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The Journal of the Sydney University
Veterinary Society

CENTAUR

1955

Editor:
R. B. MARSHALL

Assistant Editors:
R. BORLAND  V. J. GREEN  I. K. HOTSON

NUMBER SEVENTEEN
ACKNOWLEDGMENT

We extend our thanks to all those members of the staff who gave their opinions and assistance to some of our problems.

To the students who took time off to make their contribution to this magazine, goes our gratitude.

Once again we received with pleasure a copy of the Queensland University Veterinary Society Journal "Apsyrtus".

In typing all the manuscripts Mrs. Arthurson and Miss Taylor did a grand job; we extend our sincere thanks.
It is felt that in previous years several topics, although very important, have been "well voiced" as a result of the Editorials written in "Centaur". That shows they have been highly successful and worthwhile, even if stimulating discussion is all they have done.

This year we, the Editors, propose to point out to the reader of "Centaur" some of the interesting features contained in this magazine.

Few students will fail to realise the value both direct and indirect which the Veterinary School has gained from Dr. G. H. Hart's visit to our Faculty this year. He has passed on to many students some of his tremendous knowledge, gained by years of very active work in the Animal Husbandry and Veterinary field. Much sound advice, which none of us can afford to ignore, is contained in Dr. Hart's contribution "The Broad Field of Veterinary Medicine". We can all benefit greatly by considering these words of wisdom given us by a man with many years' experience in the career problems of students.

Stimulating a new train of thought is Professor Carne's article on the proposed new Common Room. This gives some "new" and practical ideas on how to assist that much desired "broadening of a student's outlook." Considerable evidence is found in this article of the great interest Professor Carne has taken in student facilities overseas, with a view to improving those in the University of Sydney.

Another feature which will have wide interest is "A Trip to India and Highlights" written by Keith Gudsell, who graduated from this University last year. We were very pleased to receive this account of Keith's Trip, as it shows the interest the Veterinary graduates from Sydney have in this Faculty. The article may strengthen in some of you (as it certainly did in us) the desire to travel which entails the enjoyment of meeting new people and seeing new places.

There are still many activities pursued today which can well do with a more scientific approach - perhaps the training of race-horses is one of these, at least the ideas put forward in "Training the Standardbred Horse" should be critically considered. This contribution will also prove instructive to those of us who have little knowledge as to how race-horses are actually trained.

Money, an ever-present and necessary evil, drives many of us into unusual jobs just for the sake of a large weekly cheque. Perhaps this is being a bit too mercenary, as often the experience to be gained is considered in some measure. The account of cane cutting seems to give good warning to those who are after some comparatively "easy money."

When reading the facts about the two new farms acquired by the Faculty of Veterinary Science, we must stop to consider the full import of these new acquisitions to the Australian livestock industry. It will be some years, no doubt, before their full value can be gauged. There is no doubt, however, that this value will far exceed the amount so kindly donated by Boards and Companies which have the interests of the livestock industry of Australia at heart.

Also of major importance to Australian primary production is the establishment of a Chair of Animal Husbandry which will serve both the Faculties of Veterinary Science and Agriculture. Your attention is drawn to the experience and qualifications of the first Professor to fill this Chair. As a graduate in Agriculture from an Australian University, Professor T. J. Robinson will naturally have a very keen interest in the future of Animal Husbandry in this country.

Problems which affect the livestock industry of Australia either directly or indirectly should always interest us. The work being done in Tasmania to combat that worrisome pest, the rabbit, makes both interesting and instructive reading.

Finally, may we express our sincere hope that all who read this year's edition will get as much enjoyment from it as we have from preparing the magazine.
SYDNEY UNIVERSITY VETERINARY SOCIETY
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PRESIDENT'S LETTER TO MEMBERS

Writing this letter does not give me much pleasure; indeed it has been a source of constant worry to me during the past few weeks. However, I do consider it a great honor to have been chosen as your President so perhaps therein lies some consolation.

The question foremost in my mind is should I try to appear a learned and educated person, wise in the ways of men and write about some feature of University education, or should I ramble on and write whatever comes into my head?

Without trying to appear too arrogant I shall try to write a little of each.

Let us ask ourselves what we should aim at for a complete University education. Does it mean solely the obtaining of a degree at the expense of all other aspects? I think not. Certainly the degree is the most important — why
else do we come to the University? But with our University years numbering comparatively so few I think we should strive for more.

Here is a grand opportunity for so many of us coming from other States and indeed from other countries to meet and discuss with people different ideas and outlooks on life. Looking at the average student in our Faculty I find that we are a very isolated mob who do not take a very active interest in University affairs nor do we meet many people from other faculties. I may even go further and point out that in each year there is separation further into groups between each of which is a barrier. Veterinary Science fills our lives from beginning to end of each term. This it not a very happy state of affairs so we must look for a reason. It may be that our curriculum is too full. It may be due to the isolation of the Veterinary School from the rest of the University or it may be that students entering upon second year are overawed by thoughts of a fantastically low pass rate. Whatever the reason — I will not go so far as to suggest that one of the above factors is responsible, more probably a combination of these plus others — I do think that students could do more to help themselves obtain a more general education. Those who are fortunate enough to be able to live in a Residential College, do, in my opinion, obtain something approaching the optimum in a broad education.

Therefore to all students in the junior years particularly, to those who are just starting and happen to read this, may I offer this suggestion. Make full use of the opportunities presented by your Society. The Executive, to which I offer my special thanks, does an enormous amount of work in arranging social functions and general meetings — all designed to help the student to meet other people on informal terms. Our staff attend these functions and enjoy meeting students to talk about things other than "shop". Attendances at this year's functions have been rather disappointing particularly from our junior years. The excuse too much work or not enough money. Why is it then that from IVth year (who probably have less money and more work) we have nearly 100 per cent. attendance? I think perhaps it is due to the fact that people are getting to know each other better — the barriers are being broken down and our year is not divided into cliques. To all junior years I give this advise then — get to know each other well and don't confine yourselves to a very small group. Strive to make our Faculty one big family and then I think you will be able to approach your studies in a happy state of mind. On graduation be able to say that you really enjoyed your years at the University; be able to look back upon them with pride and not as I heard a student say after completing 2nd year, "Well, that was the worst eight months I ever spent!"

We were very pleased to hear this year that the N.S.W. division of A.V.A. has decided to establish a Memorial in the Veterinary School to the late Mr. F. H. Whitehouse. Those who knew him are particularly pleased that the form of the Memorial is to be the furnishing of the proposed new Common Room. It is fitting that a lasting memorial to this great man, whose prime concern was always for the student, should be something of use to the students.

The Executive decided to donate the whole of the proceeds of the Annual Ball to this Fund and we were very proud to hand over some £70. We were honoured to welcome the Whitehouse family at our Ball.

Finally I wish to express my very sincere thanks to the Executive and to all those that have made a difficult task much easier. Especially my thanks go to the Secretary and Treasurer whose energy seemed never ending. For the guidance given to me by the Staff on what was at times rather an erratic path I am very grateful. To Mrs. Arthurson and Miss Taylor for handling all correspondence I say "thank you".

I wish you all good luck in the forthcoming trials — may you all pass!

Yours sincerely,
R. L. WILLSON,
President, S.U.V.S.

PRIZES, 1954

Gurner and Ebsworth Prize: Ian Alexander McWatters.
Farr Memorial Prize for Equitation: Henry Mervyn Graham Williamson.
Baker and Ridley Memorial Prize: John Gordon Digby.
William Cooper and Nephews Prize for Parasitology: Alan David Donald.
S. T. D. Symons Prize for Clinical Subjects: Dudley Errol Johnston.
J. D. Stewart Essay Prize: Hans Rudolf Lindner.
The death of Professor J. D. Stewart on 17th September in his 87th year after a short illness has brought to a close the life of one of the outstanding figures in the history of veterinary science in Australia.

He came from a veterinary family, his father being one of the best known practitioners in N.S.W. After graduating at the Royal (Dick) Veterinary College in Edinburgh, he returned to Sydney and entered the veterinary service of the State, eventually becoming the most outstanding Chief Inspector of Stock for a decade.

In 1909, he became the first occupant of the Chair of Veterinary Science within the University of Sydney. He was responsible for planning, equipping and staffing the Veterinary School which initially was a department of the Faculty of Science. Professor Stewart had the satisfaction of seeing the School grow to full Faculty status and he was elected the first Dean, holding this position till his retirement in 1939.

Over the thirty years that he guided the destinies of the School, he exercised a great personal influence on the students passing through. By his example, he showed that, in addition to scientific knowledge and technical skill, the veterinarian should have a high sense of service, responsibility and capacity for leadership.

It has been truly said that no influence on members of the veterinary profession in this country has been greater. He was an outstanding leader of the profession, and its welfare and progress were his constant interest. He played a major part in establishing our professional associations, the first of which was the Veterinary Association of N.S.W. and later, the Australian Veterinary Association.

One of Professor Stewart's major contributions to the development of the profession was his work to bring about the regulation of the practice of veterinary science in this State which led to the passage of the Veterinary Surgeons' Act in 1923.

In addition to his activities within the Univer-
sity and the veterinary profession generally, he made important contributions in other directions in public life. During the first World War, he was appointed Director of Veterinary Services of the Commonwealth Military Forces; he was a member of the Executive Committee of the Advisory Council of Science and Industry, the precursor of C.S.I.R. O. Another life-long interest was the Royal Agricultural Society which bestowed on him the rare honour of life membership.

Professor Stewart was always a keen horseman and had a long interest and association with the Australian Jockey Club, not only holding the position of Honorary Veterinary Surgeon to that organisation, but taking a special interest in maintaining high standards.

Professor Stewart had many honours bestowed upon him. Amongst others, when he retired in 1939, he was appointed Professor Emeritus by the Senate of the University; the Royal College of Veterinary Surgeons of Great Britain made him first an honorary Fellow and later awarded him its highest honour, namely, Honorary Associate of the Royal College of Veterinary Surgeons. He was elected to the Presidency of the N.S.W. Veterinary Association and the Australian Veterinary Association, and the A.V.A. conferred its highest honour on him by creating him the First Fellow of the Australian Veterinary Association. Subsequently, in 1958, he was one of the recipients of the first award of the Gilruth Prize for meritorious service to the veterinary profession.

Professor Stewart was very good company. Those who knew him in the earlier days of the Veterinary School will recall visits to his home, excursions to the country, etc., when his zest for life, his good humour and his interest in both young and old made these occasions memorable.

His wide and active interest in others took many forms, including the establishment of schools for jockeys and the Corps of Commissionaires for ex-servicemen. Many will recall his wise counsel, personal interest and encouragement.

It is not given to many to live such a long and useful life, nor to see the fruition of so many of one's hopes and plans.

**OBITUARY**

GEORGE ALFRED DANDY

Everybody in the Veterinary School knew George. The students liked him and those who, like George, were getting on in years admired him.

George, a former school teacher from New Zealand, had given away his classroom and pupils to study Veterinary Science. He commenced the course at Victoria University College, Wellington, New Zealand, in 1946, and in 1948 entered Second Year at Sydney University. With great tenacity and endurance, George pursued his aim to become a veterinarian only to be killed on a motorcycle prior to his completion of the course.

During the years of his studies he often enlightened us with his philosophies on life, also to be remembered was his continuous and outstanding kindness to others and to animals.

The best testimonial a man could get was given to George at his funeral, where the boys who were in the struggle of 1939-45 were heard to say “I wish we could have a friend like George next to us if those times of endurance and trials should come again.”
The Veterinary School has had the privilege and pleasure of welcoming Professor G. H. Hart as a visiting Fulbright Professor during 1955.

Professor Hart is one of the most distinguished figures in Veterinary Science in the U.S.A. He was nurtured in a veterinary atmosphere, being the son of a veterinary practitioner in Philadelphia. He received his initial veterinary degree in the University of Pennsylvania and subsequently graduated in Medicine at the George Washington University.

Dr. Hart was a member of the veterinary research staff of the U.S.A. Bureau of Animal Industry and soon made a reputation as a man of outstanding ability. He was stationed in California for a number of years with a research team of the Federal Bureau, and it was from here that he was invited to become the head of the Department of Animal Husbandry at Davis, another section of the very extensive University of California.

During his term of office in this position which lasted twenty years, Dr. Hart built up the scientific foundations of this institute by the establishment of strong sections of physiology, biochemistry and genetics, and under his guidance the California School of Animal Husbandry not only became one of the foremost in the U.S.A., but also gained an international reputation. Dr. Hart's own researches, especially in animal nutrition, contributed very substantially to this.

Another tribute to Dr. Hart's wisdom and administrative ability came just prior to retirement, when he was asked to undertake the responsibility of establishing the new School of Veterinary Medicine which it had been decided to build also at Davis. Some idea of the magnitude of this task can be gained from the fact that approximately £3,500,000 was spent in buildings and equipment alone. This new veterinary school is most impressive to the Australian veterinarian who has been accustomed to temporary buildings and rather overcrowded conditions.

During his year in Australia, Dr. Hart has given a series of lectures at the Veterinary School during first term, covering a wide range of topics which included the Zoonoses, foot and mouth disease, blue tongue, vitamin A deficiency, etc.

Dr. Hart is particularly stimulating and refreshing when speaking on the general role of the veterinarian in the community, also in his contributions to many problems such as those of wild life, which lie beyond the confines of traditional veterinary activities.

Dr. Hart has travelled widely in Australia, visiting most of the states and spending a considerable amount of time in country areas seeing something of the conditions of animal husbandry in this continent. He proposes to visit New Zealand and then return to the U.S.A. towards the end of the year.

All who have had the privilege of meeting Dr. Hart have been impressed, not only with his breadth of interest and outlook, but with his zest, good humour and amiability. His visit to Australia has been stimulating and much appreciated.

THE BROAD FIELD OF VETERINARY MEDICINE

By George H. Hart

Selecting a Career

To-day more and more young people of above average ability are looking toward veterinary medicine as a career. This occurs from many causes among which might be mentioned — love of animals, service to the public welfare, interest in broad biological research, following in the footsteps of a successful parent, leaning for a life in rural communities and outdoor work, getting into a profession that is not overcrowded and developing increased prestige and other reasons.

Adolescents are usually helped along scholastic-
or interesting courses are taken to the later detriment of the student going on to higher education. The science courses are essential and become most interesting to the student who will apply himself. A great asset is to learn early to budget one’s time. Then the adolescent can live the abundant life with athletics, music, broad reading and scholarly work. Also learn to concentrate. Many a would-be student wastes three hours apparently studying, but really thinking of fishing, swimming, football or some other pleasant pastime, when one hour of concentrated effort would have resulted much more profitably in mastering homework under study.

Admission to a Veterinary School

It is a problem for the average person making application for entrance to a veterinary school in some parts of the world to be accepted. This is because the total number of applicants exceeds by several times the number that can be admitted. Remember the old saying “there is always room at the top”. Applicants with high scholastic records can most always become accepted. In the selection of students under these conditions personal interviews help to obtain an appraisal of personality, continuity of purpose, physical fitness, etc., but high scholastic record in the pre-veterinary courses is still the best index of a person’s ability to go through the veterinary course and get the most out of it.

Finally you are in the freshman class of a veterinary school. This is no time to become too well satisfied with yourself because some of your friends did not get in and therefore you feel superior. This attitude may make your sojourn there quite temporary. You will take the beginning courses in the school to build on your pre-veterinary training. The veterinary field of work will broaden before you as you proceed. It is an exacting curriculum with much subject matter but you have now learned to budget your time and concentrate your thinking.

With these assets you will proceed through the school but you should do more than this. Just as in your high school days you made a decision to study veterinary medicine, now while in the professional school you must decide the field of activity within the profession in which you are most interested. Hunt for that which is work for the casually interested is play to you and you want to do more than is required. Under these conditions over time passes unnoticed, accomplishment is greater and this becomes your speciality and as your life develops in it more and more difficult problems may be mastered and you become a leader.

Specializing Within the Profession

The student should make his decision along the following lines and the earlier in the course it is made the better. Do I want to go into private practice? If so shall I strive to be in pet animal work, or in larger animal work? If the latter, would I rather work with light horses, dairy cattle, beef cattle, sheep or pigs and now coming along, the relatively new field of poultry practice.

They are all good but their mention or thought regarding them stimulates different reactions in the individual subjectively.

Many persons point to veterinary medicine in their youth for one particular reason and change over to something entirely different as the course and the years broaden their perspective of the entire field. This is so big that no one human mind and pair of hands can master all phases of it.

Do I want to enter investigational work and become a researcher and teacher? It is generally considered that teaching is more virile when done by a researcher delving in the borderland of knowledge. Many researchers make progress faster when not burdened with too much teaching or none at all. There are places for all desires and the young man must make his own decisions and strive to get where he may do that which most interests him. Veterinary Medicine is all advanced work and the Doctorate in Veterinary Medicine is generally considered to be a higher degree. In the research field the present day veterinary graduate needs further advanced training and should aim for the Ph. D. or Dr. of Sc. degree. Generally for such work the person needs financial assistance but this is available for those who have demonstrated their ability, know what they want and where to get it. The great graduate centres of the world are always looking for capable men and have means to support them.

You have some world famous places right here in Australia and New Zealand and I would mention as examples the C.S.I.R.O. Division of Biochemistry and General Nutrition at Adelaide and the Ruakura Experiment Station at Hamilton, New Zealand. Veterinary Medicine lends itself well to biological research and large domestic animals are as expendible as small laboratory animals when the stakes are high enough and species variation furnish important stepping stones to the advancement of knowledge.

Do I want to be in public service? This is a broad field in itself covering a great variety of activities from confined meat and food inspection
with quite regular hours to field work in disease control with irregular hours and much travel. Also should be mentioned military service in parts of the world where the armed forces maintain a veterinary corps. Employment may be by national government, state government or smaller political subdivisions. It is a work of service and great careers have been made in it.

I have recently been greatly impressed with its workings in Tasmania where practically all the veterinarians are in this work and are doing a most commendable job for the state.

Do you think you would be interested in animal husbandry? This is another broad field with many specialists outside the veterinary profession. The veterinary training is well adapted for service in this field particularly in operation of properties where management is the main task. In its specialties of animal nutrition, genetics and physiology of reproduction further training beyond the veterinary degree is desirable particularly in research. This general field is usually selected by men born and raised in the livestock industry. They enter veterinary training to support their livestock managerial experience and desire to stay with it.

Lastly I would quote the last sentence in a pamphlet entitled "The Veterinary Profession — Its Requirements and Opportunities," issued under the auspices of the Association of State and Provincial Veterinary Colleges of North America.

"The lessening of suffering in our domesticated animals, the prevention of diseases of animals communicable to man and the saving of millions of dollars worth of livestock from disease are tasks of sufficient importance to attract those who wish to render a valuable service to humanity, which is the true purpose of all professions."

THE NEW CHAIR IN ANIMAL HUSBANDRY

In the University of Sydney, Animal Husbandry was taught only by part-time Staff until 1928, when the Pastures Protection Board Lectureship in Zootechny was established. Then in 1940 the Garland Lectureship in Animal Husbandry was established and this has continued to the present time.

Some two years ago the Senate of the University of Sydney appointed a Committee to consider the teaching of Animal Husbandry in the Faculties of Veterinary Science and Agricultural Science and also the proposed gift of two farms at Cobbitty which the Commonwealth Meat, Dairy and Wool Boards had offered to the University of Sydney. As a result of the committee's recommendations, the Senate decided to establish a Chair in Animal Husbandry, to be within the Faculties of Veterinary Science and Agriculture.

Dr. Terence James Robinson has been appointed as the first occupant of the Chair. Professor Robinson studied Agricultural Science in the University of Western Australia, graduating B. Sc.(Agric.) in 1940. He enlisted in the Royal Australian Navy, serving as a sub-lieutenant and lieutenant from 1941-1945. After demobilization he returned to Western Australia and was awarded M.Sc.(Agric.) in 1947. He then proceeded to Cambridge with a Hackett Studentship and graduated Ph.D.(Cantab.) in 1949, studying under Dr. John Hammond at Downing College and the School of Agriculture. He spent some years in the Department of Agriculture in Western Australia and in 1950 was Research Associate in Animal Husbandry in the University of California at Davis. The following year he was appointed Senior Lecturer in the Physiology of Domestic Animals at the School of Agriculture, University of Melbourne.

Professor Robinson is to take up his duties at the University of Sydney in February, 1956. His objective will be to provide courses in Animal Husbandry to satisfy the needs of both the Faculty of Veterinary Science and the Faculty of Agriculture, and to run concurrently as many of them as possible. In order that his general aim can be facilitated, a Board of Studies in Animal Husbandry has been instituted.
THE TWO NEW FARMS AT COBBITTY

Following the generous action of three Commonwealth Boards, viz., the Interdepartmental Committee on Wool Research, the Australian Meat Board, and the Australian Dairy Produce board, each of whom offered a grant of £50,000, the University has bought two new farms, totalling 770 acres, in the Cobbitty district. On them will be erected buildings costing £150,000, including residential, teaching, research, and administrative buildings and a veterinary hospital. Besides affecting the teaching of animal husbandry for the whole Commonwealth, the scheme could transform rural economics within the Country of Cumberland.

In addition to the grants from the three Commonwealth Boards, the Rural Bank of New South Wales will provide £10,000, the Commonwealth Bank of Australia £7,500, Grazcos Co-operative Ltd. £2,000, the Bank of New South Wales £2,000, Imperial Chemical Industries of Australia and New Zealand £2,500, and William Cooper and Nephews (Aust.) Pty. Ltd., £500.

The two farms which have been bought are situated in one of the best river-flat areas in the Camden district. At the present time the farms are being supervised by the Senior Lecturer in Animal Husbandry, Mr. H. J. Geddes, simply as production units.

The University hopes that the William McIlrath Fellow, who is at present Dr. M. C. Franklin, will have his headquarters at the new farms, where he will carry out research work on animal nutrition.

In the meanwhile the McGarvie Smith Animal Husbandry Farm at Badgery's Creek is being retained, not only for the present teaching of Animal Husbandry and Advanced Clinical Studies, but also for water harvesting projects, being undertaken there by Mr. H. J. Geddes.

The plans to develop the two new farms at Cobbitty are proceeding: an architect has been appointed to prepare long range schemes for buildings, to which the Building and Grounds Committee of the University, has given its general approval. Steps are being taken, under the University's new resumption powers, to acquire a separate site for a new University Clinic in a position where its activities cannot interfere with the normal functioning of the institutions to be erected on "Mayfarm" and "Corstorphine".

PROPOSAL TO ESTABLISH STUDENT AND STAFF COMMON ROOMS IN THE VETERINARY SCHOOL

Throughout the world, the number of students seeking entry to universities is rising rapidly, and there is general agreement that all who are capable of profiting by an academic training should be encouraged to enter a university. In many countries including our own, this policy has been implemented by the provision of a liberal number of university scholarships.

The problems arising from increasing numbers of students are numerous and complex. In the first place, there is an optimum size for most human organizations, including universities, and when this is exceeded, something is lost. It is probable that the ideal size for a university is in the vicinity of 4,000—5,000 undergraduates. The cost of establishing new universities, however, is so great that it is not practicable at present to start new ones when the optimum figure of existing ones is passed.

Expansion of staff, accommodation and equipment have naturally to be given a high priority in apportioning available finance. Universities, however, and particularly the ancient ones of Great Britain, have not only carried on their traditional functions of handing on the torch of knowledge and winning new knowledge by research, but have also offered to their students opportunities of acquiring those more intangible qualities of the truly educated person which include a sense of values, a taste for the fine things of life and a breadth of interests and understanding of things and people. They have also played an important part in preserving habits of civilized intercourse and the ideas of knowledge for its own sake and education for leisure.

As has been recently pointed out by the principal of one of the Oxford Colleges, such ideas are liable to come under pressure, both from the demands of the state and from those of the individual who looks upon a university as being purely a means of training for a career. A university, in a sense, is always vocational; but something more than the vocational idea is an essential element in the university ideal. A great part of this facet of university education is acquired by rubbing shoulders under congenial
conditions with other people, both young and older, of wide range of interests and disciplines.

Residence in one of the older universities brings home very forcibly the serious contraction of opportunities for personal contact and informal discussion that has occurred in the younger universities including our own. The factors that have mainly been responsible for this are, firstly, the preponderance of non-resident students and staff, and secondly, because of the urgent demands for accommodation generally, a high priority has had to be given to expansion for teaching, so that facilities providing for social intercourse have not been able to keep pace with the demand.

The part played by a central organization like the Union at Sydney University must always be of special importance. While the University was relatively small, the Union filled reasonably well its role of providing a common meeting ground for students and staff of all faculties. As the numbers have increased, however, its facilities have become progressively overtaxed, with the result that increasing numbers of staff and students stay in their own departments.

There will always be a need for a central organization, especially for major social gatherings, but a bigger and better Union (which must come) is not the complete answer to the problem. Some of the most valuable contacts and discussions are those which can only take place in the more intimate atmosphere of smaller groups.

One of the greatest needs of the modern, non-residential university is to expand all those facilities which provide opportunities for personal contacts and informal discussion in an atmosphere that is not only intimate but has the special charms of aesthetic attractiveness. A valuable step in this direction would be to supplement the central Union by smaller, decentralised common rooms whose size and convenient location would encourage a more intimate atmosphere and greater use. Such smaller common rooms could be developed as branches of the Union. One danger of such an arrangement, however, would be that, if the initial ones were as attractive as they should be and were open to all students, there would be grave danger of overcrowding which would defeat one of the main objectives.

An alternative proposal is that of establishing common rooms in appropriate Schools in which each School could take pride, having a sense of ownership and giving it a special character of its own. It is believed that it would be possible to incorporate in such supplementary common rooms, some of the best features of the common rooms in the colleges of Oxford and Cambridge. One of the most important of these is bringing together staff and students of different disciplines, but at the same time keeping the unit small enough so that it has an atmosphere of intimacy that is lost in a large unit. This could be done by extending an invitation to various members of the student body (e.g., the members of the executive committees of various societies) and staff to accept the privileges of membership of a particular common room for a limited period, say twelve months, following which, other groups might be invited in turn. This follows the general practice of English Colleges of extending “dining rights” to others outside the College.

It is hoped that the Veterinary School may pioneer such a development. A substantial gift has been made for this purpose by an anonymous donor, and the University Senate has appointed a well known private architect to draw up draft plans for student and staff common rooms.

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**PORTRAIT OF A STUDENT**

In the anatomy room
Ever pregnant with gloom,
Where horses hang limp on the hooks
Midst the formalin fumes,
In the shadow of doom,
Is the student, enslaved by his books.

His dark clammy hair
And rheumaticky stare,
The tuberculous look on his face
Will show you that there
'Neath the chill of despair,
He rows in this pitiless race.

He coughs yet again
And is racked by the pain.
In this world of dead meat and decay
With drug muddled brain,
He tries hard to gain
A reprieve till the end of the day.

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Professor: A fool can ask more than the wisest man can answer!
Student: That’s why so many of us fail in our exams!

“How did you like Venice?”
“Didn’t stop — the place was flooded.”
Ladies and Gentlemen,

It is with pleasure that I submit the forty third Annual Report of the Sydney University Veterinary Society.

The decline in student numbers has continued and the 1955 total of 170 is 17 below the 1954 total. The Society membership is 167.

There have been fewer lunch time addresses this year than usual and though the standard of these was excellent the attendances were poor.

The finances of the Society are in a healthy position and consequently the Society has given some thought to the disposal of these funds. Many suggestions have been put forward with a view to spending a portion of the money but many of these have not been readily workable. However the decision has been made to purchase a selection of the more recent (and expensive) text books for the Veterinary School Library. These books will soon be available. We hope that this will be of some benefit to the present students as they certainly shall benefit the students who will be going through the course in the next few years.

This year the Society donated the proceeds of their Annual Ball to the Whitehouse Memorial Fund.

The Executive takes this opportunity to express its gratitude to the Dinner and Dance Committees for the success of the 1955 Society functions.

Our Veterinary Informal was held at the Union Refectory and although the attendance was not as high as in previous years the gay atmosphere typical of the occasion once more prevailed.

An attendance of 115 members and guests at the Annual Dinner, which was held in Cahill’s restaurant was most gratifying. The Dinner Committee deserves full credit for the outstanding success of the Dinner. Once again the obvious social benefits of the evening made financial losses seem insignificant.

The Dance Committee spared no effort in the organisation of the Annual Ball held in honour of the late Mr. F. Whitehouse, B. V. Sc. The enthusiastic advertising of the Ball by this efficient team and their Publicity officers resulted in an excellent attendance which included a large number of staff and graduates.

Miss Russell Mogensen deserves special mention, her tireless work setting an example to the Society.

The Sporting activities of the Faculty were well supported as usual but as they are dealt with elsewhere I shall pass over them. However, I would like to congratulate all the players on their enthusiasm and for so contributing to Faculty spirit.

On behalf of the Society and Executive I wish to thank all the members of the staff for their assistance and guidance throughout the year. Also Mrs. Arthurson and Miss Taylor for the time and trouble they have expended in typing out Society correspondence.

Finally I would like to offer my congratulations to those students who will accept office in the Society for the coming year.

J. G. Digby,
Honorary Secretary.

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S.R.C. REPORT

The appearance of a students’ Representative Council report in Centaur is a rare occurrence. We had one last year because we had an energetic and enterprising representative in David Irving, and we thank him for his term of office which was enthusiastically and successfully carried out.

The undergraduate population of our faculty, due to efforts of our Faculty Society (S.U.V.S.), is a very closely-knit independent and self-sufficient body. Consequently the S.R.C. is of little use to the Vet. undergraduate, but the rep. does fill the vet. rep’s. chair and he does vote and speak on matters of importance that occasionally arise. A representative contributes on the average five hours per week on S.R.C. work — this is the minimum time he can spend and so it is suggested that the vote and voice on the S.R.C. that your rep. has, be used a little more fully.

That the S.R.C. does nothing for the Faculty is a charge that is difficult to answer in face of what the Vet. Society does for its members. What the S.R.C. can do if it is asked, is a question more easily answered. It is a body through which Faculty Societies can speak to higher — ups; Vice-Chancellor, Senate, Dept. Heads, other faculties — and the S.R.C. sponsored enquiry into administrative, teaching, and social aspects of University life (at present in its embryonic stage) is an example of the work it does which can be of considerable importance to vet. students of future years.

If the S.R.C. does nothing for the Faculty it does do something for the representative in that he is made to realize that the undergraduates in other faculties have names and personalities and ideas, he discovers too the mistake of
thinking that the only thing that matters in the five or more years that we spend at the University Veterinary School is a knowledge of a horses entrails and how to fix them. Ours is a technical faculty in the midst of many academic groups — they certainly can learn much from us and we in turn can benefit from intellectual contact with them. It can not be satisfactorily done in the isolation of our own faculty society, but it can be done if we occasionally forget the fear of “competitive passes” and “what benefit will come from this lunch hour talk so far as my curricular work is concerned,” and perhaps make an effort to attend a lunch hour talk about something completely away from our chosen profession. This it not a criticism of the speakers, nor the organizers of the lunch hour talks that we have had this year; they have been excellent in the way they have been chosen so that we will not forget (as we sometimes do) our role in the community when we graduate and the scope and interest of the work we will have to do, but apart from one well attended address by a notable veterinary bacteriologist all have been of a veterinary nature and this does not help to correct the bias that our curriculum must give to our extra-university living.

Admittedly the S.R.C wastes a lot of time doing very little but it is sometimes interesting and often funny; may the Faculty encourage some of its members to nominate at the next S.R.C elections — the representative may then feel that his task is more worthwhile if he is a majority rep. with the interest of the faculty society behind him and not the dupe of extra-curricular apathy.

WOMEN’S NOTES

This year we welcome Robin, Margot, Judy and Helen to swell our depleting ranks; and at the other end of the scale, wish Sue, Barbie and Agnija all the best for their coming exams.

As far as sporting events are concerned, we have not been very successful, but Russ did manage to score one goal for us in the Hockey match against Agriculture. In the basketball we were again defeated by Agriculture.

Laurie and Russ are to be thanked for their work in helping to make both the Formal and the Informal such a success; and Bett for her work on the Float Committee.

The Women’s Room now looks a little more cheerful, as Manning House painted the stools for us, and provided us with a few other items conducive to comfort and some additions to our “cuppa tea” apparatus. —N.A.H.

DANCE COMMITTEE REPORT

The Informal Dance and the Ball were both held in the Union again. We endeavoured to hold both functions on Friday nights as attending lectures with a hangover is unprofitable and rather gruelling. Unfortunately both dances clashed with College ones. In spite of this only a slight loss was incurred on the Informal while a colossal profit was made in the Formal. We hired Ellwood Bowen and his boys again as they proved so popular last year.

The Formal Dance, the Whitehouse Memorial Ball, held on July 15th, was the most successful ball for years. The proceeds of the ball are to be donated to the Whitehouse Memorial Fund which will take the form of furnishings for the common room, if it is ever built. The success of the ball was mainly due to a vigorous advertising campaign which obtained an enthusiastic response from staff and other graduates.

The Refectory was transformed by fairy lights, balloons, gay streamers, masses of greenery. Colourful posters adorned the walls. Table decorations consisted of camellias and white horses, some of which were souvenired. If anyone has an uneasy conscience the horses can be returned to Dalgetys. The kid was borrowed from Anthony Horderns again.

The absence of Dr. and Mrs. Gunn from both our dances was regretted. Professor and Mrs. Carne graced the official table at the ball and Mrs. Whitehouse and Miss Jill Whitehouse were our guests.

The judges Messrs. Gordon and Webb chose Miss Lesley Blackeby champion female. She passed under an archway of bones to receive the sash. It is suggested the Zootechny Department should assist the judging as Conformation is in its province.

The formal dance belied its name being marked by the informality of the student-staff relationship. The kiwis as usual performed the inevitable haka. An attempt to dance by lantern light was frustrated by Mr. Baggie standing guard on the light switches. The highlight of the evening was an heroic performance of the can-can by the faculty women.

The last couple of years there seems to be a dearth of talent in the Faculty. Hilarious floor-shows have now become a rarity. Let us hope the junior years will rectify this.

The committee thanks those members of the staff and student body who assisted in the organisation of both dances. In particular we thank John Digby.

R.H.M., I.L., B.G., I.McW., R.G.
ANNUAL DINNER

The 1955 S.U.V.S. Annual Dinner was once again held at Cahill's restaurant. This year, the occasion was made quite memorable, by the Society's decision to utilize some of idle finances in providing a four-course meal (instead of the usual three courses) together with a first class wine list.

The catering and service at the dinner were excellent, and were thoroughly enjoyed (it seemed) by over 110 guests, including many staff notorieties.

We were fortunate in having a distinguished list of alter-dinner speakers, and after a toast to 'The Queen' which was given by Mr. R. L. Willson (the President), Dr. G. Hart, visiting American Fulbright Lecturer moved a toast to the University, which was responded to by the Chancellor; Dr. D. R. Stewart of the McMaster Laboratories then gave a pleasing address in which he discussed the social objectives to be aimed by the student, and the role of the Society in helping to attain these objectives. He concluded by proposing a toast to the Society, to which the President replied.

The toast to the Final Year students was proposed by Dr. R. M. C. Gunn, and the more junior society members joined with him in congratulating these students on arriving so close to the threshold of their career. Mr. T. Rowlands from fifth year, replied. The final toast (official toast, that is) was proposed to the Guests by Mr. T. D. Quinlivan, who delivered a very fine oration thanking the guests for their interest and attendance. The response to this toast was made by Mr. A. G. Potter (Chairman of the A.J.C.).

Having completed the more serious part of the evening's programme, the diners then relaxed, and an immediate transformation took place.

Sober sherry-sippers vanished, and in their stead stood students and staff together, each trying to outdo his neighbours and Mario Lanza (Ref. "Student Prince") in their academic consumption of liquor.

Mario also had plenty of competition in the vocal section, and before long it could be observed that most of the waitresses were suffering from acute ear-ache (not having been pre-fortified by the necessary medicine). From Cahill's the party adjourned to The Roundhouse, to find—no beer! Angry murmurings were perceived from one member of fourth year, and the dinner committee stood in fear, trembling and intense thirst, until they were finally saved by the arrival of a very adequate supply.

The rest of the evening was uneventful, apart from the near-abduction of one (female) House Surgeon by a second year party, and the amorous pleadings to the second House Surgeon by an inebriated group of fourth year students. Fortunately, both girls were able to think more clearly than their assailants and consequently eluded them.

Before long, the grog was gone, revellers dispersed, and another never-to-be-forgotten Annual Dinner had ended!

FLOAT COMMITTEE REPORT

On Tuesday, May 10th—Commemoration Day—some of the downtown populace were lucky enough to see the Veterinary Science Float—(there were some, even luckier, who didn't see it!). It consisted of an attempt to cast asides at visiting American Celebrities. There was a wet and bedraggled—but definitely vocal—Johnny Bray, Betty Mutton at the noisiest, Trumpeter Satchmoo Armstrong and last, and definitely not least, an inimitable Spike Bones and his City Chickens.

We were unfortunate in that as we were manoeuvring into position we were deluged by a rather heavy shower. This ruined our posters but although it dampened us it failed to dampen our spirits. In consequence we made the most of our trip downtown and thoroughly enjoyed ourselves.

This committee wishes to make mention of the help it received from various members of the Faculty.

However, it is felt that there are many members who "come along for the ride," clutter up the float and detract seriously from the theme. Future committees are advised to limit the number of people on the float—the limitation being confined to people helping most in the preparation.

Finally, we must again thank the Australian Sugar Carters Ltd. for a loan of one of their trucks. We appreciate this.

John Bryden
B. Christie
(Miss) Betty Glanville
N. G. Japp
Miss J. Magnus

Float Committee
SWIMMING

Swimming this year was rather wet. Owing to lack of faculty interest in this sport there were half a dozen from 1st year and only four from other years. It was raining most of the time and many people were frightened of getting wet. After Rod Kater had won so many points for us last year, we were very pleased to see that he arrived too late to do the same for Medicine this year. Our main talent from 1st year came in the form of Margot Archer who executed some beautiful bombs. Ron Wells came second in Freshers 55 yd. backstroke. Neil Harbison went in something and Lloyd Beeby came a place in something else. Only faculty point score was an effort of 2nd in 110 yards backstroke by Philip Ahrens. We should have done better in the relay with L. Beeby, R. Steel, P. Rees and P. Ahrens doing their best.

We expect more interest from all years next time to regain our swimming prestige.

N. B. A carnival is always a good idea for working up a thirst which is catered for after the exercise. Exercise for those who can't float can be gained by spectating. Judy Magnus was the chief exponent of this in 1955. A number of other people seemed to have got out of their depth.

ROWING

The rowing effort this year was divided into three stages. In the beginning was a month of inaction. This was valuable time but was completely wasted.

There followed a period of a week which was used by the rowing committee to find a rowing club willing to loan us an eight. Haberfield Rowing Club was tried and Kevin Webb supplied our needs.

The final period was a week and a day in extent and was a period of marked activity, beginning with picking and training a crew and culminating in the regatta on Easter Saturday.

As is easily imagined we were not as prepared as we might have been. We finished fourth in that race.

Three lessons can be drawn from this experience:—

1. Make preparations early,
2. Pick your crew early,

Due to the energy of the rowing committee (Mr. Christie), certain members of the faculty were more or less forced into a position of responsibility. However, a little enthusiasm soon held sway and eight members of the crew were picked from about 12 who offered. Of the eight who finally took part in the race, four of them claimed to have had previous rowing experience, but the other half of the crew showed little less skill by the time of the race. Most of the training was done in the dark but a couple of day time rows were arranged.

The crew that took the water on Easter Saturday was R. Marshal (1); R. Ryan (2); P. Rees (3); R. Elliot (4); J. Slack-Smith (5); A. Donald (6); D. Cordes (7); H. Pearce (stroke); R. Weaver cox.

Because of lack of training the crew could only row into fourth place, Engineering having won, with Medicine second and Agriculture third.

The moral of the event: Do not delay.

TENNIS

The 1955 championships, as yet, have not been completed, but with the semi-finals and finals only to be played we may yet decide a champion. The Men's Singles and Doubles were the only two events in which entries were received and the doubles are still a long way from completion.

The Committee consisted of J. Bryden, B. Goulden and M. Studdert.

An attempt was also made to initiate a Table Tennis Tournament — inquiries were made and the chief difficulty was the absence of somewhere to put a table. If such a place can be found in future years this sport should prove very popular.

It seems that some attempt should be made to finish the Tennis Championships in the first term or early second term, otherwise they are usually not finished at all owing to football interest in the second term and exam interest in the third term.

SHAGGY DOG STORY: A Peke on a leash kept hovering around a man's legs and the man kept drawing away from the animal. Finally the dog's owner said, "Don't be afraid, my dog won't bite you." — "Madam, I'm not afraid that your dog is going to bite me," said the man, "but as he kept shifting his leg, I was afraid he was going to kick me!"

The last in a maiden's prayer is "Ah Men."
The veterinary team had a good season. Pre-Faculty matches were played against John's, Andrew's and Paul's, all of which aided the selectors in selecting a representative side.

The annual match against Hawkesbury was not played as the Agriculture boys had a full season.

The Faculty competition started in the third week of Second Term and the team, especially in the forwards, displayed quite good form. The forwards went from strength to strength in subsequent matches and by the time the finals were played had developed into a formidable combination.

The backs did not improve at the same rate due partly to the number of changes that were made, and partly to the fact that both handling and passing left a little to be desired.

Our hardest matches were against Medicine and Engineering, whom we met in the semi-final and final respectively.

Best form was shown against Medicine, where supremacy in the forwards paved the way for a 9-3 victory. Dick Hopkirk's boots deserve special mention in this game.

The final was played against Engineering (the first time since 1952 that the Vet. team has reached the final), and the result was always in doubt. In a hard and fast game we bowed to the Engineers by 6-3.

The team next year should be equally strong and with a determined effort we should be able to take the final.

Results of other games:

- v. Pharmacy won 8-3
- v. Arts won 18-3
- v. Law won 8-0
- v. Engineering lost 0-3
- v. Architecture won by default.

Ian Ellis.
CENTAUR

BASKETBALL REPORT, 1955

The beginning of 2nd term saw eight confident basketballers turn out for their first competition game against Eng. End of term saw eight basketballers turn out for their last game against Agriculture, by this time not quite so confident.

In that fateful Eng. game Vet. was beaten 34 to 6. A good start! In that equally fateful Agriculture game, Vet. was beaten 62 to 10. An equally good finish! But don't get me wrong — we weren't ALWAYS beaten by such great margins. To keep the record straight, we actually won two games (Arts and Architecture both by default), to give us 5th place in the competition.

No, — wrong again! There were NOT five teams in the comp., but eight.

Personalities on the court were the two guy's from Connecticut, U.S.A., namely George Podgwaite and Lloyd Drager. The team was captained by Uni. Ist's player, Lloyd Beeby. Aggressive shoulders were lent by Jack O'Grady, Ash. Stevens, and Ron Wells, while Norm. Anderson and Graham Trevana scored some good baskets.

Several interesting points are worth raising, the first being that the entire team came from 1st and 2nd years only. The second point refers to the statistics of the games, i.e. points for, points against. In five games played, we scored 47 points, (usually a good team scores this amount by half time), and had 180 points chalked up against us. One certain "man mountain," (6ft. 8inches of it), from Agric. ALONE scored 46 points against us in ONE game.

In an early intra — faculty game, the "rest" overwhelmingly beat Rod Ryan's "Final" year team. The actual scores have been mislaid, but believe me, they were COMPLETELY crushed.

Needless to say, we didn't reach the semi's, but next year, with a lot of luck and a bit of fresher talent, who can tell? L. D. BEEBY

ATHLETICS

As is not generally known, Inter-Faculty Athletics is held in conjunction with the University Athletic Championships, late in Lent Term. This, from the Inter-Faculty point of view, is unfortunate, as Athletes compete as individuals with no thoughts of competing as representatives of their Faculty.

The Athletic Club, which runs the meeting, is not to blame, the fault lying within the Faculties. The abandonment of Inter-Faculty relays, several years ago, due to fields of one and two teams exemplifies the apathy concerning athletics as an Inter-Faculty competition.

This year the Championships were held on May 10th and 12th. Results:—

1. Medicine — 50 points,
2. Veterinary Science — 16 points,
3. Pharmacy — 10 points.

Veterinary Science had two competitors, both of whom scored points. Terry Rothwell won the broad jump and hop, step and jump, was runner up in four events, and won the Harvey Sutton Cup for the champion athlete. Victorian Peter Morriss ran third in the three miles.

Morriss is a very promising distance runner and has put up a number of good performances in winter cross country running. Rothwell, who is University Club captain, has won a blue in Athletics and also has represented N.S.W. at the Australian Championships.
This year was very successful and we ran third in the Inter-Faculty competition to Engineering and Arts. Several new players were found and real discovery was our goalie who had never played before but was quite at home in pads. For the first time we played against Fifth Year and though no decision was reached, the selectors were able to survey available talent. A number of players were recruited from the football team and played very well. Our last game was against Engineering, who later won the competition. The team was Hyllseth, Marshall, Ismail, Cotton, Wilkinson, Harvey, Murray, Bailey, Pearce, Leaning and Hard.

**AUSTRALIAN RULES NOTES**

Although the Faculty does not support an official Aussie Rules team of its own, Vets., as usual made up the strength of the University Club this year.

During the season, we were sorry to lose Geoff Davidson, Phelan Medallist of 1953 and captain of the team for three years, and his other fifth year colleague Spiker Rowlands. Geoff’s absence was seriously felt on the field, and our Inter Varsity reputation dwindled in Hobart when Spiker failed to appear.

Fourth Year contributed Dick Willson (who would have done much better had he debauched a little less), Ian (“Sol”) Hart our ever-accurate goal misser, and of course Mighty-Mouse Christie (enough said).

Peter Muecke, Charlie Watson, and Tim McManus were all stalwarts from third year, and completed their second successful season with the club. Charlie threw caution to the wind this year, in regards to both football and drinking.

Steve King and Barry Gilbo were both valuable men this season, and we look forward to even better from them next year.

In conclusion it must be recorded that we had a good season once again. The premiership was still denied us by a wide margin, but our team is gradually on the improve. Proof of this is by the fact that this year, two of our members, Ian Hart and Peter Muecke (Captain) were selected to play interstate football for N.S.W. Congratulations, Peter and Ian!

**GOLF NOTES**

This year the annual Vet. Golf Day was held at Bankstown Golf Club on the Tuesday of the Easter Vacation.

Attendance was down compared with last year, but those present had a good day.

Contrary to the attendance, scores were up compared with last year, thanks to the hazardous layout of the course.

Fred Wilkinson with a stroke round of 101, and a stableford score of 28, won both the gross and net events.

Comments — Too much rough, and much too much water!

Vet’s team of three (F. Wilkinson, T. McManus, R. Robinson) took part in the Inter-Faculty contest held at Oaklands Golf Club on Commem. Day. Their respective scores of 95, 95 (190); 103, 101 (204); 96, 101 (197) for a total of 591 failed to qualify for the matchplay semifinals.
MEMBERS OF STAFF OF THE VETERINARY SCHOOL,
UNIVERSITY OF SYDNEY, 1955
DEPARTMENT OF VETERINARY SCIENCE
Teaching Staff

Professor R. M. C. Gunn, D.V.Sc., B.Sc.Agri., F.R.C.V.S., B.Sc. (Edin.),
(Dean of the Faculty).
Mr. R. M. Webb, B.V.Sc., Senior Lecturer in Veterinary Anatomy.
Miss V. E. Osborne, B.V.Sc., Lecturer in Veterinary Anatomy.
Mr. C. S. Sapsford, B.V.Sc., Lecturer in Veterinary Anatomy.
Mr. L. H. Larsen, B.V.Sc., M.S. (Colorado), Lecturer in Veterinary Surgery,
- Obstetrics and Gynaecology.
Mr. A. K. Lascelles, B.V.Sc., Lecturer in Veterinary Surgery.
Mr. J. A. Springhall, B.V.Sc., Temporary Lecturer in Zootechny.
Dr. G. F. Finlay, B.V.Sc., Ph.D. (Cantab.), M.Sc., Teaching Fellow in Genetics.
Dr. M. C. Franklin, Part-time Lecturer in Nutrition.
Mr. V. E. H. Davis, B.V.Sc., Part-time Demonstrator in Clinical Methods.
Mr. E. N. Larkin, B.V.Sc., Part-time Demonstrator in Clinical Methods.
Mr. K. E. W. Robinson, M.A. (N.Z.), Part-time Lecturer in Livestock Geography.
Dr. K. Campbell, B.Sc.Agri., M.A. (Chicago), M.P.A. (Harvard), Ph.D. (Chicago),
Part-time Lecturer in Livestock Economics.

Secretarial
Mrs. R. E. Arthurson
Miss S. D. Taylor

Technical and Attendant
Mr. C. Rames
Mr. J. R. Hadden
Mr. V. Slawin
Mr. C. W. O'Brien
Mr. F. Seller
Mr. S. T. James

DEPARTMENT OF VETERINARY PATHOLOGY
AND BACTERIOLOGY

Professor H. R. Carne, D.V.Sc.
Mr. R. V. S. Bain, B.V.Sc., Senior Lecturer in Veterinary Pathology and
Bacteriology.
Mr. J. H. Whittem, B.V.Sc., Senior Lecturer in Veterinary Pathology and
Bacteriology.
Mr. K. G. Johnston, B.V.Sc., Lecturer in Veterinary Pathology and Bacteriology.
Mr. D. S. Roberts, B.V.Sc., Teaching Fellow in Veterinary Pathology and
Bacteriology.
Mr. R. D. Barry, B.V.Sc., Teaching Fellow in Veterinary Pathology and
Bacteriology.
Mr. H. McL. Gordon, B.V.Sc., Part-time Lecturer in Veterinary Parasitology.
Mr. J. Drabble, B.V.Sc., Part-time Lecturer in Meat Inspection.
Miss Helen Turner, B.Arch., Part-time Lecturer in Veterinary Biometry.
Mr. I. Sommerville, Part-time Demonstrator in Veterinary Parasitology.
Mr. M. A. Gemmell, B.V.Sc., George Aktin Pastoral Research Fellow in
Parasitology.

Secretarial
Miss P. K. Warren
Mrs. D. Robertson, B.A.

Technical and Attendant
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Mr. R. F. Jones
Mr. A. R. Thorne
Mr. N. F. Jones
Mr. E. Lepherd
Mr. G. Page
Mr. P. Ward
Miss K. Davern
Mr. W. Kraus
Mr. A. Murdoch
Mrs. E. A. McMahon
Mrs. H. Ryde
Mrs. B. Ferris
DEPARTMENT OF VETERINARY PHYSIOLOGY

Professor C. W. Emmens, D.Sc., Ph.D.
Mr. I. G. White, D.Sc., Lecturer in Veterinary Physiology.
Mr. A. W. Blackshaw, B.V.Sc., Research Assistant in Veterinary Physiology.
Dr. P. J. Claringbold, B.V.Sc., Ph.D., Research Assistant in Veterinary Physiology.
Mr. B. Morris, B.V.Sc., Part-time Demonstrator in Veterinary Physiology.
Mr. L. Martin, Junior Cancer Research Fellow.
Mr. I. Martin, B.V.Sc., Field Research Officer.
Dr. J. M. Rendel, B.Sc., Ph.D. (Lond.), C.S.I.R.O. Animal Genetics Section.
Dr. A. Fraser, B.Sc., M.Sc., Ph.D., C.S.I.R.O. Animal Genetics Section.
Dr. K. A. Ferguson, B.Sc., Ph.D. (Acton Laboratories Ltd.), C.S.I.R.O. Wool Biology Section.
Dr. G. H. Humphrey, M.Sc., Ph.D., Lecturer in Biochemistry.

Secretarial  Mrs. D. Lascelles.

Technical and Attendant

Mr. A. A. Audet  Miss R. Spurway  Mrs. Forster  Mr. T. Nye
Mr. R. M. Penn  Mrs. H. Fischer  Mrs. Gilmore  Miss S. Gillart
Mr. N. Sinclair  Miss A. Tamblyn  Miss P. Back
Mr. J. Tye  Miss J. Purcell  Animal Genetics: Mrs. F. Van Bossum
Miss L. Kerr  Miss B. Joseph  Mr. K. Adams

DEPARTMENT OF VETERINARY MEDICINE

Teaching Staff

Mr. D. C. Blood, B.V.Sc., Senior Lecturer in Veterinary Medicine.
Mr. J. D. Steel, B.V.Sc., Senior Lecturer in Veterinary Medicine.
Mr. T. G. Hungerford, B.V.Sc., Part-time Lecturer in Diseases of Poultry.
Dr. H. G. Belschner, D.V.Sc., Part-time Lecturer in Diseases of Sheep.
Mr. N. K. Golding, B.V.Sc., Part-time Lecturer in Veterinary Jurisprudence.
Mr. W. L. Hindmarsh, B.V.Sc., M.R.C.V.S., Part-time Lecturer in Epidemiology.
Mr. L. A. Monk, B.V.Sc., Part-time Teaching Fellow in Veterinary Materia Medica, Therapeutics and Pharmacy.

Technical

Mr. R. Paris  Mr. G. Sealby.

UNIVERSITY VETERINARY HOSPITAL AND CLINIC

Mr. J. M. Keep, B.V.Sc., Superintendent.
Miss J. Caterson, B.V.Sc., Junior House Surgeon.
Miss D. P. Edmonstone, B.V.Sc., Junior House Surgeon.

Attendant

Mr. G. M. Hannan  Mr. K. M. Griggs.

McGARVIE SMITH ANIMAL HUSBANDRY FARM

Mr. H. J. Geddes, M.Sc.Agr. (N.Z.), Senior Lecturer in Animal Husbandry and Officer-in-Charge.
Mr. D. C. Blood, B.V.Sc., Senior Lecturer in Veterinary Medicine.
Mr. D. R. Hutchins, B.V.Sc., Clinical Officer.
Mr. J. D. Dunsmore, B.V.Sc., Junior House Surgeon.

Secretarial

Miss N. Jagelman  Miss B. Preston  Mrs. Richards (Housekeeper).

Technical

Mr. H. R. Kerr

Farm

Mr. T. M. Black, Farm Foreman  Mr. Miner, Dairy Assistant.
Mr. F. Fishwick, Farm Foreman Assistant  Mr. Miner, Snr., Farm Assistant.
Mr. F. Sedgewick, Dairy Assistant.
RESIGNATIONS

Mr. A. H. Brook, B.V.Sc., resigned in February to accept a position with the C.S.I.R.O. Sheep Biology Laboratory, Prospect.

Mr. J. H. Thomas, who had been acting as Teaching Fellow in Veterinary Pathology and Bacteriology during 1954, left the Veterinary School at the end of the year to accept an appointment at the McMaster Laboratory.

Dr. J. D. Biggers will not be returning to the Veterinary School after his leave of absence.

Miss J. Clout, Junior House Surgeon during 1954, resigned at the end of the year and was married in January to Jack Thompson.

Dr. M. Lindner has left the Department of Veterinary Pathology and is now working at the Veterinary Research Station, Glenfield.

Mrs. J. Bernard has resigned from her position as Secretary to the Professor of Veterinary Pathology and will leave in December for a trip abroad with her husband.

Mrs. R. Loveday transferred to Fisher Library last November, and her successor, Miss B. Hargreaves resigned at Easter.

APPOINTMENTS

Mr. R. D. Barry, B.V.Sc., has been appointed Teaching Fellow in Veterinary Pathology and Bacteriology. He commenced the course in 1950 and graduated in January, 1955.

Mr. I. A. Martin, B.V.Sc., has been appointed Field Research Officer in the Department of Veterinary Physiology. He commenced the course in 1950 and graduated in January, 1955.

Mr. L. Martin has been appointed Junior Cancer Research Fellow in the Department of Veterinary Physiology.

Mr. J. D. Dunsmore, B.V.Sc., has been appointed Junior House Surgeon at the University Farm Clinic. He commenced the course in 1950 and graduated in January, 1955.

Misses J. Caterson and D. P. Edmonstone have been appointed Junior House Surgeons in the Veterinary Hospital. Miss Caterson commenced the course in 1950 and Miss Edmonstone in 1949, both graduating in January, 1955.

Miss P. K. Warren has been appointed Secretary to the Professor of Veterinary Pathology.

Mrs. D. Robertson has been appointed Librarian.

ALTERATIONS

Mr. A. K. Lascelles has been appointed Lecturer in Veterinary Surgery. He has held the position of Temporary Lecturer since graduating in November, 1952.

Mr. M. A. Gemmell, who was a Junior House Surgeon in the Veterinary Hospital during 1954, is carrying out research on Hydatids as the George Aitken Pastoral Research Fellow.

LEAVE

Professor H. R. Carne returned to the Veterinary School in January after spending a year abroad on Sabattical Leave.

Mr. K. G. Johnston, B.V.Sc., left in August to spend at least twelve months in England, where he will take the Diploma Course in Bacteriology at the London School of Hygiene and Tropical Medicine.

Dr. I. G. White, D.Sc., left in August to undertake twelve months' work at Cambridge on Biochemistry of Semen.

Mr. A. W. Blackshaw, B.V.Sc., will spend a year in America working on artificial insemination and deep freezing of spermatozoa.

VETERINARY PHYSIOLOGY

(RESEARCH REPORT)

General

Reproductive physiology continues to form the main focus of research in this Department. To this however, has now been added an expanded interest in the more endocrine aspects of the subject in that several workers are now occupied with the various aspects of hormone assay under a scheme of the N.S.W. State Cancer Council.

Studies of spermatozoa have continued both on the biochemical and physiological lines with expansion into field work with cattle. The Department is now collaborating with the Hunter Valley Co-operative Dairy Company in what should develop into extensive testing of methods of deep freezing of semen.

Work on the physiology of the female reproductive tract continues with a special emphasis on local sensitivity to oestrogens. It has now proved possible to culture slices of rodent vagina in vitro and these respond to oestrogenic stimulation just as do intact vaginas in vivo. While studies of the interaction of various hormones in the intact animal still continue, the added information given by these in vitro preparations should prove invaluable. A further important development in this field has been the development by genetic selection of lines of mice of widely different sensitivity to oestrogens. So far, at the 8th generation of selection a 10-fold difference has been demonstrable.
The development of statistical methods appropriate to biological problems also continues.

Work in Progress
1. The prevention of temperature shock in ram and bull spermatozoa with lecithin. A. W. Blackshaw
2. The preservation of sheep, rabbit, and ox red cells at −79°C. A. W. Blackshaw.
3. The fertilizing capacity of frozen ram and bull spermatozoa. C. W. Emmens, A. W. Blackshaw.
4. The development of a supra vital stain for the evaluation of semen smears. A. W. Blackshaw.
5. The effects of equilibration, mixing temperatures and various sugars on the revival of frozen spermatozoa. A. W. Blackshaw.
8. The effects of heavy metals on bull, ram, rabbit, and human spermatozoa. I. G. White.
13. The response of ovariectomized mice to various natural and synthetic oestrogens. J. D. Biggers.
15. Histological studies of keratinisation. J. D. Biggers.
19. The glycogen content and wet and dry weight of the reproductive organs of the mouse. J. Balmain, J. D. Biggers, P. J. Claringbold.

Work Published
RESEARCH IN THE
DEPARTMENT OF VETERINARY
PATHOLOGY

1. Pasteurellosis Investigations (R. V. S. Bain)

In the laboratory, immunochemical studies on
P. multocida have continued with the collabora-
tion of Dr. Knox of the Department of Bio-
chemistry. A large batch of adjuvant vaccine
against bovine haemorrhagic septicemia in
South Eastern Asia has been prepared and Mr.
Bain has recently visited Thailand, Burma,
India and Ceylon to supervise the field tests of
vaccination.

2. Canine Virus Diseases (J. H. Whittem)

Investigations on distemper and contagious
hepatitis viruses have continued. The cultivation
of these viruses in living tissues, using tech-
niques employed for the cultivation of poliomye-
litis and other viruses is being explored.

3. Virus Pneumonia of Swine (J. H. Whittem)

Attempts are being made to establish the
agent of this disease in tissue culture, using the
Dulbecco technique.


Attempts to adapt this virus to other species
have continued and propagation in tissue cul-
tures is also being investigated.

5. Ataxic Diseases in Calves (J. H. Whittem, in
 collaboration with D. C. Blood)

Pathological studies are being made on so-
called “Curly calves” which are either born
dead or, when born alive, show a variety of
muscular and joint affections which are fre-
quently associated with abnormalities of the
central nervous system.

6. A special form of Ataxia in Young Thor-
oughbreds (J. H. Whittem, in collaboration
with J. D. Steel).

Studies are being carried out on a series of
thoroughbreds affected with an ataxic condition
commonly known as “wobblers”.

7. Causse Lymphadenitis in Sheep (H. R. Carne
and R. D. Barry).

Investigations have concentrated on the toxic
lipid that has been extracted from C. ovis and
the part that it plays in the mechanism of
pathogenesis. The chemical properties of the
lipid and various solubility fractions are under
examination.

8. Cysts of the Parotid Region of the Dog (H. R.
Carne and J. M. Keep).

A pathological study is being made of the
curious asymmetrical cysts which occur in the
sub-parotid region of the dog. A number of
cases of this condition have been collected
through the Veterinary Hospital.

9. Swine Dysentery (D. S. Roberts and D. C.
Blood).

An outbreak of swine dysentery met with in
the University Farm clinical practice has pre-
sented an opportunity to undertake an investi-
gation of the nature of the causative agent of
this disease. The condition has been set up in
experimental pigs and bacteriological studies
are in progress.

VETERINARY SCIENCE REPORT

PERSONNEL, DEPARTMENT OF
VETERINARY SCIENCE

R.M.C. Gunn (Professor), J. D. Steel (Senior
Lecturer), Miss V. E. Osborne, C. S. Sapsford
and A. K. Lascelles (Lecturers) and J. A. Spring-
hall (Temporary Lecturer).

SUBJECTS INVESTIGATED DURING
THE YEAR HAVE BEEN

1. Spermatogenesis in the Ram and Rat.
Investigations concerning the cell types of the
sex cords and their development have been
 carried out by Mr. C. S. Sapsford.

2. Muscle Functions in Relation to Posture,
Locomotion and Lameness. Continuation of this
investigation has been mainly in repetition of
previous experiments, the elimination of certain
muscle movements by the performance of more
extensive neuractomies, and the removal of the
function of certain fexor muscles from the com-
bined limb movements by tenotomies performed
at special sites. R. M. C. Gunn and Miss V. E.
Osborne.

3. Tests of Dimethoxystilbene and of Trans-
stilbene have been made in relation to their value
in promoting higher egg production by Mr. J. A.
Springhall.

4. The Determination of Blood Pressure in
Horses, using a modified Colen’s sphygmos-
ciometer, for reading blood pressures in the
tail, has been investigated on forty Thorough-
bred horses by Mr. A. K. Lascelles.

5. “Wobbles” in Horses and Equine Cardio-
graphy: Five cases of “Wobbles,” not previously
described in Australia, have been studied in
 collaboration with Mr. J. H. Whittem. The
study of the equine electrocardiogram has con-
tinued, and results indicate a relationship be-
tween the cardiogram and performance. J. D.
Steel.

Publications:

“Some Observations on the Development of
the Testis, Epididymides and Penis in the Young
Merino Ram” – R. H. Watson, C. S. Sapsford
and I. McCance (in press).
FACULTY MEMBERS!

The Directors of the Edinburgh Publishing Company wish to announce that they are prepared to supply any of the University Faculties with their Year Book or any similar publication Absolutely Free of Cost Edinburgh Publishing Company

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Phones: BM 3661 BM 3893
THE LATEST ANTI-RABBIT WEAPON

Recently, considerable publicity has been given to the use, initially in Tasmania and subsequently in Victoria, of a new type of rabbit poison, viz. compound “ten-eighty” (sodium fluroacetate). So far this compound has not been employed on a commercial scale in New South Wales although its capabilities have been investigated by the Department of Agriculture.

In the years preceding 1953 the rabbit population in Tasmania presented a very serious problem and towards the end of 1952 the Department of Agriculture there, carried out the first poison trial with the hitherto unknown substance, “10-80,” obtained from the Monsanto Chemical Company, U.S.A. The initial experiments were designed to determine the action of the poison, about which very little was known, and also if possible, the minimum lethal dose. Caged rabbits were used and solutions of varying concentrations per kilogram body weight, administered by means of a syringe and rubber tubing. From this early work the M.L.D. was determined first for the rabbit (1mg/Kg) and later for the domestic animals.

The effects of the poison are brought about by enzyme inhibition. The net result is a disruption of the citric acid cycle and hence of carbohydrate metabolism with a consequent build-up of citric acid in the tissues. The means whereby this sequence of events causes death is not well understood. In the sheep and rabbit for example, the symptoms can be related to ventricular fibrillation with terminal involvement of the nervous system resulting in mild convulsions prior to death. In dogs, however, the nervous symptoms are dominant and the picture is very characteristic of this. No effective antidote has yet been discovered and since sodium fluroacetate is a light, odourless, white crystalline powder, very soluble in water and with little or no taste, every precaution is necessary when handling it.

The next step, after the experiments on caged rabbits, was to conduct field trials in order to discover the most suitable and economical means of employing “10-80” on a large scale. Various baits were used and furrows laid in heavily infested areas on properties in the lower Midlands of Tasmania. Results of these trials were very encouraging and much useful data was obtained. All the usual baits, particularly apples, were found to be quite satisfactory but in the case of grain there was a risk of poisoning stock even several weeks after laying, and its use was therefore discouraged. The rate of mixing was standardized at 160 lbs. to 1 oz. of the poison.

Once all the required information had been obtained, no time was lost in equipping field officers and commencing operations on a commercial basis all over the state. Large quantities of “10-80” were imported and departmental vermin inspectors instructed in its use and in the precautionary measures necessary. The landowners, whose interest had been aroused during the experimental work, proved to be most cooperative and the Department of Agriculture was flooded with enquiries. At the outset the demand considerably exceeded the supply of men available for the work. Fortunately it is possible with “10-80” to poison at any time of the year so a programme was able to be constructed to satisfy all demands quickly. The venture was very successful and even the farmers were satisfied. Many sheep owners, who had been almost run off the land by rabbits which they had unsuccessfully tried to control for years, were able to bring large areas back into production.

Since then, work with “10-80” has continued and vermin inspectors are employed all the year round to keep the rabbits down to a minimum. It has been estimated that in the last few years, the rabbit population of Tasmania has been cut by at least half. This is a considerable achievement when one considers that many parts of the state are covered with thick scrub or mountainous territory where the pests necessarily have a “free run,” and are consequently continually infiltrating into the pastoral regions. On the great majority of smaller holdings this problem has been overcome with rabbit proof fences and after one or two poisonings the vermin have been completely eliminated.

In August, 1954, the first large scale “10-80” trial was conducted in New South Wales on Mr. P. J. Baldwin’s property in the Blue Mountains. The area was of a very rough and hilly nature and consisted of an 800 acre paddock encircled by a rabbit proof fence. The rabbit infestation was very bad with most of the country totally eaten out and the position, with regard to stock carrying capacity, hopeless.
Bait trials indicated carrot to be the most suitable and economical, bulk supplies of which were obtained, washed and diced, from a large canning firm at a moderate cost. Twenty miles of furrow were prepared and 1½ tons of carrot was required to complete the project, much of this being used for free feeding prior to poisoning. The work was completed in 19 days. Several weeks later, a thorough visual examination at night with high powered spotlights failed to detect more than 6 or 7 rabbits over the 300 acres or so examined. This was most striking when compared with the moving mass of them observed prior to the trial merely by flashing the headlights of a car about. Finally all accessible warrens were ripped to a depth of 4 feet and the few stragglers disposed of by gassing any holes that opened up. In less than 3 weeks “10-80” accomplished a task originally given up as almost hopeless after several other methods had been tried over a period of many months.

During the last 3½ years “10-80” has been found to be effective in any type of country regardless of the amount of natural feed available. Furrows laid in paddocks of young green Algerion oats, for example, still produced the same high percentage kills. There are quite a number of areas in New South Wales where myxomatosis is of little value due to the lack of suitable vectors; the Kanimbla valley is but one example. It is felt that in these regions in particular, the introduction of fluroacetate would prove very beneficial in assisting property owners to overcome their rabbit problems.

T. J. McM., Vet. III.

OPEN DAY

Now gather round my hearties,  
And hear the tale I tell  
Of how we went to Badgery’s Creek  
And raised up merry hell.

'Twas in the summer solstice,  
When the days were long and hot,  
And every man among us,  
Was well and truly shot.

We started in the dining room,  
When evening meal was done  
And overturned the tables  
In clean and healthy fun.

We smashed up all the benches  
And set the place alight,  
And then in drunken ribaldry  
Went howling through the night.

We mounted up the staircase dams  
And let the water flow,  
Then went and told the Big White Chief  
That it was time to sow.

We got the riding horses out  
And drove the cows around  
Until those wretched creatures  
Wouldn’t milk you half a pound.

We sold the sheep in toto  
To a pair of local crooks,  
Who altered all the ear marks  
And put them on their books.

The pigs we caught and skewered  
Every kicking squealing beast,  
And then we had a barbecue,  
The daddy of a feast.

The end it came quite suddenly,  
When the local cops were called,  
And up before a magistrate  
The lot of us were hauled.
TRIP TO INDIA AND ITS HIGHLIGHTS
By K. E. Gudsell

The British India Steamship Company has a fleet of about ninety ships concentrated to a great extent on the U.K.-Asia-Australia sea-route. The s.s. Chanda of this company is a cargo-passenger ship of 6,921 tons and it was on this vessel that I sailed from Melbourne with the precious cargo of 200 Australian Stud Sheep on January 20, 1954, now bound for Bombay. The crew were Indian except the fitter and carpenter who were Chinese. They numbered eighty; and were divided roughly into three parts — the deck crew who were Hindus from Diu, Surat, and Calcutta, the engineering crew who were Moslems from Karachi and the Cabin crew who are Christians from Goa. The deck and engineering Officers, twenty in number, were all British.

Casting off was associated with a certain amount of relief as the previous few days had been headaches — last minute instructions to Carpenters, purchase of Drugs, government Veterinary inspections, Department of Navigation inspections, Port authorities embarkation inspection and all the concomitant form filling. The voyage across the Australian Bight was unusually placid for the first three days but the change to rough weather on the last two days coincided with the disappearance from the table of the ship's doctor and purser. Little of interest occurred on this five and a half day run to Freemantle, except that I was kicked off the Bridge by the Captain during a morning jaunt with the third Mate. However, the Old Man and I were soon on good terms and regularly wagered on the fate of the M.C.C. Team in Australia. During our eight day lay-up in Freemantle for cargo loading, the Old Man, the Mate and I went to the night trotting on two occasions, where the thriving Veterinary, Surgeon of Perth, Lindsay Spiers, officiated. Acting on his advice on some occasions and following our noses on other occasions we ended up well in front of the Bookmakers. Fine place West Australia.

Two very interesting consignments were taken on board at Freemantle, the first was 200 Merino Wethers, due to become Malayan Mutton. These were simply hurdled on the fore-deck and fed on oaten-hay during the eight day trip to Singapore. The second consignment consisted of two young female passengers due to become additions to the Sultan of Muscat's Harem. These were located in the passenger cabins guarded by the Sultan's own overseer. Games of hide-and-seek ensued during the rest of the voyage to the Persian gulf, for obviously one man cannot oversee two females oft called away simultaneously by false summons by the Chief Officer or the Purser.

The run to Singapore was notable for heat and humidity both of which were better withstood by the sheep than the humans. Whilst poundage streamed off the humans in beads of perspiration the sheep were relishing the ready supply of feed and obviously gaining weight. Their respiratory rate increased somewhat but there was no signs of distress with this increase of temperature and humidity. Navigation was extremely difficult on this run as the Sundha Straits between Java and Sumatra and the Bankers Straits between Sumatra and off shore islands were both very narrow passages.

Singapore was my introduction to Eastern trading methods and I am told that there is only one place better for learning the art viz. Hongkong. There is a world renowned street, just 75 yards long and barely 4 yards wide, off Raffles' Square called Change Alley where you may purchase anything you choose to mention at any price the Shopkeepers choose to mention. Their choice depends on their appraisal of you and of your appraisal of the article. Your lack of careful scrutiny is followed by demands of prices equal to those pertaining in Australia for the same goods. One soon learns to proffer less than half of the demanded price and the final price varies between half and three-quarters of the demanded price depending upon your patience and ability to find and magnifying any faults in the article. Your vigilence must not wane upon settling, for the shop-keeper is very adept whilst wrapping the article up as I well know. On one occasion after purchasing a dressing gown I took no notice of its wrapping-up process because I was busy changing money with the ever present money exchange wallah. Upon opening up my parcel some hours later I found that the dressing gown was big enough for my back only.

Singapore is probably the best shopping centre in the world as there is Chinese, American, Japanese, Belgium, Malayan, Dutch, Siamese, Indian, English and French goods in abundance. Shopping may be continued until midnight if so desired as there are vendors in the three huge amusement parks, the Great World, the New World and the Happy World. Besides shopping stalls there is all the fun of the fair akin to Luna Park and many Cabarets. A cheap night can be had at the latter where in the very dim light the ship's wine cards are accepted in lieu of
Straits Dollar tickets by the taxi dance girls of all Nationalities.

Besides shopping, Singapore is noted for swimming, sight-seeing and sweating. The latter is continuous and needs no comment. The Singapore Swimming Club consists of palatial buildings and a magnificent swimming pool. The membership fee requires similar epithets for description. It serves as half the home of the European residents of Singapore. Description of the outstanding sights to be seen in Singapore can be obtained from any tourist bureau booklet but one is worthy of special mention, namely the Tiger Balm Bath. With an edifice and a pool equal to the Singapore swimming club it is situated in beautiful native foliage. Similar Tiger Balm Baths are situated throughout the East and thrive on supposedly miraculous cures worked by the content of the Bath — so many parts of so many tigers.

Leaving Singapore on February 12th we headed north-west along the Malacca Straits, then turned south down to Colombo where we arrived on February 17th. Ceylon is a very clean and pretty place and I would have liked a fortnight to travel into its interior, especially to Kandy. Jewellery is the main item offered to the tourist and anyone who has experienced the pressure of Singapore salesmen can relax in Colombo and still win the haggling process. There appear to be as many gem bazaars as there are people but unless a connoisseur of the sparkling stones it pays to purchase only from the reputable jewellers. After a visit to them and a drive to picturesque Mount Lavaenia, a swim at its beach, we left Colombo only twenty-four hours after arrival. After a two day run up the cooler western coast of India we tied up in the Port of Murmagoa, which exhibited the filthiest dock area of the whole trip. However, a pleasant launch trip across the Harbour to Nova Goa revealed a fair city of apparently happy Goanese. A few miles further out lies the ruins of Old Goa or the Rome of the East. Here are four large Cathedrals, the architecture, embossing and glasswork, I have never seen the equal for magnificence. In one of these Cathedrals lies the remains of St. Francis Xavier, whose two fingers are still on display. In Nova Goa the evident happiness is matched by the number of cafes, taverns and bars which must approximate 400 in a population of 160,000. The liquor consumption of the population must be very high and our Indian Crew soon fell into the way of things. When full of Coconut Beer and Goanese Gin they would make merry but end up fighting like hell cats in the after deck. Inebriated Indians are not easy to deal with and the ship's officers were happy to quit Goa within 72 hours of arrival. The day after departure we landed in Bombay, just five weeks after leaving Melbourne.

Here was India in reality. No sooner was the gang plank lowered than hundreds of Indians swarmed on board willing to buy, sell, mend or procure anything for you. Officialdom arrived with them — Custom and Quarantine officers asked many questions before the sheep went down the gangway. These I could have avoided for one Rupee if I had been a little wiser to the corruption of Indian Civil Service. The sheep were taken away to Bombay Veterinary College for three days awaiting their railing to Dehra Dun. The day after arrival, the official handing over of the sheep was performed at the Bombay Veterinary College. The Chief Minister of Bombay accepted on behalf of India the Australian Sheep presented by the Regional Director of Asia who had flown over from Bangkok. The Chief Minister's interest in the two Kelpie dogs which I had brought with the sheep, lead to one of the funniest scenes of the trip. He asked for a sheep dog trial whereupon I acceded by letting thirty sheep out onto the road lined with Indian students. The Indian conception of a sheep dog is one which frightens all else away from the immediate vicinity of the sheep; so when I sent one dog out on a cast the Indian students thought that the dog would attack them. The resultant scene was fit for the films — (and it was because Indian Newsreels had filmed the whole show). There were Indian students running in all directions, sheep doing likewise, dog dashing here and there with pop-eyed students climbing up fences, posts, trees and houses. When the humans settled down, the dogs duly delivered the sheep back to the sheds.

Before starting out on the rail journey, I decided to look about Bombay. The first impression one receives of India is that there must be either a large amount of illegitimacy or artificial insemination because from the time a European sets foot on the land till he leaves it he is pestered by children begging with the incessant chant of "No mama, no papa, one anna buckshees Sahib". A tour of the famous Grant Road leads you to ascribe to the former possibility.

I went to the Bombay Races with the Principal of the Bombay Veterinary College and the Course Veterinarian. The latter was a great judge of horseflesh and the future, for he marked on my racebook seven consecutive winners. The strangest sight at the races is the starting. The tapes fly up when horses and jockeys are at varying distances from the start and at varying
clearance for each. They are all wood constructions completely closed against the weather on the bulwark and forward sides. The roof is slanting 5ft. 2in. high on the hatch side and four feet on the bulwark side, and has an extra cover of malthoid. Department of Navigation Regulations allow for six feet per sheep with little allowance for sex and no allowance for amount of wool, breed differences, value of sheep and duration of voyage. Further their flooring laws provide for a complete wooden floor; no provision for dung clearance as when slats are employed. Feeding troughs of depth and width of 6in. are placed on both bulwark and hatch sides of the pens. Watering troughs consist of 1/3 44 gallon drums placed in each pen. Each pen holds about 50 sheep.

TENDING SHEEP ABOARD SHIP

The basic requirement of an animal attendant on board a ship is the ability to perform manual work. The daily routine consists of cleaning out the pens, feeding and watering the animals and attending to any clinical cases. All of these require some considerable physical exertion especially when the ship is moving like a cork-screw in a heavy swelling sea. You may be surprised that clinical work requires some physical effort, but I can assure you carrying a ram up a ladder to the poop deck in order to isolate it is not the easiest manipulation I have performed.

With luck and a good Chief Officer, aid may be supplied in the form of Seamen (Indian). I was supplied with three, two Topasses (sweepers), and a Classie (general rouseabout). The two Topasses would help with the cleaning out and the Classie with the feeding. The Classie I named "Useless", which he thought meant "very good" and as the mate said "he loved me like a father". Despite this aid, however, the puny nature of the Indian physique limits their ability to handle anything very heavy, thus most of the harder tasks fell back on yours truly.

CLEANING OUT

This is the first procedure in the morning, and a routine to be recommended for pigmies because as previously stated the pens are but 4ft. 6in. high, and the flooring is completely boarded. At sea all refuse is permitted to be thrown overboard but in port nothing may be thrown in the harbour; consequently, after five or six days in Port with the temperature above 100 degrees, the dung is caked hard on the flooring. This must be scraped off the floor with shovels and anyone who has been bent double for two hours at this exercise finds difficulty in straightening out his back,

FEEDING AND WATERING

Watering is a simple procedure — a hose put into the 1/3 44 gallon drum. Do not be foolish enough to accept recommendations to water per buckets.

Feeding is a more difficult procedure. The feed (hay, chaff and bran), is usually kept in the tunnage well. This well has rather a small exit but holds quite a lot of feed. Location of the particular item is the first difficulty. All the bran may have been dumped under the hay and chaff by the wharfies. This 8 ton of chaff and 2 ton of hay need be lifted onto the deck in order to obtain some bran. At sea, with no steam on deck, this lifting procedure is a straight haul by one person through the narrow exit of the tunnage well. If the ship is rolling, it is even harder. When all three commodities are on deck, then the bran and oaten or wheaten chaff are mixed in the feed bin and the feeding troughs of each pen filled per medium of buckets. This procedure is performed in the morning. In the afternoon the Lucerne hay bales are broken up and teased into the then empty feeding troughs.

CLINICAL WORK

Sheep do not appear to become seasick though rough weather may eventuate. They relish their food in the first twenty-four hours. With strict attention to proper diet and cleanliness and with the smile of Dame Fortune, few clinical cases arise. Confirmed cases of Coccidiosis did arise and upon noticing the dysenteric faeces, the animals were isolated and treated with sulphamethazine. All recovered. It must be noted here that the normal temperature of the sheep in four months wool in the Tropics was ascertained at 103.8.

Each consignment was attended by outbreaks with the apparently inevitable contagious Ophthalmia. The worst cases, and those which always progressed from a severe Conjunctivitis to a Keratitis, were those with short palpebral margins and a tendency to Entropian (usually unilaterial).

Treatment was with (1) Zinc Sulphate, (2) Berberine Sulphate, (3) Albuscid Soluble, (4) Chloromycetin, (5) Expectant.

The latter two were most successful in any stage of the disease. Apart from Coccidiosis and Contagious Ophthalmia, little of interest arose except Rams crippled by grass seeds in their socks (fetlock and cannon wool) unshorn from birth for reasons well known to Stud Breeders.
stages of preparedness — the horses are well strung out after going one hundred yards and some may be heading in the opposite direction.

The train journey from Bombay to Dehra Dun via Dehli was the worst experience of the whole trip. It was a slow passenger train with four sheep trucks at the rear. The interior was filthy, the facilities poor and the heat almost intolerable. Progress was at approximately eleven miles per hour; the whole journey of 1100 miles taking 94 hours. The depression of the trip through the hot dry and unproductive south was somewhat alleviated by the cooler and more productive looking north after we had passed Dehli.

The F.A.O. Mission Farm at Rishikesh, where the sheep were off-loaded, is a virtual paradise. It consists of 2,000 acres of rich alluvial flats right on the banks of the Ganges where it leaves the Himalayas. Numerous springs and little brooks run through it, lined with palms and ferns and the Ganges of clear blue water edged with white rocks. The forest clad Himalayas rise sheer from the distant bank of the Ganges. Two peculiar daily sights on the Ganges were:

1. The transport of milk from Rishikesh to Hardwar (12 miles) via the river. The transporter merely sits on a dozen sealed, partly filled cans which have been strapped together.

2. The method of crossing the Ganges by the villagers is on inflated buffalo hides from which the buffalo has been extracted without any incision to any part of the hide.

The highlight of my stay in the northern section of India was a trek up 7,500 feet to a snow-clad hill top (via the hill station of Mussoorie) to view the distant Himalayan mountains. This indeed was a great sight with the unconquered Ms. Trisul and Nanda Devi revealing all their splendour.

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THE TRANSPORT OF SHEEP TO INDIA

By K. E. GUDSELL

REASONS FOR THE TRIP

There are just over 37 million sheep in India and production is estimated at 72 million pounds greasy. The average wool clip is, then, just under 2lbs./sheep/annum. In an effort to raise this average, especially in their own area, Uttar Pradesh have availed themselves of United Nations Technical Assistance. In the past twelve months U.P. has imported 410 Australian sheep under the U.N. Technical Assistance Scheme. The composition of these sheep which I have transported to India in two lots, February-March, 1954, and January-February, 1955, is as follows:—

200 Polwarth Ewes. 50 Border Leicester Ewes.
70 Polwarth Rams. 20 Corriedale Rams.
50 Corriedale Ewes. 20 Border Leicester Rams.

The implementation programme for sheep improvement in U.P. is:—

1. To breed pure Rams of Australian sheep for distribution to 32 Stud Ram depots throughout the Himalayan area.

2. Experimental crossbreeding with Indigenous Ewes.

PURCHASE OF SHEEP AND TREATMENT PRIOR TO EMBARKATION

The breed best suited to most of India undoubtedly is the Merino. In 1940 Kashmir produced a shipment from Australia but since the embargo placed on the export of Merinos from Australia by their Government, no further shipments have been obtained. Instead, American Rambouillets have been purchased. The first consignment (1954), of Australian sheep to U.P. consisted of the three breeds, Border Leicester, Corriedale and Polwarth; the latter breed is faring best. Hence the latest consignment is Polwarths (200), only. It is most desirable that the sheep purchased are from a country experiencing fairly high temperatures, analogous to Indian conditions, and most of the sheep selected in Australia are from Western N.S.W. — Wagga, Junee, Jerilderie. The ideal length of wool for a sheep travelling through the Tropics is no more than one month and drenching should be carried out at least two weeks beforehand. Though no fatalities occurred among the sheep on the six weeks voyage to India by sea, quite a number died on the train in the 24 hour journey prior to embarkation. This, I suspect was due to the sheep owners fulfilling the shipper's stipulation of drenching by doing same at the last moment. As the sheep must be on hard feed for the whole journey it is best if they be totally or partially hand fed for at least two weeks prior to the E.T.D. This is important with the younger sheep, especially hoggets.

TIME OF EMBARKATION

Shipments to the East travel much better in January-February when it is coolest in the Northern Hemisphere. Thus the animals have a chance to become acclimatized slowly in the country of their destination.

HOUSING ON BOARD SHIP

Pens are located in the fore and after decks, preferably the latter. They are built between the hatches and bulwark allowing about four feet
There are now six veterinary schools in the United Kingdom and one in Eire. These are at London, Edinburgh, Glasgow, Liverpool, Dublin, Bristol and Cambridge.

The last two named have only been in operation for two or three years. Previously the five veterinary schools were all separate entities. The examinations in all five were the same, set by the controlling body of the veterinary profession in the U.K., the Royal College of Veterinary Surgeons. This body issued the Diploma of M.R.C.V.S.

A reorganisation has taken place in which all of the seven veterinary schools are now part of their respective universities. Instead of the “one portal” system, there are now seven different degrees in veterinary science issued in Great Britain.

The Royal Veterinary College, London, is (I think) the oldest of the schools, having been established about two hundred years ago. By 1938 the complete rebuilding of the R.V.C. (on the same site) had been completed.

The buildings themselves are magnificent. Situated in a somewhat unpleasant part of London between Kings Cross and Camden Town, they are constructed of red brick and teak throughout.

There are four separate buildings, the Main Block, the Clinic, the Canine Block and the Stable Block.

The Main Block contains all the lecture theatres, laboratories, offices and the Pathology wing. In the basement are students’ common rooms, locker rooms, etc. and a cafeteria-style refectory. The whole building has a thermostatic central-heating system.

In the Clinic there is a large waiting room for clients, a large operating theatre, laboratory, x-ray therapy machine, and x-ray room, etc.

The Canine Block consists mainly of canine and feline wards. These are similar to human hospital wards, with swing doors, cages all round the walls, and a sluice room! On the top floor of this building there are two more operating theatres. There are lifts to the upper floors, as in all the other buildings. On the ground floor there are also a few sheep pens and a fully equipped cow byre fitted with milking machines.

The Stable Block is on two levels. A ramp leads up to the upper row of loose boxes. There is a covered-in riding menage under these boxes. In all there are about twenty-five loose boxes.

Having given this brief description of the buildings at the R.V.C., I will add that in my personal opinion the training given at the Sydney School is better than that at the R.V.C. I think the teaching methods are better in Sydney, and the standard of the examinations is higher.

The course at London is, broadly speaking, very much the same as in Sydney. I understand that two of the schools now have a six year course (Cambridge and Glasgow) but I think the course at London is still five years. The first four years are undertaken at London, and the final year students are accommodated at the Field Station.

A few points of difference come to mind. The subjects studied in each year are slightly different. There are only four professional examinations.

First Year — Physics, Chemistry, Biology and Animal Management (first exam.).

Second Year — Anatomy, Physiology (second exam.).

Third Year — Animal Husbandry, Pharmacology (part of third exam), Bacteriology, Parasitology, Pathology.

Fourth Year — Pathology, Bacteriology and Parasitology (part of third exam.), Medicine and Surgery.

Fifth Year — Medicine, Surgery, Jurisprudence, etc. (final exam.).

The Physiology course is not so extensive. Because of the stringent laws regarding “vivisection” it does not include any mammalian experiments. The same law applies to the surgery course and thus little practical surgery can be carried out. The anatomy course is shorter and there is much less demonstrating in that subject. On the other hand, the anatomy museum and bone room are far better equipped, and many pickled specimens are available.

One great advantage to the veterinary students in the U.K. is that they have ample opportunities for seeing veterinary practice. A minimum of six months experience with a general practitioner is compulsory. A “case book” has to be signed and presented at the final examination. Most students spend nearly every vacation throughout the course working with veterinary surgeons in the country.

To keep in the rear of opportunity in matters of indulgence is as valuable a habit as to keep abreast of opportunity in matters of enterprise.” —Thomas Hardy.
TRAINING THE STANDARD-BRED HORSE

Some observations on modern methods, with a special reference to a suggested new method.

Although the conditioning of standard-bred horses has for long been an exacting task calling for a great deal of technical knowledge and skill no attempts have been made to conduct it in a scientific manner based upon scientific principles. In an industry where hundreds of thousands of pounds are distributed each season in prize money and even greater sums pass through the totalizator windows and bookmakers' bags this is perhaps surprising; but even more surprising is the diversity of training methods in common use, all of which manage to produce their share of winners.

Training methods in New Zealand and Australia—New South Wales at least—show marked similarity, the New Zealand trainers being on the average however, harder taskmasters with a strong tendency to train a horse for a specific race rather than to enter the horse for a suitable race once it is known to be properly fit. This results in some horses being over-trained through doing too much work over too short a period, and could well explain why a few horses which were only moderate performers in the Dominion have done quite well in this country, where the trainers might possibly have given them more time to come to hand. The different racing set-ups have also contributed largely to this difference in training procedure between the two countries, since in New Zealand, horses are nominated for a specific race at each meeting, whereas in New South Wales horses are nominated for the meeting and what race they run in is determined by the handicapper, who is expected to grade the fields so as to give as many of the starters a chance as is possible, and to frame the races so that fields of reasonable size contest each event.

Trainers in both countries divide up the week's training so that each horse in his team spends alternate days doing fast and slow work. In New Zealand, many trainers do not work their teams on Sunday but in Australia, with their numerous gymkhanas on that day, training tends to occupy the whole week. The work asked of a horse on slow days is almost universal throughout Australasia, consisting of an hour spent at a slow-trot or pace, the speed being such that about ten miles are covered in that time. Some trainers, especially those across the Tasman, do not do any jogging; the task assigned to their teams on slow days consisting of pace work—that is, of five or so miles covered at a speed about twice that used in jogging work. For many horses who do not pace readily free-legged (horses are fully harnessed only on fast days) this means five miles at a slow canter. This type of conditioning on "off" days is rather popular with trainers of large strings who, because of the numbers in their stable, must push the horses through as quickly as possible if training is not to drag on into the afternoon; most trainers preferring to complete the exercising of their horses by mid-day so that the afternoon may be spent in cleaning harness, mucking-out boxes and similar miscellaneous but necessary tasks. These men usually work half of their team fast each day so that the trainer may himself drive or work with all the members of his stable; the pace work being left to the junior members of his staff.

The accent in New Zealand being on stayers especially amongst the maiden and improving horses, fast work in that country is mainly over two miles though at what speed this distance is covered depends largely on the trainer. By and large, the two miles is run in between five minutes forty seconds, the sectional times being, one minute twenty seconds, one minute fifteen seconds, one minute fifteen seconds, and one minute ten seconds for the respective half miles with the last furlong being run at maximum speed so as to develop through habit a final mustering of speed for the run to the judge. Occasionally, as racing approaches, a mile and a half in three minutes thirty seconds or better is substituted on fast days. This task is preceded by a preliminary of a mile and a half to two miles commenced at a jogging pace, the speed being increased each round of the track until it culminates in two sharp sprints over a furlong which tend to key the horses up and increase their eagerness to race. Following the preliminary and before the task proper is commenced, the horses are allowed to "catch their breath," in New Zealand the usual procedure being to walk the horses about until their respiration returns to normal, a habit arising from the colder months when activity is essential if the horses are to be kept warm without their rugs. In Australia, with its warmer climate, it is usual to stand the horses against the outside of the track during this recovery period. Since Australian standard-breds race mainly over sprint and middle distances, tasks over two miles do not seem to be as popular with Australian trainers, they being in the main content to work a 3:30-3:35 mile and a half with a similar preliminary to that common in New Zealand. During fast work every effort is made
to simulate racing conditions so every horse trains with as much company as can be obtained at the time, it being always attempted to get the horses to finish on terms so that no one horse may become dispirited and lose the will to win through frequent defeats. This applies particularly in the development of young horses.

Horses coming into work for the first time or returning to training after a spell, commence their training with a period of jogging which is built up each day until ten miles are being covered in an hour and after six weeks or so of this work the horses commence fast work by being worked along at the track on alternate days in company with other horses. The distance over which they are asked to show speed on fast days is gradually increased as the horse shows its fitness, until it is accomplishing fast tasks similar to those already outlined. Young horses (2 year olds) are not as a rule worked over a distance greater than a mile and a half, their early fast tasks being over a mile, although towards the end of the New Zealand season when a mile and a half race for two year olds is run at Ashburton some of these horses would be assigned fast work over two miles to build up their stamina.

In Australia with so many of the stables in city areas a great number of horses do all their training fast and slow work on the tracks whereas in New Zealand, most trainers live in country areas and own a fair acreage—many have private tracks—and there, horses are usually on the track only on fast mornings, doing all their jogging work on the wide grass verge of the back roads.

In order to determine just how fit a horse may be, trials in which a horse is asked for a maximum effort over a race distance are run at periodic intervals — one often being run in the last ten to fourteen days before a race. Trials seem to be run more frequently in Australia possibly because more wagering is done in this country—the small stakes offered at bush meetings make it almost essential—trainers require to know much more surely what their horses are capable of, as race day approaches. Many New Zealand trainers do not trial their older horses at all, having found that their charges race equally well off five minute two miles as they do when asked for greater efforts during the period of training immediately preceeding race day. However, on one of the fast days in the week prior to a race these trainers would work the last mile of the two mile journey in under two minutes fifteen seconds covering the first half in one minute ten seconds and the last half mile as fast as the horse is able. From this they are able to gauge how well prepared their entry is for the race. Horses, which have never been to the races on the other hand, are trialed at periodic intervals that their progress might be successfully determined.

Amongst trainers on both sides of the Tasman there are many who believe each strain of standard-bred has individual characteristics and so must be trained differently, whilst individuals of any one strain must be trained in a similar manner to obtain the best results. This manner of training it must be stated has paid dividends on occasions. The sons and daughters of Nelson Derby, for instance, require to be trained very hard up until a week before the races when they were turned out in the paddock and were not worked again until the day before they were due to contest an event, when they were given a good rousing gallop. Trained any other way these horses were only mediocre but with this system such good ones as Haughty 1:59 4/5, 4:13 2/5, probably New Zealand’s best racing mare; Bedrock, Tradition (both classic winners) and many others of the breed were developed. Mares of the Bingen breed too, were looked down upon as second raters until the late Roy Berry found the Training method to which they were best suited.

Training light harness horses is, however, not quite as simple as this may make it appear, since each horse being an individual requires different treatment. Many horses thrive on hard work and plenty of racing, others do best on a light preparation with only occasional races, and since each trainer is also an individual with his own ways of doing things it follows that there are and always will be horses which with one trainer are useless yet are able in another man’s care to win races. It is improbable that a more unorthodox trainer ever lived than Leo, F. Berkett, who whilst a pea farmer in Hope, Nelson, New Zealand, entered the trotting game with a string of low-priced horses. When not at the races they all took their turn in the plough chains or between the shafts of one of his farm implements. That Berkett knew just how much of this treatment was good for a horse is apparent when one considers some of the members of the “Berkett Circus” which tilled the soil at Hope and in later years at his training farm in Templeton. They include amongst their number, horses of the calibre of Highland Scott, Imprint, Nyallo Scott all top class pacers, Douglas McElwyn one of the best trotters New Zealand has seen, Toushay, who won consecutive races on the one day — the first event as a trotter, the second as a pacer — and the non-parrel High-
land Fling 1:57 2/5 4:10 3/5 winner of two New Zealand Trotting Cups and six free-for-alls.

The early Americans also trained in a manner similar to that at present in vogue in Australasia; but following the overwhelming success of Charles Marvin with aged and juvenile horses, the brush system of training which he devised was rapidly adopted and soon became the predominant training system in the United States and Canada. American trainers lead a largely nomadic life, following the race meetings across the continent with their strings, and living out the off season in winter camps in the warmer states such as Florida and California. It is in these winter quarters that the year's training regime is developed with the horses receiving their early conditioning for their first campaign and the older horses are wound up again for the spring and summer racing. Since the accent in American light harness racing is on two and three year old events, it is not surprising to find that the youngsters are set training tasks very different from those allotted to the older horses but that they come through them apparently unharmed and continue on unimpaired in later years will no doubt surprise those who advocate barring two year old racing.

Following the spelling of the older horses in the autumn—during which the young ones are broken in—the trainer starts his team off by jogging them for a period of six or eight weeks increasing the distance covered from four or five to some ten or twelve miles each day. By the end of December, this phase of the training has usually been completed and the first fast work is then introduced. From January onwards each week is usually divided into alternate fast and slow days with the jogging routine already outlined being continued on the slow days whilst brushes are introduced on the alternate days intermingled with a reduced amount of jogging. The routine commences on fast days with three or four miles covered at a jog usually going the wrong way round the track (all American tracks are left handed) after which the horse is turned round and scored twice preparatory to being brushed his first mile. Scoring is the term used to describe a practise start in which the horse is taken rapidly from a slow trot or pace to near maximum speed in an attempt to develop in the horse that ability to muster early speed so essential if a good position is to be obtained in the scramble for stations going away from the mobile starting gate. The horse is then brushed over a mile going the first three-quarters at a steady rate and attempting to come home the final quarter mile in under forty seconds to make a mile rate of three minutes twenty seconds or thereabouts, care always being taken not to unduly stress a horse or to push him so hard that he over-reaches or breaks with the danger of striking his quarters or tendons. Returning to the stables the horse is then unharnessed and walked around lightly rugged for up to half an hour, the time depending on the trainer, when he is then re-harnessed and taken out on to the track where he is scored twice more before being brushed another mile in slightly reduced time.

Throughout January this pattern continues with the introduction in the latter part of that month of a further mile dash so that each horse now covers some six or seven miles each fast day with up to one and a half hours walking interspersed between the dashes, after each of which the horse is hosed down to remove sweat and dust. During February and March as the horses demonstrate their fitness the number of brushes are increased while the times for the individual heats are whittled down until in early April when the teams ship out of winter quarters for the early spring meetings the older horses are working up to six heats on fast mornings going the first one in three minutes ten seconds or thereabouts and backing off ten seconds each mile through the second, third and fourth heats so as to come the last circuit in close to two minutes twenty seconds. This means that the total distance covered in a week's training will be at this stage in excess of fifty miles per week. No wonder American horses go fast and back up for three or even five heats in a day's racing.

April is the month of decision as trainers cull out the halt, the lame and unable, shipping the remainder north for the spring training at the track chosen by the trainer to open his season's campaign. With spring training come the fast times as trainers with particular races in mind train down their charges to times approaching those which they know will be good enough to win particular races for which the horses are being prepared. Thus, in the weeks approaching a race in which a pacer must go close to 2:4 to beat the other horses in the field, that pacer's training times would be gradually reduced until he could readily travel his final heat in two minutes six seconds, the American trainers having found from experience that most horses perform at least two seconds better in a race than what they can readily accomplish on the training track. Working on this principle, Delvin Millar trained 1953 Hambletonian charge Helicopter so that the three year old Hoot Mon filly was regularly accomplishing a fast assignment of six
heats, brushing the first two in two minutes thirty seconds the next two in two minutes ten seconds and coming the final bracket in only fractions over two minutes. That Helicopter was able to take out the hundred thousand dollar event—the world's richest harness race—by strolling in the second and third heats in two minutes one second after finishing fourth in the first heat following a break and that her wins were accomplished with great ease is tribute enough to the wisdom of Millar's plan.

Stanley Dancer, a young trainer still in his twenties, yet already number three man in the States and winner for the last two seasons of the Roosevelt Raceway's training premiership (last season from thirty-eight starts his horses recorded ten firsts, eighteen seconds and six thirds at that track) aims each winter to have his charges accomplish one hundred miles of fast brushes before they are shipped out to the opening night of Roosevelt's fifty-six day meeting in late April. By this date, members of Dancer's team other than two year olds twice weekly participate in five mile dashes at fifteen minute intervals going the first mile in three minutes ten seconds and coming the final journey in two minutes fourteen seconds, with the intermediate three heats being covered in times ranging from two minutes fifty seconds to two minutes twenty seconds, the horses being driven right out over the last two furlongs of each mile to develop in them the instinctive habit of maximum effort in the final dash for the wire. This effort is preceded by four miles at a jogging pace, the routine on other days of the week being similar to that already outlined for slow days at other training establishments. Fast work is first introduced in January as two heats twice weekly covered at a three minute rate or thereabouts, with further heats being added to the programme at the end of that month, at the end of February, and in mid March as outlined in the accompanying table. As their condition improves, Dancer works many of his older horses what he likes to refer to as "double headers" in which an initial mile is travelled in three minutes ten seconds followed immediately by a second mile in two minutes fifty seconds. Horses experiencing their first season in training are not shipped out with the main team in April but remain in work at Dancer's New Jersey farm until the middle of May so that by the time race day comes around they have received five or six months of hard training.

The labour situation being what it is in this country and New Zealand, makes the American method of training prohibitively expensive with even moderate numbers of horses in a team, since it requires at least one caretaker for each pair of horses if they are to be walked continuously between brushes and if the trainer is to work with or drive all the individuals in his team which is the most desirable state of affairs. However, that the system is successful under Australasian conditions of racing where races comprise single events over distances up to two miles; as opposed to the American arrangement where races consist of three and five heat events, each heat of a mile being run at half hour intervals, has been ably demonstrated by W. J. McKay in Melbourne and by the late F. J. Smith in New Zealand.

The McKay brothers, long recognised as without peer in the development of young horses because of their unparalleled success in restricted age races in Victoria and New South Wales, grade their stables into groups according to the speed which their horses have shown in an attempt to have all the horses that work together finish on terms even though being pushed right out. Three or four times a day following a brief preliminary, the horses are moved up a quiet mile, the greenest horses being sprinted only over the final
furlong of each mile when they are asked for their maximum speed. As their times for this distance improves the final sprint at the end of each heat is increased until even the two year olds are sprinting half miles in thirty-two seconds or better. The older horses as they improve begin to work over a mile and a half on a similar pattern, i.e., coming down the first half mile fairly steadily, increasing the speed over the second mile and coming the final mile at maximum speed. Because of the labour problem, the management of the McKay Stable is somewhat different to that of any in the United States of America. The horses are breakfasted in the morning and while eating are geared up if they are to be worked fast that day. On completion of their first heat, they are left to cool out under a light rug while the remainder of the string is worked, the drivers going round and round in groups in turn until all the horses have covered their allotted tasks when the whole team is then hosed down and dried out. That they have consistently produced such juvenile champions as Convivial, Explicit and Astrology and handled older horses of the calibre of Auburn Lad throughout their careers is indicative of the success of the McKay methods.

The late F. J. Smith, a Scotsman who spent much time with leading trainers in America, was by means of the heat system of training able to make his presence felt in no small way throughout his eighteen years in New Zealand. During that time, he turned out over five hundred winners becoming premier trainer after only two seasons in the Dominion, an honour which he was to hold on no less than six occasions. His imported stallion, Josedale Grattan, was trained by the brush system to win the 1941 New Zealand Cup in the then record time of four minutes fifteen seconds for the two mile journey and by this method Smith was able in 1946 to condition the tough old pacer so well that after some years at the stud he was able to go within a head of winning the Dominion’s premier event for a second time and two days later finish only a length away from the one and only Haughty, in the free-for-all. This sort of come back performance it must be admitted is rarely accomplished and casts a grave doubt on the old saying “stud horses don’t come back”.

It has been suggested by Mr. Forbes Carlile following study of the training methods at present popular with light harness enthusiasts throughout Australia and New Zealand that a system similar to that devised by the late Professor Cotton and Mr. Carlile might well bring about improvement in many horses. Since their methods have origin in physiological principles and have met with so much success in conditioning humans for aquatic and terrestrial sports whereas all other methods of training standard breeds have arisen purely from a system of trial and error over the years it would be of the greatest interest to see the results which could be obtained by their utilization in the equine sporting fields. Professor Cotton’s system is based on the discoveries of Hans Selye and his concepts of a general adaptation syndrome which envisages adaptation as being specific so that once a certain basic fitness has been obtained only repetition of the actual activity with concentrated effort can adapt nervous co-ordination and other bodily functions to the activity. The most modern thought recognises a limited amount of adaptation energy so that to utilize the maximum amount of this energy, factors which might drain part of this energy such as malnutrition, temperature extremes, illness or insufficient rest (over-training?), must be reduced to a minimum.

In the attainment of this state of complete adaptation Mr. Forbes Carlile utilizes a weekly cycle of four days hard work, three days easy work; a cycle which could be easily altered to the arrangement, which is at present common, of alternate fast and slow days throughout the week with Sunday being given over to rest. A system which trainers have found fits best into the smooth running of their stables. That the maximum amount of physiological adaptation might be achieved with the minimum risk of over-training, a judicious mixture of three types of training is utilized in the plan, these being basic work—the bread and butter of training—broken work, and efforts.

Basic work is carried out at a speed such that it can be maintained more or less indefinitely by a trained subject, or more precisely at a speed such that it does not raise the heart rate above twice that of the resting animal. This, in the human, would be a pulse rate less than 140 beats per minute or in the horse less than 90 beats per minute, the pulse rate being taken over the first ten seconds after completion of exercise.

Efforts involve training over the race distance at 85 to 95 per cent of the speed which it would be possible for the animal to achieve if asked for a maximum expenditure of energy, but it cannot be stressed too emphatically that, in training, a 100 per cent effort should be asked of the animal only on very rare occasions. The actual effort expended can be determined most scientifically by comparing the ratio of the heart rate over the first ten seconds after completing the race distance with the maximum heart rate.
of the subject over a similar time interval. Thus—and here human examples are quoted—if the pulse rate of the subject on completion of an effort is determined to be 25 beats for a ten second interval and the subject's maximum heart rate is known to be thirty beats for a similar time interval, then the subject has just completed an effort of 83 per cent of the maximum provided that the speed has been fairly constant over the whole journey. However, this technique requires much experience, especially with the horse, so that for practical purposes it is best to calculate roughly the expended effort and ensure that this is adhered to by training at all times with a stop watch and closely observing the horse's behaviour so that any signs of undue stress may be quickly noted and overtraining avoided. An 80 per cent effort can be roughly calculated by adding a tenth of the time for the race distance to the best time which the animal is capable of turning in over that distance. Thus, a horse capable of a mile in two minutes twelve seconds would achieve an 80 per cent effort by covering the distance in two minutes twenty-five seconds.

Broken work introduces the latest in training technique as used by the world's best runners and swimmers and comprises interval work in which training at 95 per cent effort is carried out for half a minute followed immediately by a few minutes training at basic speed to allow the subject to recover. This cycle being repeated for up to ten minutes.

To return to the training cycle; basic work as described would be carried out on the three days of the week set aside for slow work the period of training being an hour or a little more. The exact distance which would be covered in this time however, would have to be determined from heart rate recordings, although from purely empirical observation it would seem that the almost universal jogging routine of ten miles or so covered in about an hour would very closely approximate to what is classified as basic work. On the days set aside for hard training the tasks allotted would consist of two or more efforts and two to three periods of broken work blended with basic work. Naturally, every individual requires slightly different treatment so that no hard and fast rules can be laid down and some work of an experimental nature would have to be carried out before it was possible to say just how much standard bred in general would be able to take without over-training. This programme could then be varied to suit individuals. It may be safe to assume, however, that an hours continuous training would be sufficient for any one session. It has been recommended for athletes using this training system that two training periods of an hour each should be utilized each day, one in the morning and one in the afternoon, but the labour situation would make this almost impossible with harness horses except with the very smallest of strings. However, a period of basic work or an hour's walking could be accomplished each afternoon when it would be possible for one man to take out up to five horses for exercise. That this latter arrangement would prove satisfactory there seems little doubt, several New Zealand trainers having proved conclusively that a period of walking in the afternoons greatly benefits their horses not only

![Training Programme for a Maiden Pacer](image-url)

**TRAINING PROGRAMME FOR A MAIDEN PACER**

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<th>SLOW WORK</th>
<th>Distance</th>
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in fitness but also by relieving the boredom of stable life which is apparently the major contributing cause to such stable vices as wind sucking.

On the basis of this system therefore, a suitable training programme for a maiden pacer in hard work would be similar to that set out below, it being assumed that the horse would be competing in mile events—most races for this class of pacer being run over that distance in New South Wales—and aiming to have the horse able to run the mile in two minutes twelve seconds, a time which would win the majority of races for maidens and improvers in this State.

The morning's fast work in this programme can be seen to consist of a preliminary warming up period of basic work, two ten minute periods of broken work and two 80 per cent efforts over a mile. Between the first mile heat and the second period of broken work the horse is jogged two miles, this basic work acting as a recovery period. The morning's work is completed with a two mile walk or jog. The horses do not stop between or after efforts because scientific tests have proved that lactic acid, the cause of fatigue, is dissipated more rapidly and does less harm to muscles if the animal is kept moving.

Naturally, this level of work could not be attained immediately the standard-bred was placed into training, but, that it could be attained with patience and care there is little doubt. A green horse, or one freshly in from a spell would commence training with a preliminary period of basic work lasting six to eight weeks, the aim being to obtain a basic fitness on which to build the later more specific training. During the first part of this preliminary conditioning, only an hour a day would be spent in work but over the latter weeks, morning and afternoon training sessions would be the ideal. Fast work would be introduced into the training programme as a period of broken work and one effort over a mile preceded by two miles basic work and followed by sufficient jogging to make up the training period of an hour. To determine the time which the horse could run at this stage of his preparation, a trial of some sort would have to be run in which the horse was asked for maximum effort. As the horse became fitter a second period of broken work and later a further heat could be included in the programme and when the full distance was being covered on fast days the speed could be gradually increased—possibly at two-weekly intervals—until the horse was working to the programme already outlined.

An excellent indication of the animals' adaptation to the work being asked of it could be obtained by taking a daily reading of the resting pulse rate which should drop gradually as the animal's fitness improves. For the athlete, the time recommended for making this observation is each morning on waking, but that would be impracticable with the horse. However, if the pulse was taken at the same time each day—before the morning meal for instance—a fairly good idea should be obtained of how a horse is standing up to training, a rise of 10 or so beats per minute often indicating that a let up is necessary. Further indications of fitness could be obtained by periodic time trials which would show how the horse's speed was improving and give a further basis on which to increase the speed of efforts and sprints in broken work. Weekly weighings would also be a useful check on how a horse was progressing since a too rapid or prolonged drop in weight is indicative of excessive stress, but a set of scales for weighing horses would involve a very large financial outlay for one trainer.

To those familiar with training techniques, nine and a half miles at one session on a fast day may seem over much, but, since this distance is covered in sixty-one minutes, the actual average speed for that distance is less than that asked of the horse when jogging. Nor can the weekly total around ninety miles—assuming the horse walks five miles each afternoon—be regarded as too much when it is compared with the distances travelled at better average speeds by coaching horses or the thirty miles per day regularly travelled with upwards of fourteen stone on their backs. That this system could be successfully employed with benefit to the horse concerned is suggested by the methods of the late Willie Kerr, an Australian, who settled in New Zealand at the end of last century. Kerr's horses all did several laps of the track on fast mornings at a moderate speed, walked for a short while, then, following a quick preliminary, worked over two miles. That he was able to win every race that his charges started in for a period of ten years seems good evidence. Patience on the part of both owner and trainer would of course be necessary, since for a horse, never previously in work, it might take six months to reach the state of fitness such that it would be able to win at its first start, although doubtless animals which had been trained previously would come to hand more quickly. This fact alone might defeat attempts to introduce this scheme to trainers since patience, once the long suit of the racing fraternity, light harness and thoroughbred alike, now seems to be a rapidly vanishing trait in this time of high priced youngsters and numerous juvenile events.

Harold Logan, III,
There are many ways in which a student may supplement his income. After having tried many of these, including taking a census of garbage tins in the suburbs and cab-driving, I can definitely state that I do NOT recommend CANE-CUTTING.

The cane-cutting season is from about May to December or January. It is an extremely arduous job, made all the more so by the sub-tropical and tropical conditions in Queensland.

The cutters are a nomadic race, who work like blacks for six months of the year and spend the other six months in relaxation. Many of them vow “never again” at the end of the season, but financial stress forces them back again. They are an extremely tough and hard drinking lot, used to working hard and living hard.

There are two systems of working. In the southern areas, where the farms are small they have one or two-man “cuts”. The cane is carted on motor trucks from field to mill. In the north where the farms are larger, the men work in gangs of four to ten. The cane is carted on “tram” lines. Main trunk lines run from the mill, branch lines to the farms, and portable (but only just) rails are laid in the individual fields. Work in the south is easier and the rate per ton is less. In the north loading onto the trucks and shifting the rails makes it harder work. Good men in the south can cut and load about twelve tons per day per man. In the north the figures for the “gun” cutters, as they are called, is about ten tons per day. In my gang we were cutting eight and a half tons per day each. That earned each man about £6 per day. I soon decided that I never wanted to be in a gang which cut ten tons per day!

Each farmer has a barracks in which the gang is accommodated. These are corrugated-iron or wooden huts with concrete floors. There is a mess room with a wood fuel cooking-range, bedrooms, a cold shower room and the usual offices.

The farmer is bound to supply this accommodation plus kerosene (for lamps), cutlery, crockery and timber for the stove. The farmer also supplies cane-cutting knives and files.

The leader of the gang (or “ganger”) is responsible for organising the work in the field and settling the price per ton with the farmer. The price may vary under certain circumstances. A minimum award rate is set, but if the work is made more difficult by the presence of weeds, stones, sloping ground, or cane which is lying down, the price may be raised.

The typical day starts for the cook (we took it in turns) at 4.15 a.m. He lights the fire, cooks the breakfast, and calls the hands to breakfast at 5 a.m. Works starts at 5.45 a.m. just before dawn breaks.

The first job is loading the cane that has been cut the day before. The loading is the hardest part. This must be done in the coolest part of the day and is finished by 9.30 a.m. when half an hour’s “smoko” is taken. Large quantities of strong black tea is drunk and enormous sandwiches are eaten.

The work is shared equally. Slow workers in a gang are not tolerated.

The trucks are lined up on the railways, the distance between each being judged by the amount of cane required to fill it. Each man loads a truck by himself. The slow loaders have to drive themselves to keep up!

A similar system pertains to the cutting. Each man takes one “drill”. The whole gang moves up the field in a staggered formation so that they do not get in each others way.

The last job of the day is to cut off the tops of the plants, leaving just the sugar-containing cane to be loaded.

Before cutting, the cane is burnt. This removes the dead leaves, under-growth, and any snakes which happen to be in the field.

At dusk the weary cutters make their way back to the barracks. The Queensland nights are quite chilly to those accustomed to the heat of the day, and the cold shower which must be taken is not at all pleasant. One is literally covered with a mixture of soot and molasses. It is quite difficult to wash off.

After the shower, there is wood to be chopped for the fire, cooking, eating and washing up. The rest of the day is entirely free! It is a hard job.

H. C. III.
"The English," an Arab chief once remarked to Lord Mottistone, "make pets of their dogs and servants of their horses. We do exactly the opposite."

As a matter of fact the distinction is a fine one, especially in war-time, and it would be hard to judge fairly between the two attitudes. Indeed it could be a matter of small concern to any one if we made pets of our servants and horses of our dogs. The Nandi in East Africa make gods of their cows, if it comes to that. But no one seems to make anything of their sheep but cutlets.

This is a gross injustice. Besides cutlets, the sheep gives us winter underclothes, Harris tweed and ointment; no horse can claim half as much, and, except for the pious St. Bernards that distribute alcohol in the Swiss Alps, no dog. Compared with the ridiculous whinny with which Dobbin greets his master, or the terrifying shout which is Fido's only means of expression, the voice of the sheep is bland and friendly. His face is not half as stupid as the face of a bloodhound or a Saluki; his kick is milder and less freely given than that of a racehorse; his habits are more docile, his customs nicer than those of any domestic animal, except perhaps the tortoise. But precious little thanks he gets.

The truth is that there has long been a conspiracy to cry up horses and dogs at the expense of sheep. See how callously our proverbs treat them — "You might as well be hanged for a sheep as a lamb"; what, it seems to say, is a sheep more or less? "Give a dog a bad name," and you stand revealed as a bounder; yet you can give a sheep as bad a name as you like and no one will turn a hair. "Love me, love my sheep," brings no sentimental response; you may love a man and dislike his sheep intensely, and nobody will brand you disloyal.

You get this tendency throughout our national literature. In every well-established nursery in the realm, Nanna and Black Bess and Quoodle and Brown Jack and Harry the Horse are familiar names; and so for that matter are Ferdinand the Bull and Peter Rabbit and Mrs. Bruin (a bear, forsooth) and a score of other zoological heroes. Wordsworth even hymned the
snake and the Lesser Celandine, the one as revolt­
ing as the other is insipid. Rin-Tin-Tin and
Tom Mix's steed, whose ridiculous name escapes
me for the moment, had in their day a following
as faithful as Rudolf Valentino's. Yet, almost
alone among the animal kingdom, the sheep is
ignored. An occasional lamb finds his way in
(though, as in the example of Mary's celebrated
pet, he generally turns out to be a stooge); but his
adult brethren are rigidly excluded. The pen is
empty beside the stall of the Maltese Cat; and
that resounding couplet —

Long you may search and late, in castle and croft
and keep
For a love that is half so great as the love of a
Man for a Sheep—
For a love that is half so great as the love of a
Man for a Sheep — is not by Kipling at all,
but was composed five minutes ago as an illustra-
tion of what could be done.

By the same token, the Poet Laureate has yet
to write a companion piece to Right Roval which
shall do justice to this other fourfooted friend
of man. Should it ever occur to him to do so he
may care to make use of the following lines,
which he can have for nothing:—

Five springs my mother lived to see
Before she had a lamb like me.
I nigh killed my poor old dam;
I was a most contrary lamb.
I always hid from farmer's dippers;
I wriggled under shearer's clippers;
I roamed unchecked on hill and dale;
I wouldn't let them dock my tail.

I strayed upon the turnpike road;
I fell in snowdrifts when it snowed.
I reckon I was far the worst
From Biddenden to Staplehurst.
The shepherds swore—"You pesky lamb!
"I'll give you socks!"
"By jove!"
"By damn!"
"Why drat 'ee!"
"Dange 'ee!"
"Rot 'ee!"
"My word!"

My wastrel ways become a byword.
Nothing so red-blooded has been written about
a sheep up till now, and it could do their cause
a power of good. "Gentle as a lamb" is a fair
comment — on average lambs; but then a colt
or a puppy or a young armadillo is gentle in its
way. An adult male sheep can show as much
fire as anyone.

Revenons a nos moutons, then — there is a
slogan for our bards and our nature-novelists
that they cannot with justice ignore. Let them
league together to honour the beast whose coat,
rather than vulgar horsehair, is preferred as a
seat for the Lord Chancellor of England. Let the
magnates of the film world devise a new brand
of Western, not a horse-opera but a sheep-opera.
(It could be the making of the Australian film
industry.) What if so fundamental a change of
outlook brings on sleepless nights? There is a
certain cure: to count horses — dogs? — ocelots?
Not on your life. To count sheep.

---Purloined from "Punch."

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**Vacation Daze**

A student from the city spending his vacation
working on a farm was discovered one morning
stuffing a small, squealing pig into a bucket, and
muttering, "It's a miracle!"

"What are you trying to do?" demanded the
farmer. "And what's a miracle?"

"I can't figure it out," said the city fellow.
"This pig just drank two buckets of milk, and
I put him into the bucket and he doesn't even
half fill it!"

Preventive Medicine — when the first dose
stops you from taking any more.

* * *

**WANTED:** Home for a three month old
puppy. House trained except when very happy.

* * *

**FOR SALE.** Twin beds, one as new.
Twenty-three freshers arrived to join the
eleven old-hands at First Year, but at the end
of first term we lost Indian veterinary graduate
Dave Deveraj to Second Year, and one girl left
leaving a total of thirty-two, including five girls.

Hawkesbury graduate Ron Wells has been
active in Faculty football, and played in the Vet.
basketball team, which was captained again by
Lloyd Beeby. Lloyd played Intervarsity basket­
ball in Hobart. Ashley Stevens and George
Podgwaite also played for the Faculty. Lloyd, Ron, Margot and Judy Todd joined the vet.
swimming team, and Margot’s display of fancy
dives was a highlight of the evening. Faculty
teams in women’s hockey and basketball were
largely composed of First Years and the two
matches played seemed to provide many more
laughs for the spectators than points for the team.

The year has been characterized by a distinct
lack of support in the veterinary social activities
which, it is to be hoped, will be rectified, as
there was a very poor display of Freshers at both
dances and dinner — although I feel that a
certain member was rather relieved to know
that so few of the Year were present at the ball.

Apart from lectures, a few of us felt we could
afford to play hooky for a few days at Easter and
worked at the Show. In second term, Zoology
excursions filled up a number of Saturdays, and
we also spent an afternoon at the Museum and
another at the Zoo. Commem. Day saw Betty
Mutton, Satchmoo, and some members of the
“Bones Band” adding to the noise and general
confusion on the float.

In conclusion, we wish other years luck in the
November hurdles and hope that we also may
clear them, to surmount the greater ones ahead.

SECOND YEAR NOTES

Only fourteen New South Welshmen survived
the fire and smoke of November, 1954, to reach
Second year. In March this group, together with
the ten casualties from last years’ Vet. II were
joined by nine doughty Kiwis, three Victorians,
one Tasmanian, one South Australian, a guy
from U.S.A. and 2 others making a grand total
of forty-one and every one a male. To all inter-
state and overseas visitors a very hearty welcome
is extended.

Because some of our number were late home
from the extended holiday with Her Majesty’s
Forces, things didn’t start until very late in
March. Mr. Webb and Dr. Humphries, however,
soon made up for that and it was not long before
pearls of wisdom were being cast before us at an
alarming rate. Needless to say, our only serious complaint has been the abolition of classes in practical genetics — a field in which (rumour has it) many of our number have starred.

Three groups, each spent a fortnight’s “vacation” at the University farm, and if the awe inspiring mound of dead marines is any indication, a jolly fine show was had by all.

In the sporting field Vet. II was to the fore. Competing in University teams were, Steel (R.G.) and Stewart—Rugby Union 3rd grade; Rothwell and Morriss shining at Athletics, the first-mentioned filling the rank of Captain of the University Rep. team; Hard in the 1st Soccer XI; and Gilbo and King — Rules Senior grade. Priestley, Powell and Cartridge competed in the Inter-collegiate Rifle Shoot. Rothwell, King and Hard represented the University in the Inter-varsity Tournament. Turning to Interfaculty sport we find five of our number playing in the strong (and definitely unlucky) Vet. Science Rugby XV, namely Chevis, Steel (R.G.), Bryden, Stewart and Powell. In the “not so strong” basketball team were Trevena, Drager, O’Grady and Anderson while Hard competed in the Faculty Hockey.

Once again, this year, some complaint must be made concerning the attendances at the Faculty’s Social functions. The Informal was reasonably well patronised but the number of Second Year Vets. at the Dinner and Formal was not satisfactory. Fourth and fifth year students turn out in force, so why not us? Where there’s a will there’s a way, and where there’s grog there should be the boys of Vet. II. So what about a better response next year!

Finally our very best wishes to Fifth year, as they face the last barrier. We wish them every success in the years to come. Good luck — to everyone in the November days ahead.

THIRD YEAR NOTES

Our numbers have dwindled sadly from those of Second Year and only 32 students grace Third Year. On the whole these are an unconventional lot, particularly in their rather novel fashion of selecting year reps. Our number was swollen by the additions of Mr. Ismail, who stayed to show us the ropes, and by Mr. Chandler who has turned up again from somewhere — the tropics we believe this time. He became attached during his travels; drives a taxi on the week-ends and is noted for his patronage of the Union and his rather revolutionary cat feeding methods — poor pussy.

The lone female of the year seems to suffer from deafness spells, of a most accommodating type, thus allowing full use of certain expressive male terms. Betty, we fear, is a rather fickle girl, but to keep 31 males happy I suppose she must
Brian Healy is noted for his lunch-time excursions in the direction of P.A.; it is rumoured that his downfall lurks in the near future.

Brian Goulden returned from New Zealand engaged — congratulations Gouldie; fortunately the lucky girl is not over here or it might be one of those past tense affairs.

We were well represented at each of the social functions. One of our members let the year down by losing the boat race to Second Year at the Dinner. However, he made up for it afterwards by helping to fold the tablecloths. Notable was the presence of mind of the little woman cleaning up, to always keep on the other side of the table (hard luck, Dickie boy).

Many tales are circulated of New Zealander’s vivid week-end doings. One can only marvel that they are still with us. The Australian members of the year all sincerely hope an Australian horse wins the Melbourne Cup — another burst of New Zealand crowing would be too much; we are all starting to develop inferiority complexes after last year’s cup and this year’s football.

Sporting activities are numerous. In the Faculty football team Hopkirk, Hotson, Hopkirk’s boot, Matthews, Van Schaik, Phillis, Williamson, Hayward, Harvey and Borland were well to the fore. Hopkirk played for University Ist’s, — nice going, Dick. Peter Muecke starred for University Ist’s Australian Rules team where we were also represented by Charlie Watson and Tim McManus. Tim also played Inter-faculty golf but is rather reserved about the scores. Pearce, Hyllseth (goalie), Van Schaik, Harvey and Marshall played in the hockey team; Harry Pearce captained the side and was chosen to play for the University 1st grade team, — very nice.

Bjorn Hyllseth was our loan representative in the Inter-Faculty Soccer team; he skied for the University too, where he took out the champion-vivid week-end doings. One can only marvel that ships. Although unofficial as yet, we have heard that he will receive a blue for his efforts; congratulations Bjorn.

Looking back through the list we see it is a pretty impressive array; the year is proud of its muscle-men.

Finally, with the annual cycle of events threatening, Third Year wishes the rest “Good Luck”.

**FOURTH YEAR NOTES**

Having been hounded to do these “haemorrhagic” notes and not being game to show my face until I do so; I forthwith present my impressions of fourth year and all that therein is!

We are fortunate in having such charming, attractive, intelligent girls, devoted to their work and so appreciated by the handsome hardworking men in the year.
Some of these men have distinguished themselves in many fields — for example, Ian with his blue in Australian rules and medicine, Fred, Dave, Ian (II) and Royce in faculty Rugby also Don and Royce in the rowing.

The S.U.V.S. draws most of its executive from our year, including Dick our President supported by John a very able and willing secretary, who has even been known on one occasion to offer himself as a handkerchief to our eminent surgeon, Mr. Larsen, during a difficult operation. Royce our efficient treasurer and Anne as womens rep.

The society functions this year have all been a great success and our appreciation goes to the various committees for their hard work and doggedness in making them such.

Mr. Larsen has worked unceasingly to make this year a very interesting and informative one and we assure him that his efforts have not been in vain. We also hope our surgery is successful!

Mr. Steel, our boyish Medicine lecturer, achieved notoriety this year with his electrocardiograms of horses and is now the most sought after man in the racing world.

Mr. Bain (our authority on wines) deserted us for most of the year to disappear into the wilds of Thailand but we believe he will soon be back, complete with exam paper which he set 'neath a tropical moon and the palm trees swaying in a gentle breeze.

Mr. Gordon has kept us guessing all year just as to how many more worms he can possibly conjure up. He often goes bush, we think to find a few more!

His timely termly tests terrifies only the university apparently.

John is now working happily since he brought his fiancee over from N.Z. in first term, they won't disclose a wedding date but good luck John and Betty.

Bruce, also engaged last year, has realized the perils of what can happen when his watch is ten minutes fast and has again relapsed into arriving to lectures five minutes past the hour.

The reason that the dog is man's best friend is that he doesn't borrow money.

One of the greatest labour saving devices of to-day is to-morrow.

The only reason some people become lost in thought is that it is unfamiliar territory.

Nothing is impossible to the man who does not have to do it for himself.

Any couple with 5 or 6 kids is happier than a couple with 5 or 6 thousand pounds. They don't keep on straining for more.
BARTON, B. D.: The original wild man of the West, although it is claimed that the rigours of the course or the charms of a certain young lady have tamed him. Although a New South Welshman, he put his Victorian comrades to shame with his high flying displays in the casting team. Has lived dangerously at times but has now become a very solid worker (reputed to have never let one single clue out). “Boots” once sported an aerial mycelium on the upper lip but claimed it impeded his sense of smell, thus hindering his changes in Materia Medica. Recently purchased a set of casting gear so a bright future with large animals can be predicted — perhaps “back ‘ome” in Wellington.

BOGDANOVIC, Agnija: Agnija arrived here in 1952 from Latvia, having put in some useful ground work at Hanover Veterinary School en route. We admire her ability in tackling so successfully a new country, a new language and a new Vet. School, hitting the high spots academically in parasites inter alia. Her aptitude for fine needlework ensures her success in the field of surgery. With a hobby of training and racing Persian cats, Agnija has never had a losing day. Future — dairy practice, but beware — there may be a large Alsatian on guard!

COOPER, K. J. P.: Pat arrived in 1951 from Ashburton, after being deported from Canterbury University, and took up official residence in Paul’s. He soon acquired some bad habits — viz. (1) Australian beer, (2) that famous Australian expression “Got a roll mate?”, (3) arriving at lectures with his old school tie as a belt, (4) wearing immaculately ironed shirts. Some of his more distinguished achievements are representing the Faculty in football, maintaining a batting average of two, excelling in Prac. Surgery by crawling between the hind legs of a horse in motion and on getting through — “mind you, I deserved to pass, hell I worked hard!” Has got his share of credits and distinctions, and a highly commended for taking up double harness recently. We wish Pat and Val a happy future in New Zealand club practice.

COLE, P. S.: “Hot Barrel” came to us from Taranaki, N.Z., with “curly goldy locks” (his hair — not his girl!) and a fatalistic attitude to the course (see above). Pat went to Wesley and there won great respect as a worker and dance organiser; also for his ability to quieten freshers and to receive telephone calls from a pretty North Shore nurse. In Fourth Year his golden voice over the telephone attracted many a troubled lady to the clinic. Pat has always expressed strong opinions on what was a fair thing as regards lectures, and other people raising the standard at examinations. By sheer hard work has often pushed himself to the front in Surgery — “Are you alright Jack? — Sorry, Pat”. Being a true gentleman could not fail in private practice but unfortunately has to serve in club practice in New Zealand for a time.
DAVIDSON, G. N.: From Geelong College and Melbourne, Geoff came to Sydney to bolster up local Australian Rules. Displayed considerable talent — best and fairest on the field and fairly good afterwards. Flew high to be awarded best player in the Sydney competition in 1953 and best player at Intervarsity the same year. Captain of the Rules team and University Blue to boot (besides the ball). When not training has been seen at lectures, usually late and sporting an indolent grin (sample enclosed). Just to show he was not biased about Rules, he represented Andrews in football — and also in cricket. Studies interrupted early by shortness of breath but definitely fit now for the final burst. Looking forward to large animal competition as he is scrumming down with a relative in private practice in Victoria.

DONALD, A. D.: Despite his albino characteristics, Alan hails from Fiji, hence the label “Suva”. Schooled at Scots, he started in 1951 and has had an uninterrupted course punctuated with D’s and credits. Proved an efficient and conscientious Secretary of the S.U.V.S. in 1954. Rowed in the 1955 Faculty crew and helped coach same. A keen supporter of the Doab Institute, he firmly believes in a few beers before Bacteriology exams. Other interests include long suburban train journeys catching up on sleep and supporting any Faculty “show” that happens to be on. His happy attitude to everything should greatly help him in his future with the Colonial Service, where a very successful career is predicted.

DUNLOP, R. J.: Bob is of local origin, joining the Faculty from the Cranbrook School. His pose as one of the more quieter members of the year is rather deceptive, and we believe that beneath his non-committal grin lie untold depths. Takes an active part in all sports, having proved himself a stalwart on the football field for the Faculty and for Wesley. Captained the unsuccessful Final Year cricket team which played the staff, and dropped Rod Ryan’s hat-trick for 8 beers. Always an enthusiast at Social functions, after which he has sometimes been known to go to sleep in strange places. He always has done well in November and his future interests lie in large animal practice. If reliability and constant hard work are of any help, he will succeed without any difficulty.

FALCONER, A. M.: Murray is another Kiwi from Dunedin. Has led a quite academic life, specializing in Biochemistry. He stepped out this year by acquiring a mobile matchbox in the form of a vintage Austin. Has proved his ability as a driver by attempting to navigate under the back of a military truck — for which the car bears the scars, Future — club practice,
HARRIS, G. H.: Heath, another staunch En Zedder, arrived from the wild lands near Auckland to begin his Vet. course in 1952 — after an initial taming period at Auckland University College. With a variety of activities besides drinking, wearing polo-neck sweaters and the few odd minutes of studying, he has represented the Faculty in rowing and football. With the company of various P.A. girls he has been a regular attender of the Faculty’s social evenings, never failing to loudly voice his favourite haka. Claims nothing beats the Aussie beer but his future lies in N.Z. club practice.

HUNGERFORD, P. R.: This 3-G man came down from the wild town of Barabba to seek a reclusive life in Paul’s. During Third Year he developed the habit of quietly slumbering through lectures and during the last two years his skill in this field has considerably increased. Early he showed promise as a lover and a drinker. Came Fourth Year and the LOVER really crashed into big time. His skill with the glass and with the ladies became known far and wide. Despite these activities he still managed to leave behind him an impressive record of Credits and Distinctions. Peter has represented the University, Paul’s and Faculty at athletics and shooting. We would have liked to have seen him win just one hurdles race before he left us. However, he is an exceptionally good shot. His stories of Intervarsity Carnivals are fabulous. Claims initials do not matter, and a bright future in large animal practice seems assured.

HYNE, R. H. J.: One of the two grand old men of the year and now finishing with a late run. Having spiked his guns in the R.A.A.F. he fared forth from Victoria to see what was doing in Sydney. Reliable, if somewhat nasal source of comment on Faculty doings. Ron has appeared on odd committees and has been a Vice-President. Is attached to a pipe, Mosman people, Fisher (extension 20), a Wolseley, and has bright prospects ahead of him in dairy cattle. Distinguished himself before the Board of Examiners by catching Prof. Carne in the big cricket match.

JONES, D. K.: Dave came to Sydney after one year at Armidale University. Extra-curricular activities during 2nd Year almost meant the end of his veterinary career, but he has done well in the latter years. He is the owner of a “fabulous beermobile” which is an essential part of any student social activity. His pose as one of the more quiet members of the year is shattered by attendance at any vet. function. Rumoured that Dave spends his time moving kegs to their (and his) appointed place, unless he is moving to the nearest pub. Believes there is more in football than football and seems to do pretty well in both (Rel: Vet. v. Law—1951—). Future: large animal field unless, judging by his extra-mural work, tick worry does not get him first.
KYLE, M. G. A.: Max, alias “Mr. Big,” is another Pig Islander from Rocky Basin, via Canterbury College. He has been a regular supporter of Vet “do’s” (and don’ts) and has made a grand contribution to Australian culture in introducing Stud Poker (see Hoyle—1952—). Is renowned as a teller of tall stories and possesses unlimited strength in his shoulders (Pers. Comm.). Interests include Doab’s Institute, the Long Bar, Ernie’s, Grose Farm, et al. Entered hospital with appendicitis and liked it so much he fell off a motor bike at Fuller’s Bridge to get back in. Immediate future: club practice.

LARSEN, R. F. One of the Faculty’s American importations from the “49th State” (Hawaii). There is some doubt as to (a) why Rick left U.S.A. and (b) how he got into this country—however, Rick remains a strong patriot and jibes at “things American” will generally catch a fish. An inveterate notetaker, he has had a smooth passage through the course which was uninterrupted by marriage in 1951. Extra-curricular activities include basketball, swimming and whistling at stubborn racehorses. Largely responsible for the organization of the Annual Dinner in 1954. A bright future is ahead in small animal practice.

MUNDAY, B. L.: Barry hails from the Apple Isle. Throughout the course he has straddled November hurdles with monotonous regularity. Has represented the Faculty in Basketball and Athletics, and also Andrews in Athletics. His extra-curricular activities are not well known but he has demonstrated his ability to handle motor-scooters in Sydney’s traffic—even to the extent of riding against the traffic outside Police Headquarters. His immediate future is with the Department in Tasmania, after which private practice is his goal.

POTTER, Susan E.: Sue came to us from Freンsham, via England and the Continent. Since then she has invaded the Dachshund world and has developed a keen interest in the heart capacities of racehorses. These interests have been rewarding on quite a few occasions. Claims to be an authority on soundness and scores of obscure mechanical treatments for horse’s limbs. Sue has been observed dashing through red lights to gain an introduction to Squad 21, and developing speeds quite above prescribed limits in busy Sydney streets. Future—horses, dogs, et al, and probably another world trip.
REEFS, P. B. Peter comes from the land of A.B.C. (apples, beer and Clostridia). Has been an energetic worker on social committees, and filled the goal with great skill for the Vet. Hockey team. "Nullaboor" is very attached to a bike and has given Parramatta Road bus drivers palpitations and S. T. segment shifts at times. A firm believer in early morning swimming as the best pre-exam tonic, and likewise repairs internal dehydration afterwards. A keen yachtsman in Tasmania with firm ideas on the subject. Achieved notoriety in the Faculty crew by periodically stroking the boat from the No. 3 seat. Future — Tasmanian Department.

ROWLAND, E. J. Ted came to us in Second Year after First Year at Melbourne and a distinguished course at Dookie, and took up residence at Andrews. Despite the fact that "Spiker" did most of his work at "Ernie's" he still managed to pass each year and keep a constant grin on his face. He maintains that if one plans things right there is never any need to hurry. He represented the University at Aussie Rules and made a name for himself in Hobart as the "Greatest Stalker of Mutton Birds" ever to enter the Apple Isle. He is also an oarsman of some class having been prominent in the St. Andrew's crew for some years, Year Rep. in final year and will be remembered for his After Dinner stories about a nigger in the woodpile. His usual granite calm was ruffled only after election as Year Rep. and when someone mentioned breakfast during a football match in Hobart. Only diseases suffered during the course were Remittent Cascadiasis, and periodic chronic Tooth's Disease. Future — Victorian Department, then running the property and/or large animal practice.

ROBINSON, R. A.: Ash left Christchurch for the Vet. School in 1952 in such a hurry that he forgot a comb. Has negotiated November with effortless ease and has collected his share of Credits and Distinctions. Was Treasurer of the Society in 1954 and had to be restrained from investing the funds on his weekly visits to the racecourse. Was year Rep. in 1953. Claims to be an expert on "Aseptic Technique" on Prac. Surgery days, advising others to use the "non-touch technique" — "don't touch anything at all, and I will do it," he was once heard to say on this subject. Immediate future is with Club Practice in Kiwi land, after which he hopes to establish himself in the field of research.

RYAN, R. K.: Rod has proved one of the bright sparks of the course in more ways than one. He commenced after a period of teaching — no doubt parents felt the risks involved in his teaching (and betting) activities were considerable. He has regularly got more than his share of Credits and Distinctions and was Year Rep. in 1952 and President of the Society in 1954. Represented the Faculty in football, the mighty Ryan-Weaver combination being feared by all the opposition. In addition, he filled the space between bow and No. 3 in the 1955 Vet. crew. Outside interests include billiards, basketball, hockey, singing (so he calls it), sword-dancing and driving trotters. In the latter activity, he might pay more attention to the pharmacological aspects of the sport. Believes the shortest way to Blacktown is to catch a train to Liverpool, and so apparently his fellow students are not the only ones that back the wrong horses on his advice. Future — uncertain at the moment, but sure to be bound up with horses and fillies.
SLACK-SMITH, J.: Jan, better known and respected as "Slacker" comes from the wild western town of Walgett and he has resided at Andrews intermittently through the course. Has strolled casually through the course, helped by regular refueling with the good amber fluid (Stop Press - he has recently switched to higher octane stuff and claims better performance). Believes that note-taking is for novices, not intellectuals. Claims that riding boots and wide-brimmed hats are essential for cricket matches. Engineroom-boy of the Faculty crew in 1955. Future - uncertain but sure to be successful - when he gets around to it, that is!

SMITH, D. D.: Almost every day, usually interrupting the first or second lectures, Dave arrived from Lindfield after shaking off the bandicoots, Ixodes holocyclus and a monstrous Collie named Laurie - whom several members of the class have met personally and rather suddenly. Dave, formerly known as C.C., has very ably represented the Faculty on the football field, especially in his ability to score tries, and has equally well represented himself in the game of chasing fillies. Dave's future interests lie mainly in large animals, particularly bovines, and it can be guaranteed that he will make a success of whatever he does.

TYNAN, D. A.: Don hails from the really sunny south. An inhabitant of St. John's College, where he made his name as an interior decorator. He collected a Blue for bull shooting and has top scored for the Vet, rifle team - this may have some future application in private practice. Strangely attracted to Pharmacy and Materia Medica, but it is suspected that outside influences are at work. Will hold his own in any argument - from the cruelty of the examination system to the virtues of philosophy. A successful future is predicted in whatever field Don decides to brighten with his presence.

WEAVER, R. N.: An old-boy of Hurlstone Agricultural College, Bob hails from the north-west, where he is reputed to have played some football - probably true, as he captained the Vet, XV last year. Coxed the Vet crew in 1955, and strongly denies reports that it was a paddle steamer. Has a periodic habit of expressing uninhibited views on en zedders, but is big enough to keep out of trouble. Despite a setback in first year, hard, conscientious work has finally brought the goal within reach - we hope the reward is fitting. Finds his present address at Callan Park rather embarrassing, so looks like heading back to the sheep country.
WILHELM, Barbara L.: Barbara came up from Melbourne to seek refuge at the Women's College. Like all Vet. girls she is a good supporter of every Faculty social and sporting fixture, and has even competed in the pair oar race on University Regatta days. In addition, she "figured" in a last wicket stand in the big cricket match, just to show her "form." The pleasing phenotype she possesses resulted in her winning the coveted sash of "Champion Female" at the 1954 Vet. Formal. Eminent Zootechnicians were impressed by her conformation, and Mr. Webb by her anatomy — both qualities, it has been reported, were the result of Dr. Franklin's special rations for show animals. Barbara has had considerable success with her prize Corgis, despite one of them sampling M. gastocnemius belonging to a member of Her Majesty's guards. Future? Uncertain, but probably Corgis, cats and cattle kings.

WILLIAMS, R. C.: "The Kid" from Ulladulla was shipped to the Vet. School in 1951. Bob, during the first three years of the course, was running neck and neck with the whips, but was temporarily checked by the Surgery guns. Proved an efficient Year Rep. in 1954. Extracurricular activities include frequent week-end visits to Canberra to foster international relations, and a trip to New Guinea, where "Master Bob" acquired an expert knowledge of pidgin and the foster-mothering of piglets. His happy countenance seems destined for success, though his future is a little uncertain at present. Large animal practice, however, will probably be his forte.

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RIVERINA STUD MEALS

Ninety Per Cent. of the prize-winning Merino Breeders in last year's Sheep Show, 1954, are now using Riverina Stud Meals exclusively in the feeding of their teams for this year's Sheep Show and Sales. These again include such famous Studs as — Merryville, Boonoke, Eschol and many others.

STARTER MEAL — STANDARD MEAL — FINISHER MEAL

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