoria has also obtained his majority. Best wishes to both of you.

Finally, we wish Final Year all the best in the task that lies ahead and may they shoulder the burden well.

P.S.: Second Year know all about hippopotami. Don’t they, Bill!

THIRD YEAR

Twenty runners faced the starter in the third division this year. Last year’s field had been reduced by about ten scratchings, including Alan Larsen, Fred Allsop and Ray Chatham, who joined the Air Force, Col. Petherbridge in the Navy, and Dave Rutherford in the Army. We were very pleased to see them all occasionally during the year, and wish them all the best.

The field again included two fillies. Congrats., Pat, on the engagement hoop! We wish you and Barry all the best when you settle down to raise pigs and so on. They reckon our other damsel is pretty near the money, too. (Next year’s leap year, Ern). However, we hope both girls will continue to brighten the year with their presence, and won’t retire to the stud before they complete the course.

Third year is a notoriously difficult year, especially with the accelerated course. Consequently, our outside activities were greatly limited. "Casanova" Bennett ran true to form at the Vet. Informal, but on the whole, third year weren’t conspicuous socially. Our horseplayers, with the two Kiwis as chief mourners, held burial services
every Monday morning, but were usually sufficiently recovered by Friday to study “Sportsman” and “Newsletter” during Anatomy “dems.” Bill Crogan and Don Thompson were a brace of husky forwards in the football team, while Ken Garnett, John Bentley and Cliff Irvine appeared in the backs. Bob Titcher gave an excellent performance to win the Inter-Faculty diving championship.

Jack and Cliff Irvine are still beefing about not taking that 33 to 1 about themselves in the Inter-Faculty Debating Competition, in which they steamed up against strong opposition. These two N.Zers, along with John Bentley and Laurie Stewart, caused rather a stir over a sketch they staged at the Vet. dinner.

We were a particularly well-behaved and co-operative year, e.g., not one meat fight, and many strong friendships were formed which we should hate to break (Examiners please note).

FOURTH YEAR

Thirteen students, filled with ideas of their own increasing importance, tripped lightly into the early lectures of Fourth Year. Thirteen didn’t keep tripping. This light-hearted step gradually became transformed into a work-weary plod.

The keenness with which these students undertook their clinical duties stimulated some anxiety on the part of both patients and staff. 8.30 a.m. would see half a dozen students walk briskly into the “Dog House,” break the icicles from the fingers and face and “thaw-out,” while cheerily taking the temperature of their little patient.

Pressure of work, however, turned this happy band of students into a group of morons, who during their sojourn at Badgery’s Creek took great delight in “Disappearing Tricks.”

The stay at the University Farm was, I consider, and I think I have the backing of 4th year as a whole, the most enjoyable and most informative period in our course! The much too few “rambling” lectures by Mr. Geddes were “gems.” The Ambulatory Clinic forms the nucleus of what could be another big step in the right direction.

However, a few hazards face students while in residence at the farm. Such things as the spontaneous “up-ending” of beds at the most disconcerting hours, not to say anything of bent tongues of door locks, all try one’s nerves.

In closing, I would like to congratulate all successful 5th year students and say “better luck next time” to the not-so-luckies on behalf of 4th year.

NEWS FROM ABROAD

Fellow students of James H. Whittem, who graduated in May, 1942, and who is now serving abroad in the R.A.A.F., will be pleased to hear of his engagement in Canada, to L.A.W., Dorothy Haslett, of Whitewood, Saschatchewan, Canada.

Jim is at present in the Middle East, after getting his “Wings” in Canada, followed by a short visit to England.
ARTIFICIAL DRYING OF EGGS FOR EXPORT.

By Bevan L. Reid, Year V.

Three dozen eggs condensed to one pound of egg-powder has been accomplished during the life of the egg-drying industry, representing a saving of thousands of tons of hold-space yearly aboard ships transporting the product to the United Nations. During a recent vacation, I had the opportunity of visiting a drying plant near Sydney. The following description gives a general idea as to the transformation of the egg to its powder equivalent.

Eggs chosen, at present, are those normally 1st grade export quality. Each is hand-cracked and emptied into a small metal saucer so that any deformity of yolk or albumen can be noted and the egg rejected. From the saucer the egg is emptied into a small tin somewhat like a laundry "dipper" and when about a dozen or so have been cracked, the tin and its contents pass along a conveyor belt to a collecting vat into which each tin is tipped. Shells are placed in a receptacle beside the cracker and simply discarded.

From the vats the now shell-less eggs pass through two sets of strainers, one containing some 16 meshes to the square inch, the other about 40 meshes. This ensures freedom of the pulp from fragments of cracked shell and chalazee. Such material would clog the nozzles mentioned later. Material in the vats is of the consistency of thin custard.

Hence, the pulp falls to the floor below through 3 inch diameter tubes, which can be readily dismantled for sterilisation, where it is cooled to 45°F in large open vats, by means of circular revolving tubes through which cold brine is passed. This ensures an even temperature for all pulp before being submitted to the driers.

The pulp is forced up to the driers through metal tubes about 1 inch in diameter at pressure of 150lb. to the square inch. To each pipe is connected a nozzle through which passes a hole of extremely fine bore (about .05 mm. in diameter). Each pipe can be readily thrown out of use, thus facilitating cleansing. This extremely fine spray of pulp is directed into large metal chambers about 30 feet high and 20 feet square at the top, tapering to a point on the floor beneath. At the lower end of the chamber air is forced in at 300°C, heated by means of large coke furnaces. Contact of the spray with these high temperature results in the formation of a powder, extremely fine and homogeneous, which falls to the pointed lower end of the chamber and is tapped off. The cooler air (now about 180° C) is drawn off by means of large fans and reheated in the furnaces beneath. The powder is then canned and ready for export.

It is interesting to note, that the Chinese are largely responsible for the development of the process, and much of the plant bears the somewhat uncommon device "made in China."
FRONT ROW—J. C. Gerring, Mr. H. B. Parry, Professor I. Clunies Ross, Miss N. E. Christian, G. H. Wright.
NOTES ON FINAL YEAR.

(Ed.—The Edminster, Publisher and Printer have all gone crazy trying to disentangle this, so don't bother reading it).

A SMARTING FAREWELL

Dear Edminster,

You was to having axed me. For to, and how to write them, I will; as better no body cannot with my pen. So I will if it be libel. Therefore no sooning for time charges. On go I to it.

J.H.B.: "Red" he was being to you. Distinguished career (academic). Married into the interim (non-academic). Believes the old proverb of Solomon (?): What I've seen, I've seen. You go for to looking see yourself, see.

H.B.: Let alone to the fish. And the feathery fly 'fore the female. Was once to the learning of pole crashing—into with the car; met no success. Back to the profession of peace he became a keen ruminotomist.

M.E.C.: Did the amazing things with the bobby pins and things for the operations. Was devoting self two of the masters at once to. And successful too. So much the strain of the course took a year off and forgot nothing.

F.L.C.: Our athlete who made note of it. Once time it was me told never touched it. Put forward appetite inhibition theory in cattle psychology. Definite ideas on value of seats of the gods at the Tiv.

J.C.G.: British to the boot. He was to. Not having time of a lot for cats. Is said to me if back end of caves not existing many bottoms would go out of life. Essentially practical man, ever ready for progeny test.

R.H.: At last was deciding the marriage was best. Leaving the beer and the cards for to rest. Many sound reasons to stay in the city. Private they were. And he likes married life.

N.B.K.: The king of the swing and the bing and the fling. Gave up the running of the long distance on foot. For to run it as further and sitting. On bike, took off the time to play rugged rugby and the husbandry of farm.

J.H.MacD.: Of all was philosophic and ventured from far. India where they have seeks and ganders had him (He knew 'em!) And where was the bird on the whisky tree wot say: "Brain fever, brain fever, brain fever, ditto, ditto," ad infundibulum.

A.R.Mc.T.: He was for to being the atom of mercury, and. To be the bantam killer of the fight. The champion he was; of da
Glebe. Always ready to reply "waddaladda" rot he was. And soon, too' he talk it, all time.

:: :: :: ::

L.A.M.: The man with the mobile forehead ,of, and the whistle of the correct. Having the horse to his fancy, became a re-tired chemist. In the hope of to come for the better to-morrow. Since when, disillusioned as any conservative eatremist was to having been forever.

:: :: :: ::

D.M.: The man of grace; but more none. And with him to the pontoon for being keen. After dishillusioned to be of the women is all for trying the inspectoring of stock. But he'll be with us men.

:: :: :: ::

R.R.: A horse of darkest Queensland. Joining himself to us quietly. But hark, for 'tis said he was smooth of us all. Escapades would to escape us most. Too, was the champion of the operation of the mule.

:: :: :: ::

D.A.R.: "Dar" dar sly detective. He was to being an ordinary extra fellow and the whisky. And knew where to put it! The very devil for "aypenies" this cautious pontoonist was he.

:: :: :: ::

R.S.: Deny nobody will. His dogged persistance in study. It would make him despondent to be having. With the language enough trouble, let alone coping with the "bull." Lizzen, I would ask you, zey will prosecute you. But not here!

:: :: :: ::

G.H.W.: After a beginning slow, has pulled the commando knife. From the fire out of. Interested in many poisons inc. exter-minator of the emmet (ant) . But it is to you we'll remember. Not to say: "This man he is all right—no bull."

I yours am in full faith,

THE WHIP.

R.S.P.C.S. Please for to let me hide. It is under the arms of the coat. As in France they say: "No more plum."

VARIOUS TYPES OF PARACHUTISTS.

First there is the Nazi who jumps as soon as the signal is given. The English ask what the House of Commons has to say, then jump and have to fight 100 miles back to the position.

At first the Spaniard refuses to jump till the pilot tells him he is afraid. The parachutist declares his personal honour is insulted, flings away his chute, and then jumps.

Each Italian plane is equipped with a pilot, co-pilot, rear-gunner, engineer, five strong men and one parachutist. At the given word the five strong men hurl the parachutist overboard.

Then there is the Australian—when the word is given, it is discovered he has gone. (The plane passed over a racecourse a short while ago).
CASE REPORT.
By L. C. Freeman, B.V.Sc.

VALVULAR DISEASE IN A DOG.

Subject: The animal was a white and black fox terrier dog, aged six years.

History: The dog had not been bright or active for some weeks. It was stated by the owner that about six weeks previously the dog had developed a cough which was diagnosed by a veterinary practitioner as bronchitis. It made a seemingly good recovery from this affection, but about four weeks ago, subcutaneous swellings were noticed, particularly along the ventral thoracic and abdominal walls. These were gradually increasing in extent. The appetite was fair but urination was infrequent and a black foetid diarrhoea was present.

Examination: The dog, when presented at the clinic exhibited a lethargic attitude, standing with the elbows abducted. The skin and subcutis were distended so that normal bodily prominences and depressions were smoothed out. These swellings were doughy on palpation and retained fingerprints. Some degree of “bottle jaw” was present, but the more dependant parts of the body, such as between the fore-limbs, ventral abdominal wall and hind limbs, were most markedly affected. A definite ascites was also clinically evident.

There was a slight bilateral ocular discharge, and pallidity of the conjunctiva was also evident. Temperature, 100°F., pulse, 144 per minute, regular and diffuse, being difficult to pick up. On auscultation the first heart sound was duller than normal and was accompanied by a definite hissing systolic bruit; the second heart sound was somewhat accentuated. Respiration, 13 per minute; rhythm normal, except for a slight expiratory effort by the accessory respiratory muscles. The abdomen was so distended that it was impossible to palpate any of the abdominal organs.

The case was diagnosed as valvular insufficiency. The prognosis was guarded, and the animal was admitted to hospital for observation and treatment.

Treatment: Tinct. Digit., mxv in three divided doses, and Ammon. Chlor., gr vi in two divided doses daily were prescribed. Paracentesis abdominis was performed and a blood stained fluid slowly drained away. A proprietary mercurial diuretic (Mersalyl B.D.H.) was also prescribed, an initial dose of 0.3 ml. being administered subcutaneously on admission to hospital and a further 0.6 ml. five days later.

The excretion of urine increased after the commencement of treatment. Urinalysis revealed a positive protein reaction. After several days the oedema seemed somewhat reduced, but after the sixth day it appeared to be increasing, while a profuse mucoid nasal discharge appeared. On the tenth day, the dog’s condition had deteriorated to such an extent that the prognosis was considered to be grave enough to advise destruction.
Post-mortem Findings: Examination revealed a somewhat dilated heart, the myocardium being flabby and paler than normal. The antero-medial cusp of the right atrio-ventricular valve was bound fairly loosely to the wall. Practically the whole of the left atrio-ventricular valve was useless; only small parts being free, the remainder being converted into solid white flattened nodules. A small fresh thrombus fairly easily detached was also present. The following phenomena were recorded as secondary to the heart defects:

The peritoneal cavity contained about two litres of blood-stained fluid of S.G. 1.016. The liver was firmer and darker than normal, while blood oozed from cut surfaces and lobulation was distinct, thus exhibiting the typical picture of passive venous congestion; the portal vein and vena cava were particularly distended. The pericardial sac contained about 5 ml. of fluid similar to that in the peritoneal cavity. Oedema of the subcutaneous tissues was extensive over the most dependent parts extending down the hind limbs to the hocks.

Discussion: Valvular insufficiency is common in the dog, and the pathogenesis of the condition is as follows:

As a result of some infection (commonly following distemper in dogs) thrombi, composed of platelets, fibrin and some leucocytes are deposited on the atrial surfaces of the atrio-ventricular valves usually along the lines where the cusps of the valves come into apposition when closed. The thrombi are invaded and replaced by granulation tissues from beneath. Repeated infection leads to an extension of the process.

Consequent upon shrinkage of newly-formed fibrous tissue, incompetence of the valves occurs. Embolism may occur in remote organs, and unless the lesions are very slight, there is usually some degree of permanent damage to the valves. Such lesions are the common cause of hypertrophy and/or dilatation of one or other side of the heart followed by venous congestion of the systemic or pulmonary veins. As a result of venous congestion, changes occur in the liver, spleen, kidney and lungs, while generalised oedema may develop.

In this case it is considered that the heart lesions would have been quite sufficient to produce the symptoms observed. It should be pointed out that in cases of generalised oedema with albuminuria, doubt may exist as to whether the dropsy is of renal or cardiac origin. The detection of hepatic enlargement would be of diagnostic aid, its presence being usual in cardiac but not in renal cases. In this case the ascites prevented satisfactory manipulation of the abdominal viscera even after excess fluid had been drained away.

The presence of a blood stained ascitic fluid would seem to indicate damage to endothelial cells due to venous congestion, and would lend support to the guarded prognosis.

Acknowledgement: Grateful thanks is due to Mr. J. W. Newcomb, B.V.Sc., for helpful criticism and permission to publish the case.
Fig. 1.—Note the lethargic attitude, abduction of the hind limbs and subcutaneous oedema.

Fig. 2.—Showing the dog almost prostrate with very extensive subcutaneous oedema.
COUNTRY

COLLEGE OF FARMING AND GRAZING

ARMIDALE — ORANGE — WAGGA

REORGANIZATION AND DECENTRALIZATION OF RURAL EDUCATION IN NEW SOUTH WALES

SCHEME SUBMITTED TO RURAL RECONSTRUCTION COMMISSION AND A.V.A. CONFERENCE, OCTOBER 1943

BY F. WHITEHOUSE, B.V.Sc., LECTURER IN ANIMAL HUSBANDRY, SYDNEY UNIVERSITY.

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Agriculture I
Chemistry I
Botany I
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Farm Mechanics
Farm Meteorology.

2nd YEAR

Agriculture II
Chemistry II
Botany II
Animal Husbandry II
Mathematics
Business Principles.

3rd YEAR

Agriculture III
Chemistry III
Plant Husbandry I
Animal Husbandry III
Physics I
Farm Bookkeeping.

4th YEAR

Agriculture IV
Chemistry IV
Plant Husbandry II
Animal Husbandry IV
Physics II
Elementary Agricultural Economics and Geography.

5th YEAR

Agriculture V
Chemistry V
Plant Breeding
Animal Breeding
Anatomy & Dissections
Anatomy of Farm Animals.

REMARKS ON COLLEGE SYLLABUS

Geology would be included in Agriculture.
Elementary Bacteriology would be included in Agriculture.
Zoology would be included in Animal Husbandry.
Wool Classing would be included in Animal Husbandry.
Biochemistry would be included in Chemistry V.
Soil Physics would be included in Physics.
Farm Surveying would be included in Farm Engineering.
Histology would be included in Physiology.
DEBATING, 1943.

VETERINARY SCIENCE MAKES HISTORY

Two series of inter-faculty debates were organised during the year; the first, by the Union, for Union members doing University work in any faculty, and the second, by the S.R.C., for men and women undergraduates. Veterinary Science was represented by A. W. Banks, C. H. Irvine and J. M. Irvine in the Union Competition, but the tension arising from one set of debates, and the onset of examinations, prevented our entering in the S.R.C. series. After receiving a forfeit in the first round, the team settled down to meet the first real test on 20th July, when Arts affirmed, and we denied, "That there should be one Parliament for Australia."

We held that the question did not divide itself simply into—the present State Parliament versus the present Federal Parliament; rather that there was a middle course, with a Federal Parliament laying down broad principles of policy, and a series of governing bodies in control of fairly large geographical and economic regions. Messrs. C. H. and J. M. Irvine produced many illustrations of the horrors of central bureaucracy, and of the necessity for decentralisation, from their experience. The Government had apparently not believed we could be so underhand, and seemed to expect us to champion State Parliaments. To our relief they did not accuse us of Sovietising Australia. We won this debate.

In the final, two days later, Law affirmed, and we denied, "That liberal education is outmoded." Here again the debate revolved about definitions; we insisted that the only alternative to a liberal education was a strictly technological one, and this apparently swung things in our favour, for as members of a "technical" faculty we were able to speak much more convincingly of the differences between Science and Technology, and of the evils of specialisation, than our legal opponents. They might have confounded us, even at this stage, by completely denying the validity of our alternative; they had authorities which seemed to prove that our definition of liberal education was quite unacceptable! However, this evidence was not presented in a sufficiently striking manner, and the debate was essentially a contrast between the eloquence of Law and the solid arguments and teamwork of Veterinary Science.

The three adjudicators then retired, and we waited for three-quarters of an hour, with adrenals working overtime. Finally, we received the unanimous decision, and realised that this was the first time that Veterinary Science had won the inter-faculty debates.

Congratulations to C. H. and J. M. Irvine, who, though comparatively new to debating, were not daunted by redoubtable opponents, kept cool, and made speeches which augur well for the future. We also thank the adjudicators, whose comments were kind as well as helpful, and our opponents, with whom we had enjoyable debating. May we meet again in 1944.
ENTRANCE.

An examination in accordance with matriculation requirements but at the “Intermediate Certificate” standard. Education should be to this point without any technical courses.

A boy may skip two years, i.e., enter 3rd year in the course, if he has passed the matriculation examination or its equivalent and is the son of a working farmer or grazier or has had enough practical agricultural experience.

The course of study at the College is for five years on a 50/50 basis, half practical, half lessons.

This is a step-ladder scheme, the boy being able to step out after two years, four years, five years, depending on his needs or ambitions—or he may go on to a University degree.

FARMING & GRAZING COURSES.

A boy leaving after two years would transfer to a Government Demonstration Farm for 6 to 12 months, where he would have opportunity to extend his practical experience.

A boy leaving after four years, would be a worthy holder of a membership diploma (M.C.F.G.) and would go “jackerooing” as an apprentice for one year with an approved (tutor) farmer or grazier.

A boy leaving after five years would hold the membership diploma with honours (M.C.F.G.Hons.), and would have had a very sound, broad, practical, balanced education. He would then go to a tutor farmer or grazier.

UNIVERSITY COURSES.

A boy after receiving his membership diploma (M.C.F.G.), at the end of four years could transfer to the University where he would study advanced Farming and Grazing (termed Rural Economy)—a course of three years leading to B.R.E. (Bachelor of Rural Economy).

A boy after receiving his membership diploma with honours (M.C.F.G.Hons.), at the end of five years could transfer to the University where he would study Veterinary Science or Agricultural Science—a course, in each case, of two years, leading to B.V.Sc. (Bachelor of Veterinary Science) or B.Sc. (Agr.) (Bachelor of Science in Agriculture).

POST GRADUATE COURSES.

After graduating, students not desiring to participate in highly technical and specialised research work could return to the College to spend a year studying stock, agriculture, agricultural economics and extension work. At the end of the year they would become Fellows of the College—F.C.F.G.

Other graduates could study for the diploma in Veterinary State Medicine (D.V.S.M.) or B.Sc. (Agr.) with honours, and then go on to laboratory or field research work or disease control.

(Ed. It should also be noted here that New Zealanders and men from other States need only leave their State for the two years University as against five years at present).
IMPRESSIONS OF THE EXTRA-MURAL TERM.

Perhaps it is traditional for students to think in terms of monetary outlay; and there is no denying that with many of us this matter of money is of vital importance. That was, as far as I could tell, the reason for the hum—or buzz—which buzzed amongst us when it was announced that we were to spend a term in the country doing practical work but receiving no pecuniary assistance, not even concession fares.

However, as the arrangements became more and more inevitable we resigned ourselves to it. Most of us, even those who doubted the idea, approached it with an open mind and with a desire to get all we could out of it. After having had a very enjoyable term, I shall try to give a few impressions of my work with a D.V.O., private practitioner and at an abattoir.

Experiences with a D.V.O. have their most potent value in field work, especially of an investigatory nature. Two or three outbreaks of disease with deaths and you begin to see the need for careful post-mortem examinations. It is not simply making a systematic search of the organs—this must be done as a matter of routine—but the necessity of assessing accurately the importance of lesions and the probable pathogenicity of worms becomes evident with startling rapidity.

Consider an example in sheep. Haemonchus was causing a lot of trouble in the South. A grazier reported mortalities. Naturally, we thought of Haemonchus at once, but a P.M. of three sheep revealed about a dozen altogether. Ostertagia spp. were fairly plentiful in the abomasum; Nematodirus spp. were very numerous in the small intestines; lung worms were rife. We never think of associations like this as we peruse notes, so what are we to say? The worms are not pathogenic even in very large numbers, but here they are, and with quite a few mortalities. The owner then says that he has already drenched three times but with no apparent success. There is good bulk as far as pastures go but you realise that most of the nutrients were leached out by recent heavy rains. Truly, you begin to get a new insight into the game with "startling rapidity."

If we consider the Swine Fever outbreaks, further difficulties are recognised. Two recent cases had been traced directly to unboiled garbage. Then a farmer loses two pigs in eight hours. He even admits that while away there may have been some laxity in the boiling of garbage. So you do a very careful P.M. and select the best specimens for Glenfield. The results of your examination are so typical that you think only a fool would doubt that this is Swine Fever. A week goes by, two or three pigs die; no reply from the laboratory. A fortnight, five or six more pigs die; no reply. Pigs die right and left and you wait, but it is not Swine Fever however much you think it should be.

You get well treated in this work—at most places. Bleeding and T.B. testing are gala days. You arrive for dinner, work during the afternoon and finish the rest after tea. A good day is had all round and you feel happy and well satisfied with life. The owner waits for the results as we do for examination results. Then when
his herd is classed abortion free for another year, the fatted calf is
killed, everyone rejoices—and a new spirit of life hovers into the
veterinary profession.

Now to private practice, and what a world of change! You
rush about all over the place. If you are lucky you have time to
pop into a pub and have a “middy” at six. Here is what it can be
like.

Early start to-day—180 cows to inject for the T.B. test. You
do a stall full and tear across country to do another herd. Then back
you rush, just in time to catch the next stall full at the first place.
The cows play up during ear tagging; and there is not always some­
one who can grab each side of the bail with a hand and push the
cow forward with a massive front in the region of the belt. Next
the young stock, and if you’re still a student you get a few kicks,
and wonder why someone hasn’t been gored.

Then you hurry to the surgery to do an ovarietomy, stopping
on the way to see a sick dog. The owner doesn’t know what the
kids would do if he died, he’s such a pet. But there is no time
for aestheticism, a script is written and you leave with a “Hail
fellow, well met; good-bye” wave and smile, and all this time I am
trying to decide whether the dog has a sore leg or distemper.

After lunch you make off to read a few tests. You are greeted
by George. You wonder what he is going to do with the rope, but
you soon learn. The yards wouldn’t hold a tree so you watch hope­
fully while George lassoos the bull. You creep up to his tail with
soothing words and assurances of kind intents, you grab the tail and
the bull makes off. You feel the caudal fold with your body horizon­
tally in mid air like the man on the trapeze. On the way back you
castrate a horse or remove a dead foetus.

It is not long before you realise that private practice means
speed and efficiency. Certain points must be at your finger tips—
the quick and correct diagnosis, and ever-ready prescription. What
a relief it is when the vet. tells you that it takes a bit of experience
before you become proficient!

Newcastle abattoirs has the advantage of not working on the
chain system, so you have time to look about. It is not long before
you have a fair idea where to find the glands; it is not long before
you realise how little you know about the use of the meat inspector’s
knife; it is not long before you have cut your finger. In a fortnight
you get a pretty good idea of what goes on at an abattoir and you
think you can examine a carcase fairly well. You realise, too, that
you are getting only a cross section of meat inspecting and miss
many of the less common conditions which lead to condemnation.

At lunch there is invariably a debate-argument amongst the
inspectors. Quite often you are asked to express an opinion and
you will be amazed by the fact that you are consulted as something
of an expert. The inevitable “system” comes in for a lot of criticism;
the virtues of apples are discussed; music and Shakespeare are not
out of it; sex and science are put through their paces. Then the
whistle blows and you go back to look at more meat.

The value of the extramural term cannot be overestimated. It
is like a ray of light penetrating into the gloom of endless examina-
tions. It reacts with the airy dreams of the undergraduate and precipitates the realities of veterinary practice and you come back with some idea of what your ultimate goal should be.

But you don't feel much like "coming back" to a concentrated course of swot, after almost eight months absence from the school. Perhaps, you begin to think, the extramural term should be the last terms of the course.

"Just Back"—vth Year.

**VET. SCIENCE SPORTS CLUB.**

*Office-Bearers, 1943.*

*Patron:* Professor J. D. Stewart.

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*Vice-Presidents:* Prof. I. Clunies Ross, Dr. R. M. C. Gunn, Dr. H. R. Carne, Mr. Webb, Mr. Parry, Mr. Whitehouse, Mr. Newcomb, Mr. Geddes.

*Hon. Secretary:* Mr. C. H. G. Irvine.

*Hon. Treasurer:* Mr. K. Baker.


*Delegate to the Inter-Faculty Sports Committee:* Mr. J. W. West.

**Sub-Committees**

*Swimming:* Messrs. Bentley, Titcher, Crogan.


*Rowing:* Messrs. Titcher, Eckel, Fearn.

*Golf:* Messrs. J. M. Irvine, Bentley, Titcher.

*Tennis:* Messrs. Thornbury, Osborne, McNiven.

*Cricket:* Messrs. D. Thompson, Bennett, McNiven.

*Football:* Messrs. Woodbridge, West, Skillman.

*Basketball:* Messrs. Thornbury, McNiven, Freeman.

**General**

Due to the speeding up of the course, during this year Vets had even less time for Inter-Faculty sport. As a result, our teams were not as prominent as usual. However, it is to be hoped that next year will see a return to the former high standard set by the Vet. School in the past.

**Athletics**

Cliff and Jack Irvine were the only nominations for the Inter-Faculty athletics, but the meeting was postponed until fourth term owing to the weather and track conditions. Unfortunately, only first year is present during this term, so Vet. will not be strongly represented.

**Football**

Although the Vet. team appeared to be as strong as ever this year, they met with a lot of bad luck in the running, and for the first time for many years, failed to line up for the final.

In the first round, we met Agriculture, and scored a runaway victory. However, in the second round, we ran up against the ultimate winners, Science, and were on the wrong leg from the barrier rise to be beaten 15-3.
Dentistry were our opponents in the third heat, and a very exciting tussle resulted. Although individually Dentistry were superior, Vets. played well together and were only beaten by a narrow margin in a photo finish.

Our next game was against Engineering. A cloud burst in the morning and continued to leak all afternoon, making track conditions very heavy. A good time was had by all but the players (who performed some amazing manoeuvres on their distal ends) and the referee (who lost the pea out of his whistle). Engineering won 6-3. As a result, we failed to qualify for the final.

Our outstanding footballer this year was Jimmy West, who was a regular member of the first XV., giving some excellent displays in nearly every position in the backs. He was not available for all the Inter-Faculty games, however, and Dick Thornbury was the mainstay of the backs. Bill Crogan and "Stonker" Morison were frequently observed administering a little stouch, while Bruce King and Dar Rennell were the vertebral column of the forwards.

We also sent a team up to Hawkesbury College, but due to injuries, finished the game with only thirteen men. Hawkesbury always had the better of us, and won decisively.

Swimming

Our star performer at the Inter-Faculty swimming sports was Bob Titcher, who gave a smooth display to win the diving championship. Our other representatives were Woodbridge, West, Bentley, C. Irvine, Garnett. The Vet. stable also saddled up Petherbridge in the Varsity champs. for a third placing.

Boxing

The University usually looks to Vet. to provide a strong team for boxing, but this year there was a lamentable lack of enthusiasm, and we failed to field a single representative.

Basket Ball.

The first three rounds against Arts, Agriculture and Engineering were successful, even if a couple were forfeits. Then after many weeks of rain and unsuitable grounds, we drew with Science as a terrific thunderstorm broke over-head.

Cricket

Inter-Faculty cricket was postponed until fourth term, and as only first year will be present, we will have difficulty in fielding a team.

A.E.

The wretched assistant editor has made a confession—he spent the evening out and has been unhappy since:

"I stole a kiss the other night,
My conscience hurt, alack!
I think I'll have to go to-night,
And give the darn thing back."

(The Editor declines to accept responsibility for the A.E.'s idiosyncrasies and foolish intentions—he believes that when you steal a thing you should let it linger longer).
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