The Student 1967



Registered at G.P.O., Adelaide, for transmission by post as a periodical.

Agricultural College

MINISTERIAL HEAD: THE HON. MINISTER OF AGRICULTURE (G. A. BYWATERS, M.P.)

ADVISORY COUNCIL:

Sir Richard Hawker, Professor C. M. Donald, Dr. S. I. Evans, Mr. E. Mander Jones, Mr. A. G. Strickland, Mr. T. W. Hardy, Mr. J. W. Reddin

ADMINISTRATIVE STAFF:

Principal:

R. I. HERRIOT, B.Ag.Sc.

Vice-Principal:

M. R. KRAUSE, M.Sc. (Agron.), B.Ag.Sc., R.D.A.

Housemaster:

Secretary/Accountant:

J. V. FOOT, J.P.

A. T. FOOTER, Dip.Acct. (S.A.I.T.)

desi

mile

fron

and

sam

such

cons

for t

syntl

it th

this when

facts

OFFICE STAFF:

S. R. Jones R. H. Back B. W. Attwood Miss S. J. Perry Miss C. B. Hobbs

INSTRUCTIONAL STAFF:

Agriculture:

Senior Lecturer in Agriculture: M. V. BURTON, M.Ag.Sc. Farm Superintendent: R. S. NORTON, R.D.A.
Assistant Farm Superintendent: Vacant

Animal Husbandry:

Senior Lecturer in Animal Husbandry: D. TAPLIN, B.Ag.Sc. Lecturer in Veterinary Science: F. B. HARDY, M.R.C.V.S. Research Officer Sheep and Wool Biology: S. AMIRTHALINGAM, M.V.Sc. Instructor in Sheep Husbandry: C. W. HOOPER, R.D.A. Field Officer:

Instructor in Dairying: A. H. CHARTIER, R.D.D.
Assistant Instructor in Dairying: I. R. WATT, R.D.A.
Lecturer in Animal Husbandry (Poultry): T. A. LUCKHURST, B.Sc.
Senior Laboratory Technician: R. E. BRADY
Technical Officer: P. J. SHUFF

Economics:

Senior Lecturer in Farm Management: K. B. LESKE, B.Ag.Sc.

Agricultural Engineering:

Senior Lecturer in Agricultural Engineering: G. P. ATKINS, B.E.(Hons.). Instructor in Agricultural Engineering: J. R. BURRELL, A.M.I.E.T. Workshop Superintendent and Instructor in Agricultural Engineering: D. SUTCLIFFE, A.M.I.A.A.E., A.M.I.M.I. (Eng.)

Horticulture:

Horticulturalist: J. A. GURSANSKY, R.D.A. Assistant Horticulturalist: G. S. KNIGHTS, R.H.G., N.C.H.

Plant Breeding:

Plant Breeder: M. R. KRAUSE, M.Sc. (Agron.), B.Ag.Sc., R.D.A. Assistant Plant Breeder: G. J. HOLLAMBY, B.Ag.Sc. Pure Seed Officer: R. J. FORD, R.D.A.

Science:

Senior Lecturer in Chemistry: D. J. PARRY, B.Ag.Sc. Oenologist: R. J. BAKER, R.D.Oen. Agricultural Biologist: P. C. O'BRIEN, B.Ag.Sc. Lecturer in Biochemistry: C. WEEKS, B.Ag.Sc., Dip.Ed. Technical Assistant: Vacant

Visiting Instructors in Woolclassing:

C. SMITH M. ABEL



Editorial

An average member of the population driving through the country on a pleasant day, usually gains the impression that country life leaves little to be desired.

The general scene of growing crops or grazing stock seems productive and peaceful, yet has it ever occurred to him that some of the contemporary means

of land utilization may be incredibly inefficient?

The sheep is a prime example for consideration. It has its place in the prime lamb industry, and in wool growing, yet in the poorer pastoral country, of which Australia has plenty, it is stocked at the rate of 20-50 sheep per square mile. Its grazing habits do not allow it to utilise all this area if watering points are more than 9 miles apart in every direction, as sheep only graze 4-4½ miles from water.

The dairy cow devours a pasture using 75% of the available protein for herself, and the rest is deposited in the milk. Rice grain is hulled and polished,

and this process causes much of the protein value to be lost.

More examples could be given, yet these are enough for conjecture. The same trite question is always raised, namely—"So what?" or "What can be done?"

Many ideas have been propounded, some of which have been developed, such as synthetic food manufactured from pasture, thus deleting the primary consumer, i.e. the dairy cow, and the loss that goes with her. Perhaps in the

poorer dairying areas, this could be a better proposition.

Other ideas have been put forward and rejected because they are revolutionary, yet on the surface seem absurd. The breeding of a meat type kangaroo for use in the poorer pastoral areas has been scoffed at. Many people have been erroneously informed that kangaroo meat is fit only for pet meat. The kangaroo can consume many species of plant that a sheep will not touch, and being indigenous to the country, it would be more suited to the area.

There is no doubt that the wool industry will decrease due to the ingress of synthetics. The much prosecuted wombat—the plague of many dry areas where

it thrives could perhaps be used in the same way.

With the population increasing in a geometric ratio, we must strive to keep apace with it by the production of more primary produce. To be able to perform this enormous task, education of individuals in agriculture is essential, and this is where graduates and diplomats in agriculture can use their knowledge of these facts (of which they must be aware) to educate others.

MAGAZINE COMMITTEE

MANAGER: R. S. NORTON EDITORS: N. P. NEWLAND

R. E. HOLLOWAY

SUB-EDITORS: D. E. MIEGEL

R. K. TURNBULL

G. T. BROOKMAN

1061 1062 1063

> 1071 1072

One of the greatest advances at Roseworthy in the past years was the raising of the standard of the material presented to students, and the increasing status of the Roseworthy Diploma of Agriculture, the College Principal, Mr. R. I. Herriot, said at the Graduation Day on March 3. The status of the diploma as a basis for the Secondary Teachers' Certificate was doubled at the end of last year, allowing a Roseworthy Diploma holder to do a final year at Teachers' College enabling them to enter the high school service as qualified teachers. This new and exciting development will have important consequences for the College and agriculture as a whole in South Australia, for the College will be indirectly training a larger proportion of future farmers of this

To allow for the increases in standards the level of facilities must also be raised. An extensive building and remodelling programme is progressing at the College. The new agricultural engineering centre is well on the way to completion and should be in use in June. Building of a new science and plant breeding centre is to begin in a few weeks, and on a smaller scale, buildings of importance have been erected by students. These include a slaughter house, a calf rearing shed for the dairy section, an implement shed at the horticultural section, and a new

plunge sheep dip and shower dip. Also, the processing floor in the winery will be remodelled and substantially enlarged. This is expected to be finished in about 18 months, and will present this prestige course with all facilities necessary to allow a vigorous research programme in wine making technology. These facts indicate a good future for the College, and enrolments for the coming year will be a record high.

The most serious problem at Roseworthy College is obtaining an adequately trained and experienced staff. The principal described this as a chronic disease in the field of professional employment, and once this problem was overcome, the future of Roseworthy would be very much brighter.

Mr. Herriot announced the College academic year would in future finish by Christmas, whereas before it did not finish till after harvest. This change presented its difficulties, but the advantages gained would far outweigh these.

Mr. Bywaters, as official guest at the graduation day, announced the commencement of a new course available at Roseworthy, whereby a student does the 3-year R.D.A. course, and then does a fourth year, specializing in certain fields of agriculture, to gain a Roseworthy Diploma of Agricultural Technology.

1967 Diploma List

In Order of Merit

1061	Bruce Leslie Wigney.
1062	John Henry Campbell Curlewis.
1063	Anthony James Roach Clancy.
1064	Malcolm John Woods.
1065	Martin John Cooper.
1066	Christopher James McGowan.
1067	Michael Owen Freeman.
1068	Kevin Thomas Keain.
1069	David John Cooper.
1070	James Robert Klingberg.
1071	Ian James Pickett.
1072	Jonathon Graham Lawton.
	Ian Anderson.
	Richard Irving Carty.
	Max Merckenschlager
	Keith William Pattinson.
	Kelvin D'Hildred Westbrook



Dux in Agriculture

BRUCE WIGNEY arrived at Rose-worthy from Unley High School, well qualified for the R.D.A. course. Little was seen of "Wiggles" in 1st Year, where he had a firm interest in football. However, he was hampered by injuries in First and Second Year and was obliged to give up all sport. On attaining Second Year, he became one of the "tough" members of that year, and had a number of contradictions with the authorities. His interest in pigs developed, and he was a custodian of the College show pigs in both Second and Third Year.

In Third Year, he was elected senior councilman and President of the Student Representative Council. His leadership in the S.R.C. in a difficult year was outstanding. He proved himself to be very capable in the academic field, winning the coveted Gramp, Hardy, Smith Memorial prize and the Gold Medal. With these achievements behind him, it is assured that he will make every success of his job as Farm Management Consultant of Privater.

ant at Riverton.

THIRD YEAR

Gramp, Hardy, Smith Memorial Prize: B. L. Wigney.

Gold Medal (presented by the Royal Agricultural and Horticultural Society for the highest aggregate in all diploma subjects: B. L. Wigney.

Old Students' Cup and Prize (presented by the Roseworthy Old Collegians' Association for the second aggregate in all diploma subjects): J. H. C. Curlewis.

Outside Work (presented by the Albert Molineux Memorial Trust): A. J. R. Clancy.

Practical Examinations (presented by the Members of the Advisory Board of Agriculture): J. H. C. Curlewis.

Animal Nutrition and Breeding and Veterinary Hygiene (presented by Noske Bros. (S.A.) Pty. Ltd.): D. J. Cooper.

Morphett Prize in Dairying (bequeathed by the late Mr. A. H. Morphett): B. L. Wigney.

The Haselgrove Prize in Horticulture (presented by the late Mr. C. F. Haselgrove): J. R. Klingberg.

Agriculture (presented by the Principal): M. J. Woods.

The Most Efficient Operator of Farm Machinery (presented by the Director of Agriculture): J. R. Klingberg.

Prize for Practical Farm Engineering (presented by Caltex Oil (Aust.) Pty. Ltd.): M. J. Cooper.

Sheep Husbandry (presented by Mr. W. S. Kelly): K. D. Westbrook.

Rudi Buring Prize for Practical Horticulture: A. J. R. Clancy.

The D. A. Lyall Memorial Prize for the best kept dairy: J. H. C. Curlewis.

The Richard Maxwell Memorial Prize: J. H. C. Curlewis.

Farm Management (presented by the Commonwealth Development Bank): K. T. Keain.

SECOND YEAR

Dux of Year (presented by the Gawler Agricultural, Horticultural and Floricultural Society): J. R. Kohnke.

Second Aggregate Prize (presented by the College): J. S. Dawkins.

The W. J. Colebatch Memorial Prize: J. R. Kohnke.

The Shell Prize (presented by the Shell Co. of Australia Ltd.): J. S. Dawkins.

Agriculture (presented by the Principal): J. S. Dawkins.

The T. G. H. Buring Prize in Horticulture: J. R. Kohnke.

The H. Wyndham Brown Prize (presented by the late Mr. H. Wyndham Brown for the highest aggregate in basic science subjects): J. R. Kohnke.

Outside Work (presented by the Albert Molineux Memorial Trust): J. R. Kohnke.

FIRST YEAR

Dux of Year (Bronze Medal): J. R. Stewart.

Second Aggregate Prize (presented by the College): W. D. Watson

Outside Work (presented by the Albert Molineux Memorial Trust): G. Kirkwood.

Agriculture (presented by the College): W. D. Watson.

This
—been
dynami
these cl
him, th
reluctar
trends.
Now.

this cru rational attitude this as present ning of than se should tradition their pi never b constru mental close st tions, b these ic and su students

The however this col the bas operation cessful

Other same di and nov incohere or aspir

This inherent authorit of rejecontrol.

Do n doomed and in find our We all

Don't Look Back-It's Alright

This magazine has—on many occasions—been responsible for highlighting the dynamic aspects of Agriculture but while these changes have been going on around him, the student of this College has been reluctant to adjust his thinking to modern trends.

Now, due primarily to student initiative, this crucial but important matter has been rationalised and based on present day attitudes. If the old collegian looks upon this as the end of an era, then we, the present students, must see it as the beginning of a new and better one. Yet, rather than see it as an absolute change, we should all see it as an updating of an old tradition. Traditions are only as good as their present day application and must never be allowed to stand in the way of constructive progress. Let the fundamental ideals of strong college spirit, and close student co-operation, be the traditions, but allow the mechanics by which these ideals are realized be left flexible and subject to interpretation by the students of the day.

The abolition of past practices must, however, be compensated for, or else this college will be in danger of losing the basic elements of spirit and co-operation which are fundamental to successful college life.

Other student groups faced with the same dilemma have failed to compensate and now find themselves turning into an incoherent group with few common aims or aspirations.

This seems to stem from the seemingly inherent trait in students to oppose authority, and this is carried to the point of rejecting student organisation and control.

Do not let Roseworthy follow in these doomed footsteps. Let it set the example and in the unique situation in which we find ourselves, this should not be hard. We all have a common interest—we all



J. Dawkins (President), B. Polkinghorne, C. Hurne, D. Shakespeare, W. Watson, J. Nickolls, R. Baldwin.

live very close to each other, understanding each others points of view, and as well as this, we have proved in the past that on occasions we can work together for the definite benefit of the College.

Through the S.R.C. of this college the above mentioned ideals can be realised as long as the council provides the necessary incentives with the right kind of leadership, and in response to this, the student body puts its trust in the council and supports it with vigor.

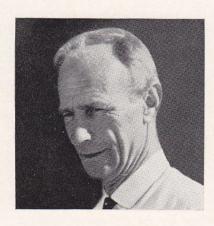
The S.R.C. must not be put on a pedestal immune to criticism and advice, but must constantly be in communication with those to whom it is respons ble and in its very delicate role as mediator, must represent the views of each side to the other to strive for what it believes to be best for the College as a whole.

This year has so far been an encouraging one but no one has any excuse for complacency. The council has moves afoot for improving communications with the students and thereby keeping them better informed of its activities, which will become more numerous if possible within the framework of our present organisation.

As I write this, I see Open Day and various sporting functions ahead of us and as the relative success of these are the best indications of student enthusiasm, I hope that my faith in this College is nothing but strengthened.

J. S. DAWKINS, President, Student Representative Council

The Animal Production Scientist and the Studbreeder



Mr. Jack Reddin of Gawler River, is well known to many. He has been actively interested in our college since his graduation in 1940. This is by no means all in which he is interested, being a Past-President of the Poll Dorset Society and the British Breeds Society, a Director of Nelsons Meat Works and active in anything else which appears to need his assistance.

However it is in his capacity as a member of the Advisory Council of Roseworthy that we have invited him to contribute an article of his choosing to our magazine. In any complex organisation, efficiency of operation can be limited by the efficiency of communication.

A military operation is a prime example—where, in battle the efficiency or otherwise of communication can spell victory or defeat. Because of the supreme importance of good communication the Armed Forces provide highly specialised equipment and highly trained personnel to establish and to maintain them. More than this they appoint a very senior Officer and Staff whose sole responsibility is Communications.

But in peacetime, where failure may not necessarily mean disaster, the importance of proper communications is sometimes not recognised. And not only the actual establishment of communication—or perhaps the correct interpretation of the facts communicated. The very human weakness of hearing what we want to hear, rather than listening carefully to the facts presented, is responsible for many communication breakdowns.

The football Coach was standing on the sideline with a girlfriend, watching his team in action. He was very pleased with a new recruit who was playing particularly well in his first game. The Coach commented to his girlfriend, "He will be our best man this year." She immediately flung her arms about him and said, "Darling how wonderful. This is so sudden."

So the communication system may be good, but the message misread.

In the complex field of modern agriculture and animal production, there is

a grown commun

fill this with too other the losing graph being drawmer demonstrated ocuments.

But the provided gic head properly ordinate to practice

And t particula between t and the purpose thought i who are officers, ministrati

It is tr a torrid breeders and prog any field early reb

Because occasional holding for observation less under pleasure and his when it thoughtles next gener municator this appearance of the pleasure and his appearance of the pleasure of the pleas

Success breed. The are ideal respect a sincere con whole. To industry a be therebreeder a growing need for carefully planned communication.

The Extension Services have strived to fill this need, but, always unstaffed, and with too many problems on their plate other than communications, they are losing ground. At many levels much is being done—Field Days, Open Days, Summer Courses, Bureau discussions, demonstrations, articles, pamphlets, film documentaries, and so on.

But the services, or communications provided seem to lack that over-all strategic head that would seem necessary to properly appreciate, and then to coordinate the communication of knowledge to practice.

And this would seem to be the case particularly in relation to communication between the Animal Production researcher and the animal Studbreeder—and the purpose of this article is to stimulate thought in this direction amongst people who are our future scientists, extension officers, studbreeders and possibly administrators.

It is true that some scientists have had a torrid time trying to get some studbreeders to accept, or even to try out new and progressive ideas. But missionaries in any field must be prepared for some early rebuffs.

Because of these rebuffs—or because occasionally a studbreeder will be found holding forth on some rather unscientific observation, a few of our immature and less understanding scientists have taken pleasure in deprecating the studbreeder and his role. This is most unfortunate when it occurs in the lecture room—a thoughtless prejudice passed on to the next generation of researchers and communicators. To all Scientists, I make this appeal:

DON'T KNOCK THE STUDBREEDER.

Successful studbreeders are a special breed. They are men of integrity. They are idealists. Their success, and the respect accorded them is due to their sincere concern for their industry as a whole. They stand at the head of this industry and they are the right men to be there. When, eventually the studbreeder and the Animal Production

Scientist are in proper communication, I am confident we will see some real progress.

So don't knock him—help him. And if you find some studbreeders a little traditional and difficult at first, then think on this: The studbreeder has, in the past, achieved what has been achieved without any assistance from the A.P. Scientist, who, after all, is a comparatively recent development. (End of Appeal.).

With the advent of the A.P. Scientist, more and more methods of improving the product value, and breeding efficiency of our livestock are being pinpointed—but the communication between researcher and studbreeder is not good. It is of no point at this time in our history to argue that the days of the animal studbreeder are numbered. Probably the only way that the studbreeder, or his equivalent, will be put out of business will be by using more efficient converters than animals.

This, I understand, is on the drawing boards, but in the meantime let us set up proper communication between our Animal Production Researchers and our Animal Production Trend-setters—the Studbreeders.

How can this be achieved? Probably the first move would be to establish a small select staff whose main task would be the collection, collation and evaluation of all A.P. work. The next step would appear to be the channelling of relevant material to where it could do most good—the Extension Officer, or the Agricultural Education establishments, the Studbreeder, the Breed Societies, the commercial lamb, beef and pigmeat committees, Farm Management Consultants and Clubs, to other Scientists, Agricultural Journals and so on.

And, of course, this communication should be two way—so that the A.P. lecturer, the farm club manager, the studbreeder, other researchers, would have some competent authority to appeal to for assistance and reference.

It is all a matter of proper communication. And the trouble with Communications is that they are often everybody's particular baby.

The College Farm

It was as early as 1879 that a definite move was made in Parliament initiating the purchase of farm land on which it was intended to establish an agricultural college. The first area was Olive Hill Farm of 720 acres, purchased for £6/acre and in 1882 an additional 100 acres belonging to the Government adjoining the original purchase, was added. The interesting point of these purchases was that at the time it was considered "unlikely that the scrub country north of Gawler would ever be brought under the plough." An eminent Scottish agriculturalist in 1891 described the property as "light, poor soil resting on a porous limestone" and was so inferior as to "continue to militate against the usefulness of the institution." In his opinion a better site should have been selected. Many people agreed that this scrub land outside the boundary of the recognized cropping area should never have been chosen. Despite these criticisms, the expensive main building was erected for £6,000 and in 1885 with Professor Custance as Principal, the College opened, enrolling 15 students.

The early years appear to have made these allegations well founded, but with the advent of artificial manures, many thousands of acres were developed on similar lines to those discovered at Roseworthy. Thus, either by blunder or design, the nucleus of scientists brought together in this environment were instrumental in solving many of the most pressing problems of the day.

It was Professor Custance's aim to influence the agriculture of the state through the medium of the younger generation. Both Professor Custance, M.R.A.C., F.C.S., 1883 to 1886, and Professor Lowrie, M.A., B.Sc., 1887 to 1901, laid the foundation for the College farm to be used as both a teaching and experimental medium, not only for those students enrolled, but the farming community generally.

In reports published after each harvest, people were kept informed of progress made with various experiments. In the 1904-05 Harvest report, Professor Perkins, who succeeded Professor Towar, 1902-1904, tabled costs including allowances for interest and depreciation to prove that the thresher was a better paying proposition than the stripper or harvester, despite the fact that the thresher required 2 shifts of 19 men at 60 cents a day.

In this period, the College farm was the focus of attention by the farming community and at an annual visiting day in 1905 crops "remarkably free from weeds" were noted and keen interest shown in mixed cereals, peas and vetches sown for ensilage.

By 1918, the aims of the farm included not only education of youth and experimental work to the tune of 250 acres, but also the distribution of clean approved cereals selected and bred at Roseworthy and the breeding of improved livestock. Although various aspects such as fat lamb trials and ensilage making have had prominence over the years, the main theme has been education. The emphasis has shifted now more from the training of farmers' sons in modern techniques, to the training of future managers, advisers and teachers in a better understanding of the skills required for a successful farming enterprise.



Farm Superintendent R. Norton and friend.

Expe the coll for con investig discussi of crop The

at pre Agricul Farmer to show tion ra techniq For a self we

358 ; 209 ; 519 ; 905 ; 202 ;

The stock co barley trequirer

The 10 lbs. oats. Treaped back in establish soil arother not onlextra la product pastures previous

This the figure as comp

1947-5 1957-6 Th 60,000

1947-5 1957-6 Experiments at present are limited on the college farm but many areas are used for comparative demonstrations, student investigational projects and general class discussion on problems and the economics of crop and pasture management.

The farming community is catered for at present through visits of various Agricultural Bureau and an annual Farmers Day, where the emphasis is more to show the college as a teaching institution rather than demonstrating farming techniques.

For an up to date view of the farm itself we find in this year —

358 acres wheat

209 acres oats

519 acres barley

905 acres of sown pasture

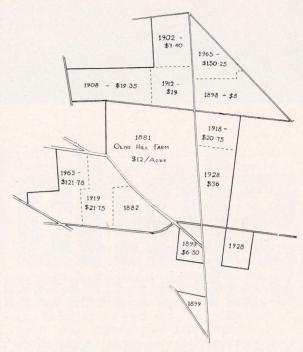
202 acres of self sown pasture

341 acres to be fallowed.

The wheat is for both pure seed and stock consumption, as is the oats, with the barley for stock feed and our own seed requirements.

The sown pasture this year has been 10 lbs. of Jenolong medic and 40 lbs. of oats. The medic, 10 tons of it, was reaped in February and will be seeded back in subsequent years. It is the establishment of this medic on the heavier soil areas which should do much to improve overall production of the farm. Another feature in recent years has been not only the purchase of 465 acres of extra land but also the reclaiming of unproductive areas and an effort to graze pastures at heavier stocking rates than previously.

This increased productivity is shown in the figures for the ten years from 1957-66 as compared with the years 1947-56.



Land values since original purchase.

TABLE FOR FARM ARTICLE

	BARLEY		WHEAT		OATS		TOTAL			
	Acres	Bush	Acres	Bush	Acres	Bush	Acres	Bush		
1947-56	1181	36627	1857	52820	930	24016	3968	113463		
1957-66	3053	77256	2426	66249	1092	30308	6571	173813		
This is	an increa	sed crops	ning area	of 2 600	acres	and an	additiona	al vield of		

This is an increased cropping area of 2,600 acres and an additional yield of 60,000 bush of grain.

In terms of stock, using the average numbers held at the 30th of June, shows

DAIRY PIGS BEEF SHEEP

1947-56 106 124 43 1496

1957-66 105 226 58 1522



Dob waggon's deluxe.

The increased use of leyland cropping has been marked in this period with naturally, the best yielding crops still being on well prepared fallow. In 1966 it was Sabre yielding 39 bush. This year appears to be Glaive, one of the best crops in the district.

Perhaps another interesting change in this 10 year period has been in the extent of mechanisation. Students of all years are taught to use sophisticated machinery. Road work is done with loader and tip truck, the refencing programme is modern, with impregnated posts being driven and the wire stapled to them. Even cheaper 240 v. electric fencing is being investigated.

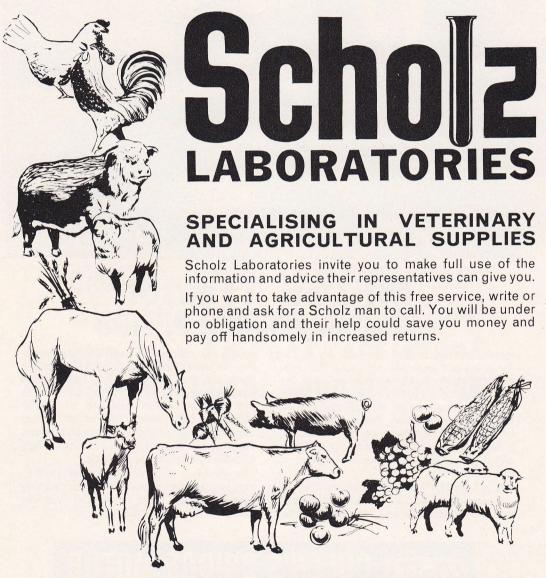
When silage is made for the dairy herd, it is in portable clamps, designed and made at the college; grain is stored in pest proofed conditions. It is only through this modern approach that the farm unit can be of use to students, and continued development along these lines can only increase its value.

Pitchfork? Whats that?





Down to earth service for the man on the land...



SCHOLZ LABORATORIES, 141 Murray St, Gawler, Phone 929. (division of Duncan and Feist, Chemists)



MF165 Tractor Top in the 50-60 H.P. Field

Here's the tractor that can take on all the run-of-the-mill farm jobs yet packs that extra power punch to tackle the tougher tasks. The MF165 boasts a 4-cylinder long-stroke directinjection diesel engine with all the stamina and flexibility you need. Fuel economy is excellent. The wide range of torque back-up gives the engine outstanding ability to "hangon" under heavy loads, without the need to change down.

The advanced Ferguson system provides all the working control advantages for linkage work while exclusive new "pressure control" brings the benefits of weight-transfer operation to trailed implements as well. Built-in lights, diff. lock, handbrake, fully-instrumented console, swinging roller drawbar, foot throttle and cushion comfort seat are all regular equipment. You have a choice of 6-speed standard or flip-switch, change-on-the-move 12-speed Multipower transmissions. High-clearance model is also available.

The MF165 is a stronger, huskier generalpurpose tractor with tremendous working scope. Why not prove it yourself? You can test drive it without obligation.



S.A. Distributors for Massey-Ferguson *

Coventry Climax

Aveling Barford *

* Lansing Bagnall.

Conquip

Coo dew Eng RES Iong



Cooper's "Tube-pack" Vaccines with the Cooper injector are the key to fast, efficient vaccination of your livestock

Cooper's High Potency vaccines are prepared by methods developed in The Wellcome Research Laboratories, England — WORLD LEADERS IN VETERINARY BIOLOGICAL RESEARCH. Cooper's "Tube-pack" Vaccines • provide long-lasting protection • retain potency in the pack for at least two years • have a 2 ml dose rate for all vaccines.

- COOPER'S . "5 IN 1" VACCINE
- . PULPY KIDNEY 150 ml
- PULPY KIDNEY, BLACK DISEASE 150 ml
- PULPY KIDNEY, BLACK DISEASE, TETANUS 150 ml
- BLACKLEG 50 ml



FOR FURTHER INFORMATION

SEE YOUR LOCAL COOPER AGENT

"Cooper's "Tube-pack" Vaccines can also be administered with syringes or, for other vaccinating instruments, adaptors are available on request.

WC/410B

Section Activities



This year has seen some changes on the section. Firstly, Keith Fairlie retired after over 40 years in the vegetable garden. To Keith we extend our thanks and appreciation. Notable changes in the garden have been the first crops of tomatoes and beans from the new glasshouse and plastic row covers for early cucurbits.

Contour furrowing of the beach near the swimming pool for cucurbits and tomatoes, and the planting of many new varieties and types of vegetables.

V & O also has progressed with the installation of a dragline hose system in the south vineyards, and this has made watering this block easier and more efficient.

Added to our machinery is a soil fumigation unit, installed on our rigid type cultivator to be used for nematode control in the vineyard and vegetable garden.

Our motorised knapsack, known as The James Bond Machine, has been very useful for the odd spot spraying jobs.

1 leius	uns	year	nave been	quite good:
			1965/66	1964/65
Grapes			31 tons	43½ tons
Apricots			5.1 tons	5 tons
Pears			5.7 tons	3 tons
Peaches			$2\frac{3}{4}$ tons	1.9 tons
Oranges.				

Navel 150 bush. 370 bush. Valencia 90 bush. 181 bush. Grapefruit 56 bush. 31 bush.

Dried fruit supplied to the kitchen: Apricots 12 cwt., Peaches 1½ cwt., Sultanas 7 cwt., Pears 6 cwt. This was more than in previous years.



Seasonal conditions have necessitated the maintenance of minimum dairy stock numbers throughout the year.

This has been achieved by sale or culling of all cows and heifers with a potential of less than 350 lbs. of butter fat

The new calf rearing shed has been completed and progress is being made on resubdivision of calf paddocks and reorganisation of dairy lanes, to facilitate the general movement of stock to and from the western area of the College.

In spite of the poor seasonal conditions and the shortage of conserved fodder and paddock feed the 42 cows completing their lactation during the year averaged 6,377 lbs. milk, at 5.5% fat test giving 352 lbs. B.F. in 291 days.

Stock numbers at 31st October, 1967: Bulls 2

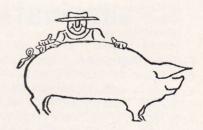
 Cows
 33

 In-Calf Heifers
 9

 Yearlings
 7

 Calves
 18

TOTAL 69



Progress on the plan of modernising the piggery has been slow during the past year. The resubdivision of the paddocks is nearing completion and the conversion of the old farrowing area to fattening pens for feeding and nutrition trials and demonstrations is well under way. Nutrit with us. you or but in s piggery one. The down in fecundity is nearly A you

from Mallala
Joker, a
by Stratt
Ann Ma
Junior C
whilst hi
prefix by
ship at
the Char
the Sydr

Due t are bein selected being gr mercial Stock Stu

> Ber Sov bre Gro

> > TO

Stu

THE WAY

The (College stage of

Nutrition and disease problems are still with us. You name it; we will show it to you or produce it in a very short time, but in spite of this the past year in the piggery has been a relatively successful one. The Large White stud has settled down now and the culling of the low fecundity blood lines in the Berkshires

is nearing completion.

A young Berkshire Boar was purchased from Messrs. H. S. & G. M. Agnew of Mallala in March. He is Gwenbank Joker, a boar of excellent conformation by Strathalabee Joker out of Gwenbank Ann Marie 12th. His litter brother was Junior Champion at the Adelaide Show whilst his grand dam won the Champion prefix by winning her second Championship at the Adelaide Royal to go with the Champion Berkshire Sow award from the Sydney Royal.

Due to the seasonal conditions all pigs are being sold as porkers except the selected stud sows and boars which are being grown on for sale as stud or com-

mercial breeders.

Stock numbers, October, 1967, are: Stud Large White Sows 11 Stud Berkshire Sows 30 $(\frac{1}{2} \text{ xBerkshire } \frac{1}{2} \text{ xLarge})$ White) Large White Boars Berkshire Boars 2 Sows and Boars for sale as 38 breeders Growing pigs and suckers 222 TOTAL ... 306



The Oenology Course at Roseworthy College has now completed the second stage of a two-year programme, during

which, it has been extended to cover the needs of the younger winemakers who will soon be entering the industry.

The 1967 vintage was quite successful and production was raised to approximately 100 tons. Most types of wine now appearing on the Australian market were made, with special emphasis being laid on the production of light table wines. The College vineyards produced some excellent materials, and when processed at optimum maturity, some excellent Claret and Burgundy styles were made. Flor sherry production continues, being well over a quarter of a century since this first was made by Mr. Jack Dillums as Oenologist.

Champagne making and brandy making are now forming a large part of the Oenology students training, and both these phases were included in student

project work this year.

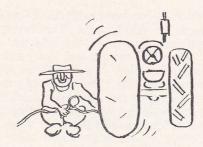
A new wine cooler purchased was excellent for controlling fermentations during the vintage period. No doubt, this addition to the cellar equipment contributed much to the improved standard of the table wines produced.

In the distillery the boiler was retubed during the off season, and this contributed to the more efficient working of the Still, which helped much in the demonstration of the production of Australian type

brandies.

During the second session, the Oenology students visited the wine making and viticultural areas in Victoria and New South Wales, gaining considerable knowledge and experience.

Vineyards and wineries were visited from our most southern and coldest areas to the warm irrigation areas of the Murrumbidgee, also the renowned Hunter River area in N.S.W. Whilst touring, it is indeed pleasing to note the keen interest which is being shown in our School of Oenology at Roseworthy, and we would like to thank all those people both within and outside the wine industry who have shown great interest in our efforts. They have done much to contribute to the education of these young men who are about to take their place in the Australian wine industry.



The new Agricultural Engineering Building which was recently opened by the Minister of Agriculture has fulfilled a long overdue need in the form of necessary teaching facilities which were previously almost non-existent. The extensive working area and appointments have transformed the A.E. section from a series of scattered and almost unrelated instructional centres, to a compact teaching unit that will undoubtedly simplify the problem of over populated practical classes and afford us the opportunity of improving class demonstrations and instructions.

It seems a little ironical that Mr. Quick, who devoted so much time and thought to the preliminary planning of the new centre, especially the research laboratory, had to leave the College before having the opportunity of seeing the building completed. One must, however, grasp opportunities as they arise, and an offer of a study grant at the state university of Iowa, U.S.A., was very hard to refuse. His departure left the section without a Senior Lecturer for a while but by no means did he leave the College without a monument to his five year presence. The standard of the engineering course at the College was without doubt elevated by his enthusiasm for agricultural engineering advancement, and the agricultural industry in general should eventually benefit from his efforts in promoting recognition of the health hazards associated with continuous tractor driving.

Towards the end of August, Mr. G. P. Atkins was appointed as Senior Lecturer in Agricultural Engineering. After the short mid-vear break the section began the final academic session for 1967 with a new building and a new chief. He

immediately illustrated his capacity to organise by the manner in which his staff combined in such a successful effort to produce a number of interesting exhibits and an informative display of the section instructional activities.

Earlier this year much interest centred around the development of a hydrostatically driven plot harvester designed by Mr. Quick to expedite and simplify harvesting of small experimental plots. Unfortunately he had to depart before the machine was completed so although the machine is mobile, the harvesting and cleaning section has yet to be completed before its operational aptitude for this work can be assessed. As this machine will probably be the only one of its kind in Australia, its progress will be closely watched by plant breeders at College and elsewhere.

The building programme is gradually replacing some of the structures that have been part of the landscape for the past 40 or 50 years. The new slaughter house was completed early this year, and two new stock shelters were erected in conjunction with the new cattle yards. These very impressive stock handling facilities should make possible the removal of the unsightly array of oft used corrugated iron and thatching that at present houses the College's bovine champions.

Preparation for transferring the workshop plant to new operational quarters involved the overhaul of many items of existing plant, and the manufacture of many new items such as vice stands and benches of such design that would be more in keeping with the new surroundings. This was carried out by the workshop staff in addition to the usual wide range of repairs to college equipment. During the year, several new items of equipment were constructed in the workshop, these included a four wheel water cart, attachments for soil fumigation plane now in use at V&O, and stock frames for the new Gitcham trailer.

One of the main reclamation projects was the complete overhaul of the A/C grader. This machine should now give many hours of valuable service in maintaining College roadways.

Durin laying h tion, an 30,856

Early
the pull
tised for
stock at
every 1
numbers
handle
rearing
now me
pullets of
point of
ing yard

The funit momercial way, the layers is modern next few ing our this to layers.

under w chased i mas ma consider form an lege diet

The activities mainly experimental work

commitn



During the year an average of 1,650 laying hens were maintained on the section, and production for the period was 30.856 dozen.

Early in 1967 it was decided to change the pullet replacement programme practised formerly, by buying in replacement stock at 6 monthly intervals instead of every 12 months. This has halved the numbers of young chickens we have to handle at any one time. The intensive rearing shed has also been extended (it now measures 40 ft. x 72 ft.) so that all pullets can now be reared intensively to point of lay, and the use of outside rearing yards has been abandoned.

The first stages of bringing the laying unit more into line with modern commercial practice are now getting under way, the intention being to house all our layers in two or three large sheds of modern design. Work will start within the next few weeks on modifying and extending our existing small cage unit to bring

this to 1,100 bird capacity.

A small turkey rearing project is also under way, 50 week-old poults being purchased in July to be raised for the Christmas market. This is proving to be of considerable interest, and should also form an acceptable addition to the College diet.

The Animal Production Laboratory's activities during the past year have been mainly devoted to finalising completed experiments, keeping existing experimental work up-to-date, and fulfilling other commitments.

Lack of adequate staff has necessitated working many extra hours and the Department of Agriculture assisted with some essential work.

During March Mr. P. J. Shuff was appointed to this section as a Technical Officer, thus alleviating the need for outside help and greatly assisted in helping this laboratory to meet its obligations.

With the termination of the Merino Selection Experiment (1966) it remained necessary to complete the large accumulation of laboratory work (mainly histological) prior to the preparation of computer data cards. With the completion and transfer of the Adelaide Gentics Department, Mr. O. Mayo of the Department, analysed and is preparing for publication the Genetic findings of this experiment.

The High/Low Fertility and Generation Interval Experiments are continuing, these incorporate some of the techniques used in the Selection Experiment.

Th Merino Studs continue to avail themselves of the Fleece Testing Service at this laboratory, numerous samples being received for both the autumn and spring shearing periods.

To date, due to other pressures, it has not been possible to continue laboratory work on the Seasonal Wool Growth Experiment, run in conjunction with various Government Research Centres throughout the state.

Technological and photographic services for other sections of the College were maintained.

Mr. D. Taplin, who is completing a Ph.D. at the Waite Research Institute, Adelaide, was appointed as Senior Lecturer in Animal Husbandry in October of this year.

We believe in more student activity and less anathy.



HYDRAULIC TIPPER TRANSPORT EQUIPMENT

HOISTS — TIPPERS — TIPPING SEMI-TRAILERS
BULK GRAIN TIPPERS





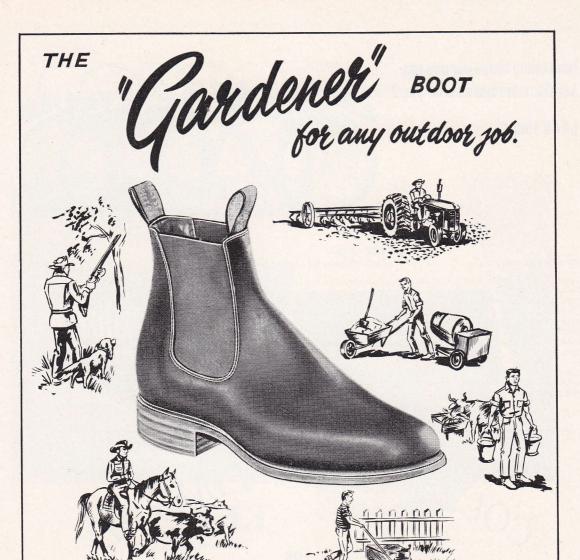
WR

Hydraulic Tractor Mounted Front End Loaders and Back-Hoe Trench Diggers Agricultural and Industrial Types to fit ALL MAKES OF TRACTORS





394 MAIN NORTH ROAD, BLAIR ATHOL, S.A. PHONE: 62 3511



R. M. Williams designed the "Gardener" for the man who wears a work boot many hours daily and needs comfort and protection for his feet. This high quality hard-wearing work boot fits neatly at the ankles and keeps out dirt and grass seeds. Uppers of chrome tanned water-resistant oiled kip are attached to butt leather insoles. The two outer butt greenhide wax-filled soles are secured by a double row of brass screw wire.

Available in wide or extra wide fittings. Colour: Dark Tan only.

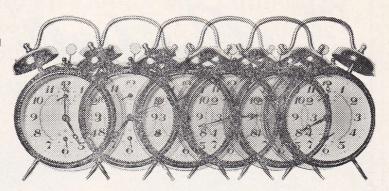
B585: The Gardener, \$13.60, post free. Buy the first pair and you will buy no other brand. **Wearite Gardener.** The same type of boot, but with an outer sole of wearite which is bonded and brass screwed to a butt leather sole. An ideal non-slip boot, particularly for dry grass conditions.

B586: Wearite Gardener, \$12.40.

WRITE TO:

M. Williams
5 PERGY STREET, PROSPECT, S.A.

how many times per day can Southern Farmers serve you? 1,440 times



Every minute of every day.. every year.. some part of Southern Farmers can be working for you.

When you sit down to breakfast enjoy the golden goodness of top quality produce —butter, cheese, bacon and honey. In the paddock . . . use implements from Southern Farmers . . stock feeds . . fencing . . agricultural chemicals. Grain, wool, livestock . . . sold for you at top market prices by Southern Farmers. The hardware you need, the furniture you want . . even a complete home . . . land . . all available thru' your local Southern Farmers office. Even when you sleep, you're protected with insurance on your possessions and assurance on your life by Southern Farmers.

A fine organisation. Always working. Always ahead. Got a minute to see your Co-operative Company? Southern Farmers have 1,440 minutes-a-day service for you right now.



36 Franklin St. Adalaide Phone 51 0171. Organised throughout South Australia N.S.W. and Vic.

COLES BROS. LIMITED

FOR

LAND

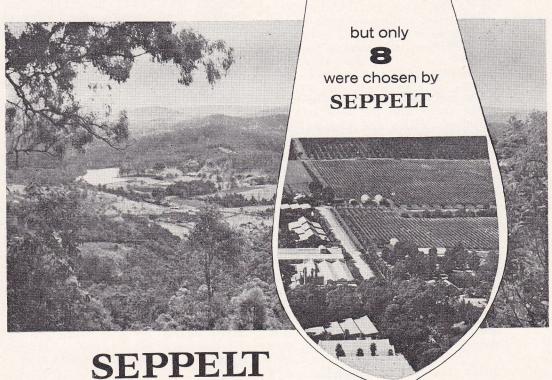
LIVESTOCK BLOODSTOCK

AND

MERCHANDISE

70 CURRIE STREET, ADELAIDE

Australia! 2,974,581 square miles of it!



FINE WINES

grown only in the sunniest most fertile Australian soil

The seven Seppelts vineyards, covering a total area of just eight square miles, are confined to carefully selected areas spread across the Southern States of Australia. Each area is renowned for the particular wine it produces — the port, sherries and brandies from South Australia, the fine Champagnes, the delicate white and more robust red table wines from Victoria. Each is true to character — comparable with the world's finest.

B. SEPPELT & SONS PTY. LIMITED Head Office Gresham Street, Adelaide, South Australia



THE HOUSE OF SEPPELT



Cattle Nos				
Bulls		 	 	 3
Cows		 	 	 31
Yearling	S	 	 	 16
Calves		 	 	 20
				_
				70

The beef position has a similar picture to the sheep with the same two sires (Highbank Viking and Elsinora Brigalow) in use.

Selection on growth rate, combined with Show type appears to be giving results and our two sires are both well in the picture.

At the Adelaide Royal we had our best year ever with Roseworthy Leopold taking Junior Champion, Champion Bull and Supreme Champion of the breed. This bull had the growth rate (nearly 1,400 lbs. when shown under 18 months) and it is our intention to use him in the herd. With three second prizes as well from a Show team of three, it was a good year.

There has been very little change in the sheep position during the past twelve months.

Although the year had been rather hard, at shearing the wool showed very little effect from the season and cut per head was about normal. Lambing percentages were lower than usual but, following very early weaning, weaners made good headway.

Following shearing, it was necessary to reduce numbers as the feed position appeared likely to become very acute. Numbers to be mated for 1968 will be

kept to a minimum.

In the Poll Dorset Stud, we are mating an appreciable number of Poll ewes and should be producing Poll rams in 1968.

SI	neep No	s., 30th	June	e, 1	967	
	Merino	Ewes				 675
	Merino					 236
	Merino	Hogget	Ew	es		 194
	Dorset	Ewes				 118
	Dorset	Rams				 35
	Dorset	Lambs				 60
	Merino	Lambs				 419
	Crossbi	ed Lam	bs			 70
	Rations					 134
						1 941

POLICE ENFORCE SPEED LIMIT



In wrigrazing it must one seas
Its air no positi

The ti

In the sown we medic do rent properties of inthe had failed.

The g grazing p Burr

to stock. the shee were ver Barley

jack, etc graphs b this prel yields of pasture.

Burr l per acre acre); 9 Three (sheep per per acre acre).

A tria relative under dit harvester 40001

3000-

Grazing Trial At R.A.C.

In writing this report on the pilot grazing trial carried out during 1966-67, it must be realised the trial was of only one season's experience.

Its aim was to guide further work and no positive conclusions could be made.

The trial examined two aspects:

(a) The effect of stocking intensity and time of grazing on the seed setting ability of medic, in this pasture mainly burr medic.

In the past most of the College was sown with barrel medic. Today burr medic dominates, and in view of the current programme of widely sowing Barrel 173 over the College it was felt it would be of interest to determine why the barrel had failed.

The graphs below show the effect of grazing pressure on pasture composition.

Burr medic appears to be unpalatable to stock. In June-July, particularly when the sheep were still losing weight and were very hungry, they left the medic.

Barley grass, soursob, three corner jack, etc., which constitutes "rest" in the graphs below, were eaten with relish and this preference is reflected in the seed yields obtained from two species in the pasture.

Burr Medic: 1,230 lbs./ac. $(1\frac{1}{2}$ sheep per acre); 1,280 lbs./ac. (3 sheep per acre); 900 lbs./ac. $(4\frac{1}{2}$ sheep per acre). Three Corner Jack: 710 lbs./ac. $(1\frac{1}{2}$ sheep per acre); 430 lbs./ac. (3 sheep per acre); 319 lbs./ac. $(4\frac{1}{2}$ sheep per acre).

A trial laid out this year comparing the relative palatibility of several medics under different grazing pressures has been harvested, but unfortunately the year was

such that it is doubtful whether the results will be very conclusive.

(b) Effect of stocking rate on animal performance.

Ewes were run at $1\frac{1}{2}$, 3 and $4\frac{1}{2}$ per acre set stocked and rotationally grazed, the latter to allow the pasture investigations to be carried out rather than because any difference between the two forms of grazing were expected.

All the sheep were removed from the plots and run as a mob in an adjacent stubble for mating, returning on February 16th

In the case of the rotationally grazed sheep, a quarter of each plot was closed off in mid-August to accommodate the needs of the pasture experiment. This reserve was opened to the sheep as needed.

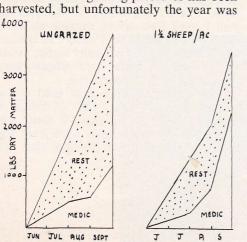
At 4½ ewes per acre the reserve feed was opened up when the sheep returned from mating on February 16th. Subsequently, handfeeding became necessary to enable the ewes to survive.

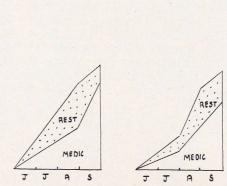
At 1½ ewes per acre the reserve feed was not required, plenty of feed being available without it.

At 3 ewes per acre an interesting comparison occurred between the set stocked group and the group which had a quarter of the area in reserve.

The set stocked sheep lost weight during late pregnancy and had to be handfed to get through. The other group, having the reserve opened to them on March 31st to correspond with onset of the last 6 weeks of pregnancy, gained 12 lbs. body weight during the last 6 weeks of pregnancy so no handfeeding was necessary. These returned the best lambing performance.

41 SHEEP/AL





3 SHEEP /AC

Differences in wool production per sheep in each treatment were insignificant.

The 3 ewes per acre rate has been taken as the basis for a new long term trial aimed at finding what long term

effects have on stock, pasture and crop.
A few results extracted from this trial
are given below-each treatment started
with 15 ewes. All ewes which died did
so from pregnancy toxognic and all were

so from pregnancy toxaemia and all were carrying twin lambs.

Treatment	Ewes to lamb	Ewes to die	Lambs born alive	Lambs born dead	Lambs tailed	Tailing %	12 months wool gms/ 100 cms
GI, $1\frac{1}{2}$ ewes/acre,	11	0	15	1	14	93	81
set stocked							
GII, 3 ewes/acre	15	1	15	7	14	93	77
GIII, $4\frac{1}{2}$ ewes/acre	10	2	10	2	10	67	77
IV, $1\frac{1}{2}$ not grazed	13	0	11	5	11	73	84
V, 3 not grazed	14	0	18	3	18	120	78
VI, $4\frac{1}{2}$ not grazed	14	2	13	5	10	67	84



The regular breeding programme using conventional Australian material is being curtailed to allow new work with semidwarf wheats to be intensified. This was initiated in Washington State, U.S.A. in 1965 and involves a crossing and backcrossing programme using seven of the currently best varieties in S.A. and a series of semidwarf lines from Mexico, Chile and several States of the U.S.A. Selections will be taken from the first cross (Semidwarf x Aust.); first backcross (Semidwarf x Aust. x Aust) and second backcross (Semidwarf x Aust. x Aust. x Aust.) and will be based primarily on awned segregates at a height level consistent with the semidwarfs which have produced such spectacular advances in certain areas overseas. The ultimate aim is to combine the outstanding yield potential and response to fertility of the semidwarf wheats with the quality characteristics and adaptability of the Australian varieties. The most advanced lines of this programme are this year F₃ rows of the first crosses. So far only a limited but representative number of semidwarfs have been used. Many

potential semidwarf parents have been introduced from 8 different countries or States of the U.S.A. and these are being tested for the first time at Roseworthy this season, under both medium and high levels of fertility. From the results of this and subsequent trials, it is hoped that lines showing adaptability to S.A. conditions can be selected for crossing to Australian varieties in the second phase of this programme.

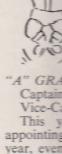
A full complement of trials involving early and later generation wheat cross breds, was carried out at the four usual sites in 1966-67, while four of the best cross breds were included in Department of Agriculture trials in as many as eight sites. Yields were average at Roseworthy and Farrell Flat, above average at Stow, but below average at Palmer. A feature of all trials was the generally higher yields of soft wheats while hard wheats were disappointing by comparison.

The most promising cross bred at the present time is RAC 687 (Scimitar x Kenya x Bobin) x Insignia 49, which has a mean yield in fourteen trials over the past four years at five different sites 4.4

thirteen to at nine s Heron. Tl but has s teristics. PUR Total 1966-67 bushels o registered private gr Oats, 1 A chan at Rosew season. In centrate u will act a multiplica

general di

bus./acr



4th position

first semi-

bus./acre better than Insignia 49 and in thirteen trials over the last three seasons at nine sites 2.5 bus./acre better than Heron. This cross bred resembles Insignia but has slightly superior quality characteristics.

PURE SEED PRODUCTION

Total sales of pure seed for the 1966-67 season were:- Wheat, 5,044 bushels of seven varieties: 651 bus. to registered growers and 4,393 bus. to private growers.

Oats, 1,017 bushels of three varieties. A change in the seed production policy at Roseworthy is being introduced this season. In future, the College will concentrate used to registered growers and will act as a registered grower for the multiplication of two varieties only for general distribution to private growers.



"A" GRADE

Captain: P. L. Jones. Vice-Captain: C. Hurn.

This year's football has been disappointing after the premiership win last year, even though we were able to reach 4th position and were beaten only in the first semi-final.

Of the seven league clubs, we had the strongest representation in the Association team: P. L. Jones (Vice-Captain), Hurn, Oliver, Evans and Goode played in the first team and Weeks, Mowatt, O'Donnell and Baldwin in the Seconds.

Nicholls, Oliver and Friedrichs have been the three most consistent players this year and are some of the few players who have remained injury free. "B" GRADE

Last season the "B" grade were narrowly defeated in the Grand Final and this year, under the superb leadership of Bob Brown, the "B" team have fought hard for their supremacy and a great deal of their success is due to his inspiration at training as well as in matches. They have supplied the depth of reserves needed at times by the "A's", and still won the matches easily.

The most consistent players have been Brown, Elsden and Boerth.

All players extend sincere thanks to Mr. Parry, coach, and to the trainers, John Kohnke and J. Hill.

B GRADE FOOTBALL

Back (l. to r.): W. Osborne, G. Fromm, Mr. O'Brien, P. Shakespeare, P. I. Jones.

3rd Row: B. Boerth, B. Crosby, J. Kohnke, W. Liebelt, C. Wurst.

2nd Row: M. Riley, J. Cooper, R. Liebich, D. Pannach, G. Brookman, G. Kirkwood.

Front Row: Mr. Footer (Manager), P. Redden, K. Woods, R. Brown (Capt.), W. Elsden, D. Gooch, Mr. Parry (coach).





The College entered two tennis teams in the Gawler Association last year, representing A and B2 grades. Both teams started off well, but holidays and exams upset the results, with neither team taking out the honours. This year, because of early exams, only one team will be representing the college in B1 grade.

The Roseworthy intercollegiate tennis team that travelled to Gatton this year could not keep the shield which had been won by our team in the past two years. However, they were far from disgraced, ending up fourth in the competition. The team comprised: R. Osborne (Captain), G. Brookman, L. Wright, B. Polkinghorne and P. Friederichs.

The 1966 tennis tournament results were—

Open singles winner: M. Stanley. runner up: R. Osborne.

Doubles winners: M. Stanley, K. Keain. runners up: J. Lawton, P. Yeo.

Handicap singles: R. Osborne. Handicap doubles: R. Osborne,

I. Anderson.

Teams, especially the intercol team would like to express their thanks to Mr. Ford for all the work he did, and for the coaching of the players. We are sorry we could not bring back the shield, but there is always next year.



The College fielded two teams in the Para Districts competitions, one team in Grade I and the other in Grade III. Our "B" Grade side was led by Spike Jones, but did not fare well, and had to pull out of the competition half way through the season because the holidays caused a serious shortage of players. The "A" grade, captained by Richard Baldwin was runner up to Riverside.

The success of the "A" team was due to a good team effort with each player performing well at certain stages of the

season.

Thanks are due to our manager, Mr. Burton, for his help and interest. We had four players in association teams. B. Boerth was in the Under 21 side, and R. Baldwin, C. Weeks and C. Hurn in the district side which was runner up in the Nutting and Young Shield.





with the for first siasm wa invitation competiti year, due the seaso here ov 1966/67 many pla Almost i Polo 'kno at RAAI bers atter Tom Ho tain, at finished u a few po

It is he its new y Polo as a



Congra Nick alia standing pion athl by Peter beaten by



TENNIS

L. to R.: B. Polkinghorne, G. Brookman (Capt.), R. Osborne, L. Wright, P. Friedrichs.



CRICKET

Back Row (l. to r.): B. Boerth, G. Mowatt, Mr. O'Brien, G. Fromm, P. I. Jones, N. Newland.

Front row: Mr. Weeks, W. Roesler, R. Baldwin (Capt.), C. Hurn, T. Twigden, R. E. Liebich.



The 1966/67 Season ended up well, with the final match being played just befor first session began. A lot of enthusiasm was shown by First Years at the invitation match. We will not be in active competition in the town association this year, due to exams being at the start of the season, and only a handful of students here over the holiday period. The 1966/67 season was good considering many played that had not done so before. Almost invaluable experience in Water Polo 'know how' was obtained at a night at RAAF Edinburgh, when a few members attended a film evening and talk by Tom Hoad, this year's Australian Captain, at present overseas. The evening finished up with all in the water applying a few points gained.

It is hoped that since the College with its new year will be able to keep Water Polo as a sport by inter-year competition.



Congratulations for 1967 go to "Mini" Nick alias Rohan Nicholls for an outstanding performance to become Champion athlete. He was very hard pushed by Peter Shakespeare who was only beaten by one point in the high jump

and last event in which the two competed.

Although the standard for the year was not high and training generally taken lightly, the Athletics Day itself provided enjoyment for many. The day was concluded with the presentation of prizes by the recently retired Keith Fairlie.

GYM JUDO

This year was probably the most successful ever for the Gym-Judo club and certainly the most successful in the last three years, due to a gradual consolidation policy within the club. Notable examples have been constitutional alterations allowing for an annual Open Night and Championship Evening, increased number of trophy presentations, and a general policy of purchasing equipment rather than improving present buildings. Thus, we should have ample facilities when we shift into our new building next year.

All Ju-Jitsu members obtained their belts; two boxers qualified for Blues; the Fencing Club was "re-juvenated". Such events reflect the heights attained by the club this year, and it is really no wonder that our Championship night was such a success. As a club, we can be proud of the fact that we have exemplified one of the ideals of the student body—sensible leadership by seniors earning full support from First Years.





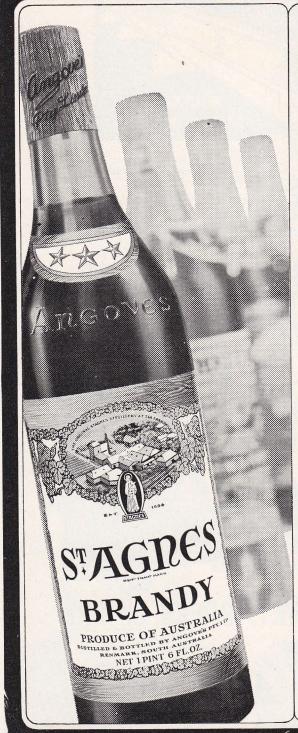
He may never plant a crop, this good neighbour of yours. But he knows the land and the people on it. He knows their needs – and the needs of their machines.

He's your Caltex Distributor – selected for his knowledge, his enterprise and his readiness to be of service to the community in which he lives.

Look to him for high quality fuels, lubricants and specialised products. Look to him for speedy, dependable deliveries in your busiest season.



A GOOD NEIGHBOUR — YOUR CALTEX DISTRIBUTOR



ALL BRANDES THE SAME? THEHECK THEY ARE!

St. Agnes is made in pot-stills.

St. Agnes is twice distilled.

St. Agnes is matured for long years

in small oak wood.

St. Agnes is pure, clean and dry. You can prove it is better

by trying the others.

Or you can take the word of International Wine Judges.

St. Agnes Brandy has won:-

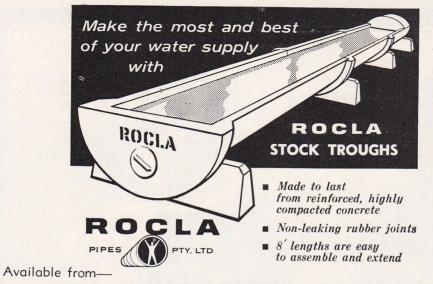
Championship Cup : Montpellier, France.

Gold Medal: Budapest, Hungary. Gold Medal: Ljubjana, Yugoslavia. Silver Medal: Tbilisi, Russia.

Convinced? Then keep asking for St. Agnes and get the best

SAGRES BRANDY

865



ROCLA CONCRETE PIPES LIMITED

Cavan Road, Dry Creek

YOUR STOCK AND STATION AGENT

WETMORE DOES IT ALL

CHOPS GRINDS **ADDS** MIXES **DELIVERS**





THERE IS A WETMORE MILL FOR **EVERY PURPOSE**

FROM

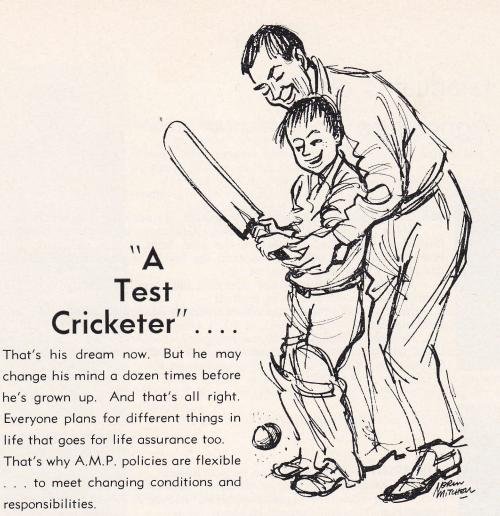
PRIMARY IMPLEMENTS Pty. Ltd.

118 GLEN OSMOND RD., PARKSIDE, S.A.

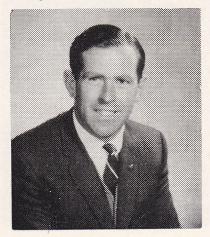
Phone: 72 1000

That's change he's gro Everyon life that That's w . . . to responsi If you them to

living a



If you haven't reviewed your life policies for some time why not go over them today with me to see how they match up with your present way of living and the goals you and your family have set for yourselves?



RICK GORDON

Consulting Representative

A.M.P. SOCIETY

A.M.P. FIRE & GENERAL INSURANCE

Phone: GAWLER 880

Graduates of 1967 Agriculture



MARK BABIDGE—"Babs"—"Fair dinkum, it's not crap, I mean to say"

Mark roamed in from Pulteney Grammar and soon established himself as the largest member of the year, both in size and voice. His booming stentorian echo has widened the cracks in the senior block and has made TV viewing difficult at times.

Despite being chief grape squasher this year, his ability to "hold"

champs leaves something to be desired.

His physical strength has amazed section officers and despite his bulk

he rarely shirks.

He has a pleasing nature, reminding one of Falstaff. We wish him well in the wine industry, where we presume he will attempt to store it in Babidge casks.



BOB BROWN—"Tuff"—"Come on you fellahs"

This excitable character is often seen dressed in moleskins and 'lastic sides, raving about the capabilities of his beloved S/E—especially around Biscuit Flat.

Tuff is a great trier and has done well in boxing and football, captaining

the "B" team to the premiership this year.

A good worker outside and at the desk, Bob's whereabouts on the weekend is doubtful, sometimes even to him. Next year he'll be just another crumb at Biscuit Flat.



CHRIS CAUDLE—"Chris"—"This is up to the individual"

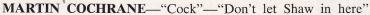
Another Pulteney product, this suave gentleman has managed to keep his hair at a preferred length even during the torrid days of early first year.

Always ready to laugh, CC's neatness often made him the subject of

some heckling.

A keen footballer, he is sometimes outspoken as regards College rules. A member of the Jet Set, he intends to devote the future to economics.





The punter of the year, Cock is often seen discussing racing with Jim Probert. His dryness and witty, cynical outlook will endear him to the Viet Cong, as he won the call up stakes last year.

He was suitably horrified (being a confirmed woman hater) when a

member of the opposite sex was left on his bed one night last year.

His management of the "3rd year tea room" has been greatly appreciated. His interests lie in dairying in the Western Districts of Victoria, but we feel that he will end up as pantryman at R.A.C.



DAVID CRAWFORD—"Dave"—"Hey Cheesey Come Here"

David crept in from Scotch College and has been unobtrusive ever since. A slow mover, he is also a deep thinker. Any excuse for a fight with fishermen is good enough. David has been the subject of many tortures, has even been clapped in irons in the lecture room.

He is another worshipper of the S/E, where he will probably live building dykes. A generous type—even to the extent of lending his car to doubtful

drivers.

His exam results have steadily improved, and so has his sense of humour.



BRUCE CROSBY—"Bing"—"Yeah!"

"Bing" is one of the best "stirrers" of our year. He hails from Kadina, with an extensive and practical knowledge of cereal farming.

He is a teetotaller, and one of the year's car lovers. A keen footballer, Bing is quite handy at most sports.

A quiet, fairly serious type, he studies harder than most, and usually finishes in the first ten at exam time.

His studies on Revolutionary Farming Techniques have left Mr. Norton aghast, but they are still speaking.



JOHN DAWKINS—"Porky"—"Hell of a funny"

The orator of our year, and the SRC Rep., Porky is a W.A. immigrant. This jovial gent has some very set ideas, and rarely compromises, even with authority.

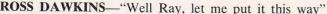
Claiming to be intellectual, he turns into a maniac behind the wheel of his ute revelling in slippery roads, and giving off with devillish chuckles.

He is a staunch Labor party fan, but discretely plays polo with the upperclass when possible. He has done an outstanding job in SRC, for three years, especially as President in 1967. He was accosted by the Principal's wife while attempting to win his Bronze Medal wearing a birthday suit down in South 4 drain.

We all think he will be the only member of the year to see the inside

of the Adelaide Club for which he is polling for Chairman.





Ross came to Roseworthy at the bottom of the Learnington Peak order, and soon established himself as an authority on most farming practices.

Ross likes to see standards of sections high and thrashes around in his Javelin to see if all is in order.

Ross drives over a given distance in the shortest possible time, in any vehicle, tractor or otherwise. But Mr. Sutcliffe has revoked his wheelbarrow driver's licence.

A crack rifleshot, Ross has been in the Intercol Rifle team for three years, and Captain in 1967.

He has proved one of the better shearers.

Ross's size equals his forceful manner and we wonder who will supervise the supervisors next year.



GAVIN ECKERSLEY—"Gav"—"No haircuts 'till after the exams"

"Gavvy's" main claim to fame is his raucous voice, which promotes unsavoury comments from all quarters when he attempts to "sing?" in the bathroom—thus the name "Gravelguts".

He was self elected "Mr. Football" 1965 and also proved his ability

in swimming, winning a Blue for this.

In first year, he may have been hermaphroditic, but has certainly changed since. His main interest is vultures (besides other things). Never short of words, Gavvy is the rouseabout of the year, though well under the thumb in marital terms.

He is an aspiring 4th year, and his services as college barber may continue for another year.



JOHN EVANS—"Evo"—"Time for tea at Martins"

Evo is one of the oldest members of the year and professes to be fine and upstanding, even on Saturday Night.

His abillities with the opposite sex are famous, but he has had to

change his views since a recent engagement.

He is the most scientific slacker in the year, having the uncanny knack

of doing less with more apparent effort.

John always sees the funny side of things, and despite his healthy appearance, he is actually physically ill, as his doctor's appointments show.

He is very interested in Beef Cattle and should do well in this field.



GRAHAM FROMM—"Frommy"—"This could be looked into"

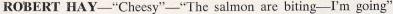
This tall, lanky friendly ghost was first noticed after illegal trading practices in first year, hence gaining another of his many nicknames.

A staunch pillar of Norwood, he drives a polished taxi with a gold plated mudguard. His long arms are very useful on the football and cricket fields, where he has proved himself.

As rangey as a Mallee bull, Graham's main ambition is to cast a shadow

and stand up straight on Saturday Night.





The greatest procrastinator of the year, Cheesy had a loud 21st birthday in first year, with spectacular results and haircuts all round. Mr. Hiddle was not amused when Cheesy offered a piece of Birthday Cake.

Robert's fishing abilities are well known, and this sometimes runs away with his thoughts. No one is quite sure what Cheesy *does* going to bed, as he has been found in the TV room clad in underwear at 2.30 a.m. reading.

His bike-riding ended after 3 falls on a zig-zag strip from Gawler, and his placid disposition and easy going temperament are renowned. He has never been known to worry. He is often found sitting in a tree reading a book.



BOB HOLLOWAY—"Stan"—"Strewth"

Bob, who spent the earlier part of his life at Alice Springs has been endowed with a great number of yarns which he spins on the slightest provocation.

He had a trying first year, unable to accept the friendly advice of the Third Years, one of whom became Sheep Cadet much to Robert's delight.

He has the dubious honour of being Chief Light Globe Dispenser. He has had the most colourful selection of vehicular transport in the history of the College . . . these including vintage cars and motorbikes.

His probable occupation will be chief Pick and Shovel adviser at Fink River.



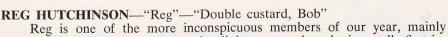
CHRIS HURN—"Chook"—"Get up Innes"

Chook came to us from Rostrevor and a Pharmacy course at Uni. One of the most likeable personalities, Chris has proved his ability at many sports, especially Cricket (Vice-Capt., 2nd year) and Football (Vice-Capt., 3rd year).

He is on the SRC Committee and is easily the fastest driver in 3rd year. He is an excellent College man, taking part in all functions, official or not.

He has the ability to tame wild cows and has done some midnight milking on No. 47.

He intends to be a plonky next year, when he may discover how to distil apricots.



Reg is one of the more inconspicuous members of our year, mainly because of his absence, except at the dining room where he is usually first in. His favourite diet is double custard, and this must contribute to his healthy glow.

His main interests are in Ju-jitsu, and his efforts in this field have been appreciated.

He is quite bright and although not a great studier, or a great note-taker,
—sleeping at unusual hours—he usually does well in the exams.

Reg loves bright colours and his car interior indicates this.

His main attraction is at Happy Valley, and methinks young Reg could have bells in his ears!



JOHN JONES—"Bumpy"—"Don't take all the bloody milk"

Bumpy is the only pommy jackeroo at Roseworthy, yet he is not greatly attached to Brummagen. His room is decorated along the lines of the Theatre Royal, and he conserves his great strength by sleeping therein as often as possible.

He has a fine appreciation of forms and figures and actually believes

that nudity is an art form.

John is noted for his bumptious attitude to staffies, and has worn out five cushions in lectures.

He has still not recovered from the breakage of his vacuum flask.

He will probably be a choreographer at Dance Scene '67 in the future.



PETER JONES—"Spike"—"Well, I might be along"

Spike (also Innes) lumbered in from Red Hill after spending some time at P.A.C. A quiet, reserved type, Spike's sense of humour has shone on various occasions. His capacity for absorbing copious quantities of fluid is well known.

Innes's farming ideas are very fixed, though practical. His views on certain selection processes are immovable. His indifference to sport is a source of amusement to us all, even though he has done well at football and cricket, captaining the "B" team last year.

His aim is to "buy that place next door," even though we keep telling

him the daughter does not go with it.



PETER JONES—"Lofty"—"Hey Trev, I saw a mighty Western last night"

Peter rode in from the Sunset and said "Call me Lofty". He put down his guns and sat down for three years' work. He has proved his abilities at football by playing for the "A's" for three years and being captain in 1967, and has also played in the Big League.

He is adept at sarcasm and his words do not go unnoticed both in and out of the Lecture Room. His future may be connected with the wonders of

coconut oil for receding hairlines.

Next year will see him in the teaching profession, and believe us, he can teach them a thing or two.



JOHN KOHNKE—"Chicken man is coming" (he's everywhere)

John hailed from Adelaide High and soon proved that his aim was to receive an R.D.A. by hard study.

He became the secretary of the football club in 1st year and has done

the job admirably since then.

John is very conscientious and has finished first in most exams. Being once a woman hater, John's romantic interests fluctuated violently in second year, falling away again this year, and his loves are now, as before, Massey Fergusons, Holdens and mist propagation. We foresee a waning in the "mist" part of it soon.







Trevor's first haircut at Roseworthy changed his appearance and outlook considerably.

He lives in the outback areas near Woodville-wears clothes tailormade by R. M. Williams, and is distinctive because of this, his pipe and cigarettes—both smoked profusely.

In second year, "Rocker" acquired a motor bike which transported him to every dance in the district and enabled him to absolutely destroy his natural fear of birds.

He is very practical, and hates Socie DC's. The large numbers of bottles (empty, of course), on his mantelpiece speak for themselves.

Trev was a member of the Intercol team in 1966/67.

He hopes to be a Stock Inspector, covering a wide range of commodities.



BARRY MORTIMER—"Morty"—"Just call me Mort"

On completion of studies at Brighton High School, Morty arrived here as a young and innocent lad. He has changed vastly since then and is now quite normal in College terms.

He spent considerable time in 1st year jumping off tables and his bass voice is often heard echoing down the corridor. Morty was one of the foolhardy to attempt Zac's interval training-twice. He got ballsed up in the gymnasium somewhat though.

He was almost gassed to death in a car which didn't quite make the

Morty should do well as a teacher since he has a total attraction for schoolgirls.



NICHOLAS NEWLAND—"Nick"—"Everyone will be there"

Nicholas came to us from Tramways Tech., and appeared at first as an aspiring Aristotle. His shrewd manner and sarcasm soon made him a person to be avoided in an argument.

He admires the old school tie, and his vernacular is beyond most of us. His constant companion is a Concise Oxford. A diligent worker he has done well in athletics and cricket, being in the A team for three years.

He is the editor of this magazine and so comments in his direction are suitably reduced.

He and the SRC Rep. are constantly at loggerheads over current political issues: Nicholas obtaining his wierd ideas from "The Bulletin".



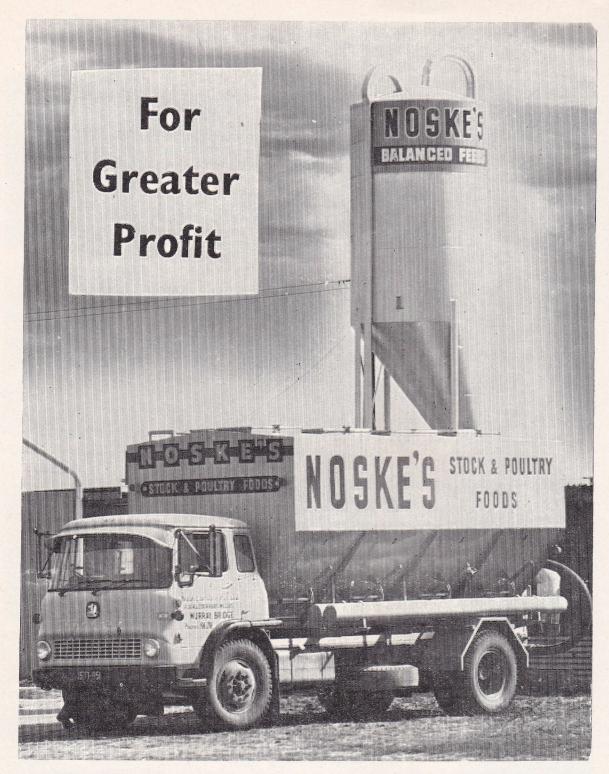
ROHAN NICHOLLS—"Mini Nic"—"Easy kid"

At the beginning, "Mini" was the year's smallest member. He has changed considerably since in stature and sporting ability; he is a natural sportsman, excelling at football and plays tennis, golf and cricket well. He topped it all this year as Champion Athlete.

From Victoria, his presence is often forecast by unusual sound effects

which he produces with ease.

In 2nd year he purchased "Shorty" which has taken him to Melbourne and Broken Hill. He's a diligent worker, though he denies it and finishes well in all exams. He's OK for a Victorian I guess, but we've had him for three years.



Write to BOX 284

MURRAY BRIDGE

or Phone 32 2422

Canowie Poll Merinos are noted for their good, deep, plain bodies, robust constitutions, and heavy-cutting, soft handling coverings of wool showing plenty of quality.

NONES

POLL MERINOS



Reg. Flock No. P12

Founded 1914

Canowie Stud Rams sold to \$1,500 at our 1967 Field Day in July, grossing more than \$8,000.

NARACOORTE 1963-67—Canowie has had top price and average Polls.

MELBOURNE SHEEP SHOW—Showing a team of two 4-tooth Canowie Rams, gained Grand Champion and Reserve Grand Champion. Strong wool.

Canowie Rams, selling for first time at Tumby Bay and Perth Royal Rams Sales, sold freely and effected total clearances.

Kulpara 239

SOUTH AUSTRALIA'S OLDEST AND LARGEST SPORTS DEPOT

Can supply all your Sporting Requirements from the Biggest Stock in Adelaide

ADELAIDE SPORTS DEPOT LTD.

PARINGA BUILDING, 13-15 HINDLEY STREET

Opposite Miller Anderson Ltd.

Write or Phone 51 4161 51 4162 Box 195 C, G.P.O. Telegrams: "Elbro"

R. Babidge & Sons

COOPERS, VAT BUILDERS and IMPORTERS

Cnr. Cuming Street and Railway Terrace, Mile End
Adelaide

Spray Vats and Pickling Casks
of any size and shape
Made to Order

TELEPHONE 57 4723



iscover all the practical relation in the practical relation in the practical relation is a standard property of the practical relationship is a standard property of the property of the prope

The 8 stand centre-board layout was specially prepared to meet the requirements of the College. In the same way Lloyds work with every client to design a shed to meet their individual needs.

Other modifications in addition to the layout include special catching pen and let-out pen doors, ventilating ridges and eaves, plus an extra large woolroom. Apart from these the shed has standard Lloyds features, proven practical features.

HIGH STRENGTH FLOORS designed to take 250 lbs. a square foot.

GANG-NAIL TRUSSES factory fabricated and capable of supporting with lifting gear loads up to \frac{1}{2} a ton.

NO RUST OR CORROSION problem with weather or sheep's urine.

PROTECTED AGAINST WHITE ANTS with a government-tested and proven white ant preventative.



FRANCIS STREET, PORT ADELAIDE TELEPHONE: 4 3111

A5J531



JOCK NICKOLLS—"Coming to this show on Saturday night?"

Jock is the only Taswegian in the year and came here on a Scholarship.

He has shown himself to be worthy of the name "Jet Set Jock".

The acquisition of a Valiant in 2nd year enabled this title to be kept more easily. Unfortunately, he has heavy foot disease, and all than can be seen of him on the way to Adelaide is a cloud of dust.

A member of the SRC in 3rd year, Jock is a good College man, in study and in practical aspects (outside work) and shearing, in which he was aided by stemulation and pliability.

He will return to his father's farms next year.



ROBERT OSBORNE—"Ossie"—"Hello, is that Robin?"

Ossie has had more experience than others of the year. He was one of the honourable eleven grandstand painters, and is another good Collegeman—both on and off the football field, where he is a versatile player; was also captain of the Intercol tennis team this year.

Bob is a keen studier (of photography as well as lectures) and works hard on outside sections.

He has a pleasant manner, and his room is usually full of admirers.



DAVID PANNACH—"Sharky"—"Where are we going next, Zac?"

Sharky is a River rat who joined us this year in May. He settled down to hard work to gain a Diploma. He is a keen B grade footballer, and was captain of the water polo team last year.

Sharky's A40 is actually mobile despite appearances and he still

frequents the nurses' quarters regularly.

Horticulture is his ultimate aim, once he overcomes two years playing soldiers.



RUSSELL PARTINGTON—"Russ"—"Hang, would you mind repeating that? Strike"

Russ was completely amazed by the attitude of the 3rd year students (Hang!), but he soon overcame this problem and was first noted as a good organist.

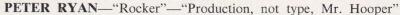
He attempts to satisfy his appetite with vast quantities of bread.

Russell is a teetotaler and a woman avoider, and can be quiet outspoken about this.

He tends to be relieved in unusual places and would do well in high pressure business.

In general, if Russ is there, everyone is. His good nature makes him more vulnerable to ribbing.





Peter began with a Whyalla haircut which has, amazingly, survived

(side-boards included), despite constant threats.

He is a keen footballer and boxer. His love of Roseworthy and its traditions were deflated slightly with the departure of his bosom friend Gerry.

Pete argues at any provocation, but his adversary may find himself labelled as a fool all too quickly. Topics range from razzing to religion.

He visits Norwood occasionally, but his selection requirements are fairly rigid.



GEOFF SCHRAPEL—"Herman"—". . . already yet so soon"

This product of the Barossa began 1st year as a quiet and reserved lad with a shady reputation. He changed immediately after finding himself behind a steering wheel

behind a steering wheel.

His first vehicle was unmentionable—he stepped up later to the hottest Holden Ute in Roseworthy, and could be heard thundering through the streets of Gawler with a vibrant roar.

He is one of our chief talent scouts, but often finds himself involved

in some serious romantic problems.

Kraut's ability to lose his two front teeth in technicolor yawns cause some embarrassment.

He is an ardent Hortifan, though perhaps it is difficult to see the trees through his (O.P.) fag smoke. Herman always smiles and may still be smiling at R.A.C. next year.



KARS SLUITER—"Dutchy"—"She's bloody nice"

Kars came to us from Jabuk, "the agricultural centre of the world,"

after a year's practical experience.

Being practically minded, Dutchy assimilated well with the life here. A good rifle shot, he was in Intercol in 1965 and 1967, and also achieves distinction in "pouring down the yard."

His toothy grin apparently is winning, from Norwood reports, and

from our own experience.

He is a hard worker outside, and excels on the Shearing Board. The practical side of agriculture will see Dutchy next year.



PHILIP SHAW—"Phil"—"She went right off"

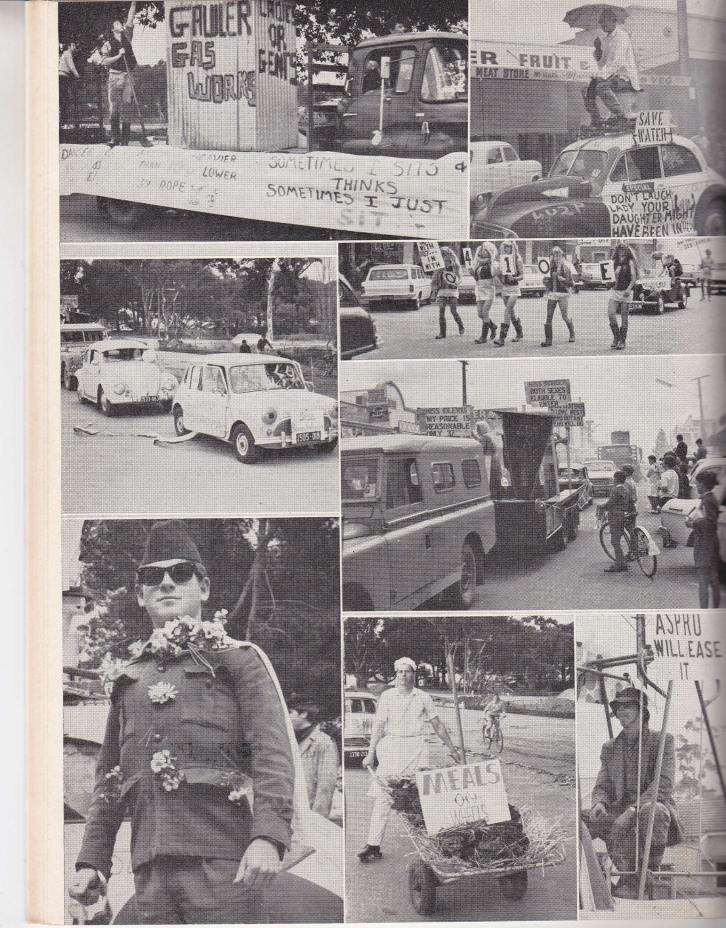
Phil is perhaps one of the few who may have lost weight while at Roseworthy, though his strength and physique equal that of a gorilla.

Phil is used as the College bulldozer on the footy field, mowing down the opposition like flies. His attempt at living on carrot and cabbage juice for one week in 1st year ended as a failure in more ways than one.

Phil can be called a rough diamond and his driving of the mini has made many policemen gasp in astonishment. His crushing grip has left many a cup in pieces.

Despite all this, Phil is a great trier and improves his results in each

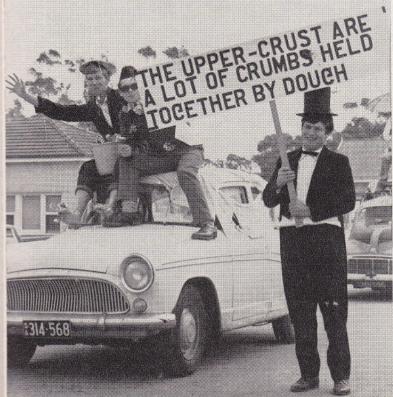
exam.

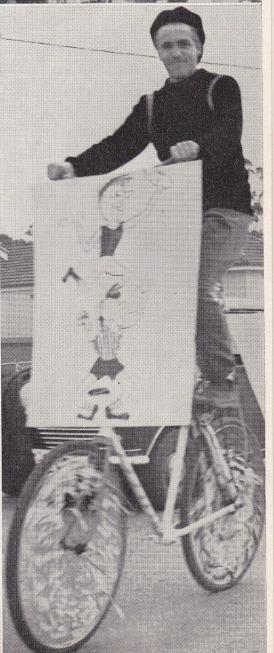








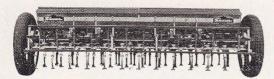






★... teaming traditional Shearer strength of construction with emphasis on sowing accuracy, cultivating efficiency, minimum maintenance and fast farm-to-farm travel! From the vast resources of this great Australian Company comes the challenge in proven quality Tyne Drills — the Shearer Highway Lift!

- * NEW HIGH ROAD TRAVEL CLEARANCE
- NEW LOW-SWEPT FRONT
- NEW LOW-PROFILE HYDRAULICS
- * NEW FIXED CRANK AXLES
- ★ NEW UNIQUE LEVEL-LIFT FLOATS
- NEW ROLLER BEARING HUBS
- NEW EASY PIN RAM ATTACHMENT
- * NEW QUICK-SCREW HITCH POINT



★ FULL 7-IN. ROAD TRAVEL CLEARANCE obtainable without adjustments in ONE LEVEL-LIFT MOVEMENT from anything down to 4 in. in the ground. A true out-of-work-into-travel lift in one fingertip movement.

AVAILABLE IN

SIZES: 16, 20, 24 row. 20 row has DOUBLE COG-DRIVE. HOPPER CAPACITY: BOX IS ZINC ANNEALED

			Bushels of Dry Wheat		187 lb. Bags Fertilizer	
16	row	 		bushels		bags
20	row	 	 8.6	bushels	4.3	bags
24	row	 	 10.4	bushels	5.1	bags

New, Modern! Engineered for high Farm Production work

★ Constructed on rigid Fixed Crank Axles, the 8 in. ASAE hydraulic ram only lifts the float, not the whole machine, thus avoiding over-strain on the tractor's hydraulic system. Front and rear pressure rods ensure POSITIVE PRESSURE for POSITIVE PENETRATION. They give POSITIVE LEVEL-LIFT to ensure safe, fast travel along the highways and byways.

Anti-sway stabilizers give rigidity to the undercarriage while working or travelling. Note that floats attach to their own front angle, all of which drops out if interchanging to another undercarriage. Strong duty floats carry spring steel tynes in either "Springtyne" or "Spring Release" Designs.

Where you see this sign-



JOHN SHEARER & SONS LIMITED

HEAD OFFICE AND FACTORY: KILKENNY, SOUTH AUSTRALIA
BRANCHES: 359-361 City Road, SOUTH MELBOURNE, VICTORIA - South Street,
TOOWOOMBA, QLD. - George Street, CONCORD WEST, N.S.W. - Tailem Bend Road,
MURRAY BRIDGE, SOUTH AUSTRALIA - Hoskins Street, TEMORA, N.S.W.
DISTRIBUTORS: Wigmores Machinery Pty. Ltd., Cnr. Koojan Avenue and Great Eastern
Highway, SOUTH GUILDFORD, W.A. - Branches at CARNAMAH, CORRIGAN, GERALDTON, GOOMALLING, KATANNING, and MERREDIN, W.A. - A. G. Webster & Woolgrowers Ltd., HOBART, LAUNCESTON, BURNIE, DEVONPORT, TASMANIA.



FARM SERVICE

For prompt and efficient BP FARM SERVICE CALL YOUR BP AGENT . . .

BP TRACTOR FUELS

BP LUBRICANTS

BP TRACTOR OIL UNIVERSAL

BP CORALITE KEROSINE

BP COMPROX DETERGENT

BP PASTURE SPRAY

BP SUMMER SPRAY OIL

BP ANTI-BLOAT OIL TO

BP CARROT SPRAY

BP WINTER SPRAY OIL



for every agriculturist

HODGE'S

GREAT BOOK



You'll find that this well-known book helps you gain a firm understanding of Pasture Development and Management—a vital asset to any agriculturist. Written by Mr. J. E. Hodge, with specialist contributions on relevant subjects, "Green Fields and Pastures New" covers many proven facts on the achievement of better pastures, better stock, heavier crops and increased soil fertility. Clearly set forth in terms which are easily understood, you'll find that this book is a valuable companion in all your farming activities.

AVAILABLE FROM ANY ESTABLISHED BOOKSELLER OR DIRECT FROM . . .

M. F. HODGE & SONS LTD.

Agricultural Seedsman & Seed Merchants

128-134 GILBERT STREET — 51 5571

only

GREW FIELDS AND PASTURES NEW

\$2

Post Free

• 40 ILLUSTRATIONS

16 CHAPTERS COVERING —

★ Soil fertility ★ Crops in relation to land use
★ Pasture development, establishment, and
management ★ Inoculation of legumes
★ Choice of Pasture Species, mixtures, establishment and management for rainfall areas
of 12-18 inches, 18-25 inches, 25 inches and
over ★ Special purpose pastures
★ Strip grazing ★ Seed testing
★ Surface seeding ★ Control of weeds, fodder,
crops, etc., etc.

POST THIS COUPON TODAY

Plea 3rd	ase fo	orwa	rd of "	Green	Fields	and	cop Pastu	ies o	of the
I e	nclose	·							
Nar	ne								
Add	dress								

PINK OR WHITE-CALL FOR STARWINE TONIGHT



No other wine has the delicate, tingling magic of Orlando Sparkling Starwine.

No other wine gives you the choice of blushing pink or palest gold.

ORLANDO Sparkling Starwing

Sparkling Starwine (REGD, T.M.) is produced and bottled by G. Gramp & Sons Pty. Ltd.

BAGS

Worn out or torn Hessian Wrappings any type scrap Hessian

3 cents lb.

J. INVERARITY PTY. LTD.

36 BEANS ROAD, THEBARTON, S.A.





Twiggy is reputedly "last of the River Breed," and his ancestry is perhaps due to the river tribes. He should not be confused with the model since his chest is bigger. He is official timekeeper at the footy and upholds the traditions faithfully.

Twiggy's claim to fame is his governorship of the Waikerie tourist board during the river trip, and his father will always remember Twiggy's

dismal failure as a host.

Trev has been a keen cricketer, "opening" for the "A" side last year. He has fitted in well with College life and works hard; he is interested in feeding peaches to pigs, but more interested in the peaches.



KYM WOODS—"Woodsie"—"Coming up home this week-end?"

Woodsie is the barman of the year, an expert keg tapper and refill man. He has had a couple of cars while at R.A.C. and drives them in a manner sometimes dangerous to the public-especially on ovals.

He can often be found at Clare helping his father out behind the bar, and is an ardent "surfie," haunting south coast beaches on free days.

Woodsie also "organises" regular sight-seeing trips to Auburn on Saturday nights. His capacity for smoke and liquid are a source of amazement to all who know him.

He is a keen footballer and a fast sprinter, also a part-time golfer.

Oenology



JEFF ANDERSON—"Joffrey"—"Got any Vic. beer?"

Big Jeff entered R.A.C. labelled with a D.D.A., as a quiet gent, who was loathe ever to use his brute strength. The scourge of Dookie soon became well known for his subtle comments that left many without answers, or just completely bluffed.

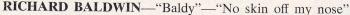
He succumbed this year to a writer who uses blue envelopes, and this amorous admirer almost trampled some senior members of the plonky course

in order to get to Jeff in Sydney recently.

Many a plonky has been seen on the floor looking up at Jeff who is still calmly putting away brownies with only Vic. labels.

Next year he is off to Avoca to produce brandy.





After gaining an R.D.A., Baldy decided that the plonky course was for him. Apart from very good exam results, some well played knocks on the cricket field and a dashing, hard kicking brand of football, Baldy has excelled as a stirrer, especially where there is a sniff of scandal, and has been a constant advocate for engagements (for his mates only)—until quite recently when he casually announced his own.

At the end of the year Baldy is returning to Mudgee where, as he in-

forms us, the top wines will come from (no comment).

We congratulate him on his engagement and wish him well for the future and hope he's not too disappointed when they distil all his efforts.



COLIN CAMPBELL—"Col"—"What a b - - - - of a life!"

A graduate of Dookie and a staunch supporter of all things Victorian, such as Fosters Lager, Melbourne Bitter, etc., Col played some rugged games of football on a half-back flank for A grade last year, but a cartilage opera-

tion put him on the boundary this season.

Although he may not qualify for the title of "fittest plonky", he more than adequately fills the bill as "Gramps" due to his stumbling gait, exclusively tailored dungeys, frequent horizontal position, anywhere, anytime and fatherly advice on all ideas from smokes to social life, but specialising in marital problems.

Col announced his engagement early this year and we congratulate him and wish him well on his return to his Rutherglen winery, if they'll have

him back.



BOB CARTWRIGHT—"Industry"—"I'm not sure what the wife will say"

Bob was born 21st December, 1946, coming from Nuri. I can't say that he's breathed the good Barossa air, but what he doesn't know about the tricks of his chosen trade, only the Barossa Co-op knows.

However, apart from being meticulously efficient, well organized and industrialized, this fellow is quiet, well-mannered, friendly and able to get

on well with anyone.

He plays deadly snooker and a deadly serious game of courting.

New 'specs' have not changed his outlook, and he is expected to "settle down" at Nuri. producing "pearls" fit to be placed before the Stuhl of a Kaiser.



ALAN HOEY—"Pommy Al"—"Daddy's got another new Holden"

This "two pint screamer," who comes from the Aussie Pommy-land—Elizabeth—joined the College to do the Ag. course but moved up to the more sophisticated Plonky course after two years.

Alan, an active member of the College B grade football team for two years, has devoted this extra time chasing women and can be frequently seen racing between College and Elizabeth in pursuit of Blue Bird.

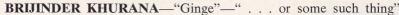
Alan, sponsored by a wine-making firm to do the Plonky course, hopes to assist in building up the "most modern and fully automatic winery in

Australia."

It could be, if he has too much to do with it, a fully automatic shambles.

0





January, 1967, brought to the plonky course an international traveller equipped with a degree in Chemical Engineering from the Delhi University. Such qualifications enabled Brijinder "Ginge" Nath Khurana to do the one year wine course.

Ginge had, on arriving, very set ideas on the amount of manual work an upper class Indian gentleman should do-eight other plonkys had different ideas, and as a result Ginge has a degree plus specialization in painting, washing up and pruning.

Social actvities—other than weekend Indian parties, complete with 24-hour gambling and sari-clad hostesses (??), Ginge has been fairly quiet.

We wish him the best for the future in establishing a winery in India -but can they make wine from molasses?



RON LIEBICH—"Road Runner"—"Eh?"

After three years agriculture, Ron decided to do the elite Plonky Perhaps the quietest member of the year, Ron is very keen on excelling himself in cricket, athletics and football, being in the B premiership side this year.

Ron is always in a hurry to lectures—usually late—and has been

named "road runner" because of it.

This year we find Ron driving a car instead of running home acre fields. We feel this is to see a "friend" of his. His association wit friend has been quite secretive until the last few months.

After completing the course Ron will work at Rovalley for his

and we wish him the success he deserves.



PHIL WALDECK—"The Mess"—"I'm not under the thumb"
After attaining a Diploma of Agriculture at Muresk (W.A.), decided to further his studies and do the plonky course.

At first impression Phil appears a little slow at manual work, but

is more than made up for by his extremely vigorous social life.

Until early this year, Phil claimed that there were no women in worth looking at twice; now he firmly believes that there is one not exception.

His favourite pastimes include driving "our" car towards Gawler Blo

wearing "our" jumper and collapsing in a mess on "our" bed.

No doubt Phil will go over to the West and start producing exception wines at his father's cellars with the help of Marie, but no matter w happens, he will always enjoy life.



WARREN WARD—"Toots"—"Got a smoke on ya?"

Warren passed out of second year agriculture with a sound acaden result; it is a pity his social outings are not of the same standard. Since th he has nearly completed his two years in Oenology.

Some doubt is now present with a rise in Warren's social standar

that his final exams may now suffer for it.

There is at the moment much doubt about Warren's future as aft receiving a Cadetship to further his studies in Oenology and Economics Davis University (California), Warren has now been called up.

Whatever avenue he ends up taking, we can only wish him the best

and our sympathies to those who land him.

Comment

This year has been a rather critical one in South Australia with regard to its water supplies. Many parts of the state received no rain of any consequence until after June, leaving the first six months of the year extremely dry. There was a little consternation about water supplies in the Adelaide reservoirs, and we now see dramatic pictures in the local papers, of "lowest levels on record." Thus people are perhaps a little more water conservation conscious

this year than previously.

Even though this problem exists over much of Australia, the apathy of some people to water conservation is amazing. Many seem to think that just because the water comes out of the tap at high pressure that it will keep doing this, yet water in this state is liquid gold. The average daily water use per head is 90 gallons, and 380,000,000 gallons are used per year. This rate doubles every 20 years. 200,000,000 acre feet are taken from rivers per year. Of the usage, 10% is for kitchen and laundry use, 20% for sanitary and ablutionary purposes, and 20% for household and

garden purposes.

In the agricultural field, water is the most restricting and limiting factor to increased production over Australia as a whole. The sheep industry supplies 70% of Australia's export trade, yet expansion of this industry is considerably hampered by a chronic lack of water. A sheep will not graze more than 4-5 miles from water so watering points need to be available 10 miles apart if maximum usage of land is to be achieved. Where underground water is not available, dams could be built in suitable areas. Incidentally, Australia has an average run-off of 1-1/3 in. It is true that many soils will not hold water, but surely research could find a way to overcome this. Evaporation from dams was a problem, varying from 15-70%, but can be reduced considerably by spraying alcohols of fatty acids on the surface. When one realizes

that Australia's 158,000,000 sheep need 112,000,000 gallons per year, and it takes 250 gallons of water to allow 1 lb. of wool to be produced, one can fathom the importance of this problem.

The advantages of water conservation are more than just saving water. The benefits on a national scale are several. For example, we read in the paper of cyclones and torrential rains causing flooding, and great loss of stock and property. In some cases, this is unavoidable, but a more vigorous approach to water storage would be a way of alleviating this problem. This would also increase erosion control.

With the current controversies on the of the Snowy Mountains Authority and the Chowilla Dam project one wonders just how far this apathy towards the dire needs of a vast area of Australia extends. Not one of us is a Midas, yet all are daily handling this liquid gold. The amount trickling through the nation's fingers is too great to ignore much longer.



We advise her to face into the wind!!

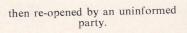


The new Agricultural Engineering building.

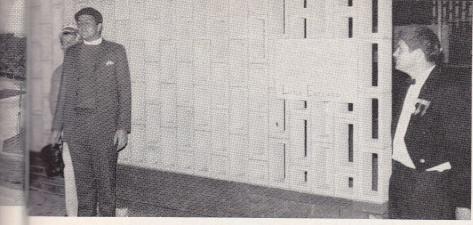




was officially opened







Bishop Savage and the Unable Minister.

On the twenty-first day of the sixth month of the sixty-seventh year, a large building was opened on the grounds of this College. The building will provide, among other interesting features, small hiding places for both Staff and Students on cold, bleak work days.

The Official Party included many distinguished guests, amongst them were Her Robusty, Liz and her husband Pill, the right and left Unable the Minister of Pommiology, and Bishop Savage, who blessed the cream bricks.

The long awaited arrival of the white limousine with blue trimmings, pulled by twenty lean horses suitably harnessed for the occasion, was greeted with a roar from the crowd. A single bugle ceased this noise and as the Official Party alighted, the setting sun glistened on the medals of all present, making a beautiful sight. An inspection and blessing of the Militia and Guard of Dishonour began proceedings.

The Party mounted a canary yellow dais, bespeckled with hundreds of National Flags streaming from both sides. Appropriate speeches were made by all, and the emphasis in all speeches was that a home away from "home" was now opened for all lost souls reaching this far part of the earth. This fact was regarded as more important than the struggle in the erection of the building as a major project, and of the devoted work over many years to make the erection possible after months of trial and error. These proceedings having finished, a small ornamental tree was planted and suitably fertilized. The party then moved to the plaque which was unveiled in traditional style and the building was declared open.



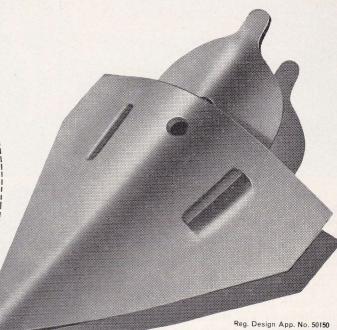
Her Robusty Liz at the planting.

The crowd moved in to inspect but were suddenly overcome by opening rains in a freak occurrence. Thus the ceremony was terminated and to the roll of the drums, all were summoned back to their "castles" after the biggest and most colourful experience for many years.

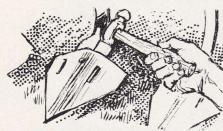
Another first for McKay

30 years ago first with... Slip-on-Points

(The famous Marlow)



Pat. App. No. 12548



Tap with a hammer--It's off.



Tap with a hammer-It's on.

leaders in the field).

- Fits all popular Cultivators and Scarifiers
- Bolt head wear completely eliminated.
- Faster, easier share changeover-no frayed tempers or skinned knuckles.
- Practical tests prove 30% more wear.
- Square cut, to retain point and cutting width for the life of the share. Semi-burster shape.
- Manufactured from top-quality steel.
- Heat treated for toughness, tempered for performance.
- Sizes 4" 5" 6" 7" 8" 9" 10"

Manufactured by The Ralph McKay Group, Melbourne and Adelaide.

PORT WAKEFIELD ROAD, GEPPS CROSS, PHONE 62 3201

3331



When the wheels go and your tractor doesn't

try Supergrip traction!

New Dunlop Supergrip tractor tyres have more robust lugs for more pull and traction — more strong muscles to resist wheel-slipping, cut power waste and give longer tyre life.

Supergrip tractor tyres are reinforced at the buttress to guard the casing. They're self-cleaning in sticky soil and reinforced at the Supergrip tread centre for greater strength and action under severe thrust.

And Dunlop Supergrip tractor tyres have casings built from pre-stressed cord for the stamina you need in rough going.

Dunlop Supergrip is the muscular tractor you can trust in wet or dry. Call in and see us about a new set soon. We run a fast, efficient on-the-farm service for repairs and replacements, too.

At Dunlop Tyre Service and approved Dunlop Dealers.





Kill Flies Continuously with

SHELLTOX PEST STRIPS

No Odour No Mist

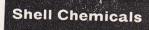
No Work

SHELL CHEMICAL ALSO MARKETS
A COMPLETE RANGE OF

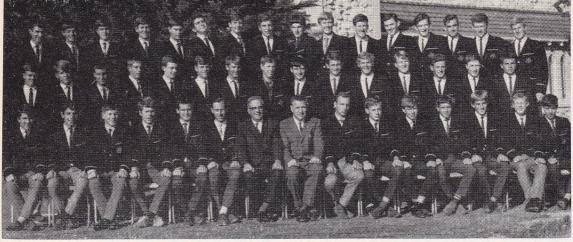
INSECTICIDES
HERBICIDES
&
FUNGICIDES

But, more important, is able to provide the technical information for their correct use.

For chemical supplies and usage recommendations Contact:







FIRST YEAR

Back Row (l. to r.): P. Hodgson, C. Wurst, W. Hein, W. Osborne, D. Gravestock, I. Riley, M. Wood, D. Fromm, N. Nieding, C. Goode, W. Liebelt, G. Pearce, R. Stewart, T. Bass, P. Burne, A. Oliver.

Middle Row: G. Kelly, A. Gerlach, D. Gooch, B. Growden, A. Scott, B. Luck, G. Inverarity, P. Friedrichs, J. Mason, A. Pick, J. O'Flaherty, P. Hackett, D. Wasley, R. Maczkowiack, M. Illbrich

Front Row: S. Gates, R. Miller, G. Brookman, R. Butler, P. Redden, B. Polkinghorne (SRC), Mr. Herriot (Princ.), Mr. Foot (Housemaster), J. Hill, L. Wright, F. Kaesler, J. Mableson, D. Hansen, R. Dorman, A. Clifford.

First Year

We opened the year with a resounding win to the dreaded Maczkowiack in the annual steeplechase, and haven't looked back since. We have not completely fused into a faceless blob labelled "1st Year" however, and the formation of conglomerate sects has been interesting to follow.

The Sects

The Iron Men-

Two virile, muscular figures race to the shore — crash into the surf and slice their way out to the heavies while compatriots plunge into icy showers, snore healthily as they lie asleep on the cold, hard floor, or trot ruthlessly around their twenty-ninth lap of the oval.

The Pseudo-Intellectuals —

Frantic voices emerge from the dim corridor and echo insanely around the blackened hall while a group of long faces lengthen as they discuss the latest crises facing the world over a cup of Gabe's famous coffee.

The Non-entities —

A group of uncommunicative souls.

The Sportsmen -

Muscular and confident heroes or playboys deriving an essential motivation in life from their exertions on the oval. The Humorists —

One professional surrounded by fans and amateurs in a smokey room full of sound.

TV Addicts -

Flickering figures miserably huddled around the set—silent, and noticing nothing outside the screen but the fading of the heaters.

Tasmanians —

One. Enough.

Spiritualists —

One suspect.

The Billiard Kings —

Stubbing his fifteenth butt for the game he mutters and chalks his cue, turns wildly, bends low and sights up. Then, with an unnatural shriek of either triumph or horror he straightens up and relights.

The Workers -

Most envied and yet despised. They sit hunched in their cells living for knowledge alone, occasionally emerging for a brief look at life—then plunging back into their books while the rest look on.

The Majority and Assorted Nuts -

Float from sect to sect as their whims take them.

But the feats performed by these gentlemen must not go unmentioned—judo fans will long remember the

repulsions of Geoff (Rocker) O'Flaherty by Brenton (Grizzelda) Growden in Scene 2 of their premier performance.

The daring resuscitation of the TV by Bill (Telefix) Osborne—one boring September night.

But seriously—

We had 4 out of 5 players in the Intercol Tennis Team—Brian Polkinghorne, Lindsay Wright, Graham Brookman and Peter Friedrichs with Bob Maczkowiack in the Rifles, all of whom enjoyed their trip to Queensland tremendously.

The "A" football team contained more than 50 p.c. first-years, while Goode, Oliver, and Friedrichs were selected for Association Teams.

Andrew Oliver received an award for being the best first year in the Association. was runner-up in the Kentish Award and was voted best and fairest in our football club.

The most victorious '67 Premier "B" grade side had 6 matchwinning first years and remembering our many trainers and officials of various descriptions, we can claim to have pulled our weight well in the world of college football.



SECOND YEAR

Back Row (l. to r.): W. Elsden, C. Glaetzer, R. Turnbull, T. Usher, B. Boerth, J. Womersley,

R. Paynter, W. Giles, B. Philp. Middle Row: J. Cooper, I. Scarborough, W. Roesler, D. Miegel, K. McCallum, I. Tapley, G. Mowatt, J. Glaetzer.

Front Row: M. Riley, J. Davies, W. Watson, Mr. Herriot, Mr. Foot, P. Shakespeare, R. Habgood, G. Kirkwood.

Second Year

We now find ourselves with a vastly different year from what we were in 1966. Many of our more colourful and sparkling members fell victim to the examiners' merciless axe or moved on to greener pastures. At the start of the year, we found ourselves with only twenty three "plus two", out of an original forty-five in first year. I say "plus two" because these two namely Steve Murray and Guy Kirkwood were let back after narrowly failing one supplementary examination.

Throughout this year we have main-

tained the same year and College spirit which we created in our flamboyant first year days. We still maintained a good representation in the football, despite our depleted numbers, especially in the victorious "B" grade team. With Bill, Shakey and Scarbs we made our presence felt strongly in a number of college activities. The lecturer on duty can find more of us in our rooms during study period, than he was able to do last year. Most of us can now see more purpose in our studies, as did Steve Murray,

The Unagricultural Side of the Northern Trip

Prior to the trip we had all been warned against having a late night on Saturday night; so we would be fresh and alert for the first day of the trip. Apparently Mr. O'Brien didn't receive the message for he looked dead tired and was asleep within an hour of leaving, much to Mr. Hooper's disgust and Ross Dawkin's delight, who got the scene on film.

The boys were pretty quiet on Sunday, probably due to the high spirits of the Tennis Club Dance held the night before. We decided that Sunday was a day of rest but not Sunday night, for things were in full swing and a great deal of cash was well spent. Mr. Hooper's idea was "never on Sunday", and saved his bank roll for another occasion; but not C.O'B, who made it two hard nights in a row.

Immediately on reaching Jamestown the college "talent scouts" began making their presence felt. For the next three nights College students were reported to have been seen at all the local sources of supply. Two were "regulars" at the Nurses' Quarters; two were constant codrivers of a battered A40, whose female owners apparently needed experienced assistance. Also an unconfirmed report filtered through that twelve third years were interested spectators at the Gladstone drive-in, 18 miles away. There was a sad note however, as one of our number left a broken heart, for so dearly did she feel for him that she spurned her finance'.

The other less forward members of our group relied on an advertisement posted on the town notice board in the main street. This invited all eligible females of the district to apply at RAC headquarters, the Commercial Hotel, for their exclusive, well sought after, male escorts.

On Tuesday night those responsible for the schedule decided that we would be best educated by a meeting with local Department of Agriculture officers. There was one, who later assured us more was learnt elsewhere, and a satisfied smile on his face was noticed as he joyfully carried out a weekend penalty for his absence, some weeks later. We left Jamestown on Thursday morning, an even drier centre of the mid-north than when we found it.

The next night we transferred our activities to Clare where, because of the shortage, an all out buck's was declared. The show was soon in full swing and with the local publican, Mr. Woods, leading, the evening began to develop along good lines. Much cash was again well spent before the crowd eventually began to disperse at about 1.00 a.m.

Lofty, who had earlier decided that football was too close, and had hit the sack, was very annoyed when his roommates decided on a melodious duet next to his sleeping room, and not feeling in the mood for a lullaby sought another resting place. This was all fairly peaceful until these two enterprising nightingales found his new abode and once again began their serenading. The whole household was thus affected by the disturbance which followed.

To all future third year students I give the following advice. Don't be put off by the tedious and uninteresting agricultural side of the trip, for the unexpected and unscheduled activities of both day and night will prove more than ample compensation.

G. Eckersley.



Pay attention you jokers!!

Prime Lamb Sires

Are we producing the right type of British Breed sire for Prime Lamb Production?

This is a question that cannot be answered exactly because insufficient trial work has been done to define the correct type of sheep. The Dorest Horn and Poll Dorest are sires to a large number of fat lambs in Australia, along with some other Breeds, but the type of sheep that is produced for Prime Lamb production varies greatly from state to state. For example, the Victorian Dorset tends to be a smaller type of sheep than the South Australian Dorset and this is very noticeable at the Royal Show, especially when a Victorian is judging sheep, and tends to select the smaller, more compact sheep.

In most other types of animals, e.g. pigs, poultry, merino sheep, dairy cattle, and to some extent in beef cattle, some form of production recording is taking place, whereby the animal is selected for best production and for the needs of the industry. But with the Prime lamb sire, we find that the sire is selected only on what particular line of breeding that the individual studmaster is aiming for and not for the industry as a whole. Trial work should be done on growth rate basis, seeing what heritability of growth rate is carried from the sire to his offspring. Also, quality of meat should be tested in regard to fat cover and size of muscles. This would mean carcass competitions, but surely this would benefit the industry. It would mean a higher grade of lamb and a more even type, which may have suitable fat cover for the consumer. It would also mean a more even return to the producer.

Surely this all stems from the type of sires used as breeders within the stud. Feeding of animals for show has its place, but do these animals lay on extra fat, and are they the type that is required on the basis for prime lamb production?

It has been said that the sires produced for show are not a true indication of the animal's capabilities in the field for the production of quality meat. So perhaps a stud should not feed their sheep for show anymore than the rest of the stud receives from the paddock. This would mean a "true type" of sheep for the Prime Lamb producer. With this would also be required a completely new outlook on judging techniques.

These are some of the factors which should be evaluated if the prime lamb producer and the studs which breed the prime lamb sires are going to be able to increase their production.

The answers cannot come overnight, but it would pay to look into some of these and aim to better Australia's prime lamb production and quality in the next decade.

R. G. Dawkins.



ZACPROPULSION

Subsidise The Dairy Industry

Is the dairy industry a benefit or a curse to Australia?

The closer this question is examined, the clearer it becomes that it needs a revolution. Some sections are highly efficient and can rate with any other rural industry for returns. These are the larger dairies in the true dairying areas, where milk is mainly used for the fresh milk market. The section of the industry in marginal areas is a burden to the Australian rural industries, as it draws on the whole economy to support it, and is an expense to all taxpayers. The cost of subsidies to augment producer returns to the butter, cheese and processed milk sections of the industry, amount to something over \$27 million per year, which comes from the Commonwealth Treasury. In addition to this, there is an extra expense borne by the consumer. He pays 16 cents a pound more than the overseas customers pay at Australian ports for butter. Thus the total value of subsidies to the manufacturing sector amounts to \$73 million annually. The average net farm income from dairies in the manufacturing sector is \$1,000. The value of subsidies to each dairy farmer amounts to \$1,800 annually. We therefore have the dairy farmer being paid to stay on the land by the government and the farmer not making economical use of his land. The average dairyman in the fresh milk sector, however, has an income of over \$3,000, and is thus paying his way.

This is only half the story—what looms up in the future for the industry? There are three major problems which the dairy farmer should be concerned with, these are: European Economic Community (E.E.C.), margarine and New Zealand.

Britain will go into the E.E.C. and our butter sales to Europe will fall at an even greater rate than they are now. If Britain is to survive as a nation she will not be able to give us handouts, and consequently we may be left with an excess of butter which we will be unable to dispose of.

What of the margarine question? It will not be long before this material is made wholly of Australian grown crops, and this will mean a battle between two equal rural industries. Governments cannot favour either side and butter will then have to fend for itself on an open market, which will be cheaper and more competitive than it is now.

Australians should also be concerned about New Zealand in her time of economic crisis. It may be in this field that we can help if anyone is bold enough to take the step. New Zealand has an ideal dairying climate, an efficient industry and dwindling markets. The Australian manufacturing sector is inefficient, with poor climate and a cost to the Australian economy. Could we, by importing her manufactured dairy products, help N.Z. and save our economy large expenses?

These are the three major problems facing the industry. What is being done? Nothing! The representatives of the dairy industry state that it employs 600,000 people, and for this reason alone it must continue. However, we find that there is a maximum of 40,000 dairy farmers in Australia and 10,000 people employed in factories. If the land were changed to different use, many of these people would be absorbed in the new industries which would result. There would actually be very little labour problem.

In true dairying areas, the industry could survive if managed properly and streamlined. However, I can see no chance of the manufacturing sector paying its way, and the only solution appears to be to phase out the subsidies to the industry as a whole. This will result in forcing the dairyman into either changing his ways and working economically, or force him out of the industry. This solution in the long run would be a benefit to all in helping to solve a difficult problem.

W. G. Giles.

Misting as a Propagation Method

Mist propagation is an extremely quick and efficient way to promote rooting of cuttings to produce greater bulk of roots

and healthier tissue.

Misting is based on supplying small amounts of water onto the leaves often, to keep them moist. This is achieved by the action of an electronic leaf, which, on drying across the terminals, breaks the circuit in a control box, activates an electronic solenoid valve, which turns on the mist until the circuit is joined again by a thin film of water. The incorporation of a heating device, such as a thermostatically controlled heating cable, keeping temperatures at an optimum of 75°F and the use of a suitable very rich rooting media, such as half peat and half sand, allows ready drainage, stops waterlogging and fungus build up, duplicating the conconditions of a tropical climate. The apparatus can either be housed in a glasshouse or propagation frame which allows greater control of the environment.

Although mist propagation has not been applied to grape vine propagation in Australia before, it is feasible that propagation times will be reduced from the normal 15 months to about 4 months, at which stage the vines are planted out, thus considerably reducing the time and overall cost of propagation. As well as being a revolutionary method of growing selected cuttings in both soft wood and ornamental cuttings, hardwoods, such as vines to enable earlier and longer productive life.

J. R. Kohnke.

Irrigated Wheat For S.A.

Why has not wheat been irrigated to any extent in S.A.? By irrigation of wheat I mean the supplementation of

natural rainfall to reduce and remove any likely moisture stress periods and hence increase yields.

Water?—This is available for irrigation along the River Murray and in parts of the South East (as bore water).

Wheat irrigation is now being practised in northern N.S.W. around Gunneda, and in the M.I.A. with apparently great success. With presently available varieties, yields of 50-60 bushells per acre appear common, compared with about 25 to 30 bushels per acre for unirrigated wheat. These increases of yield by 20-30 bushels per acre are extremely good returns for the cost of irrigation (flood) which generally only amounts to a few dollars per

Wheat is susceptible to waterlogging and therefore drainage and time of irrigation has to be considered. Work in N.S.W. generally indicates that the most suitable times for irrigation are:

(1) prewatering, i.e., an irrigation before sowing the crop to completely wet

the future root zone; and-

(2) an irrigation just before flowering

to boost grain set.

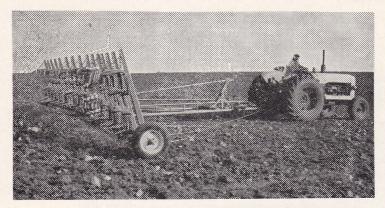
The normal winter rainfall is usually sufficient for the rest of the growing period.

With these higher yields there will naturally be a greater demand for soil nutrients especially phosphorus, nitrogen and perhaps potassium, and the application of these will have to be increased to maximise returns.

In search for information, I discovered that the S.A. Department of Agriculture has started trials on wheat irrigation at Waikerie, Struan and Bordertown. In the first trial, plots were sown at 60 lb. per acre plus varying rates of phosphorus, nitrogen and potassium fertilizers. Waikerie plots were given 3 irrigations each equivalent to 8 in. of water and the Bordertown plots received 2 irrigations.

The yields appear to be as good as those obtained in N.S.W. and therefore would appear to be a very profitable proposition of carried out in a sensible

Today's newest, most advanced Harrow!



THE Hydraulic **FOLDING** TRASH HARROW

FROM

SHEARER

KUPKE PAT. NO. 256243



Gives clean trash disposal by Hydraulic lifting of Sections. Gives ample clearance of Sections from the ground. Leaves only one wheel mark per round on cultivated ground.



The Shearer HYDRAULIC-FOLDING-TRASH-HARROW folds to a compact size for shedding, transporting or passing through gates. 11, 13 and 15 section sets fold to 16' 7"



The Shearer HYDRAULIC-FOLDING-TRASH-HARROW gives coverages of 11 section — 31' 2", 13 section — 36' 10", 15 section — 42' 6".

MANNUM

Designed to make Harrowing and Trash Clearance easier and quicker!

FEATURING:

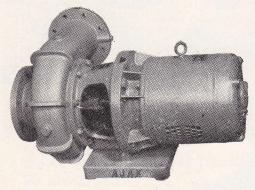
- * HYDRAULIC TRASH CONTROL
- * FOLDING BEAM COMPACTNESS
- * EASY OPERATION & TRANS-PORT ★ MAXIMUM COVERAGES

DAVID SHEARER LIMITED

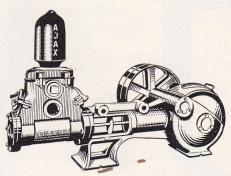
MANNUM, SOUTH AUSTRALIA

Metropolitan Showrooms: 236 Port Rd., Alberton, S.A. DISTRIBUTORS: VICTORIA (Eastern Portion) - Buckeye Harvester Company, 103 Murphy Street, Richmond, NEW SOUTH WALES - David Shearer Pty. Ltd., 62 Railway Parade, Burwood. QUEENSLAND — John Shearer & Sons Ltd., South Street, Toowoomba. WESTERN AUSTRALIA — Wigmores Machinery Pty. Ltd., Cr. Koojan Avenue and Great Eastern Highway, South Guildford. TASMANIA - A. G. Webster and Woolgrowers Ltd., Hobart, Launceston and Devonport.





AJAX MOTOR PUMP TO 30 H.P.



AJAX SELF OILING PISTON PUMP



AJAX
IRRIGATION
FITTINGS

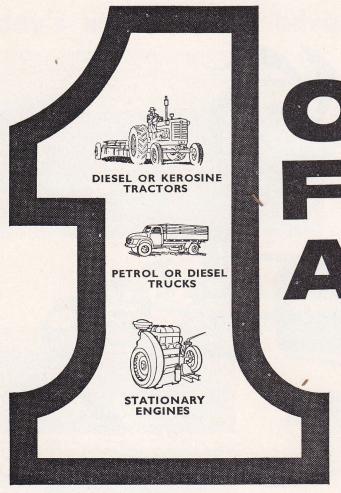


THE COMPLETE RANGE OF AJAX
PUMPING AND IRRIGATION EQUIPMENT
IS AVAILABLE FROM



MCPHERSONS LTD.

102-130 WAYMOUTH STREET, ADELAIDE



6 I L FOR ALL

Why stock several oils to do various jobs — one drum of Shell Rotella Oil M20W/40 is right for all your farm lubrication. Right for tractors, right for trucks, right for stationary engines.

Shell Rotella Oil M20W/40 gives you the advantages of a heavy duty oil with those of a multigrade oil. For cold starts it flows freely as a light grade. As the engine warms up it gives drag free lubrication of all moving parts and at top operating temperatures it provides the protection of a heavy grade. Lubricate the modern way — get heavy duty Shell Rotella Oil M20W/40—the oil which adapts itself in all engines to all operating temperatures and working conditions.

SHELL ROTELLA OIL M20W/40

ASK FOR IT AT YOUR SHELL DEPOT

THE SHELL COMPANY OF AUSTRALIA LIMITED



ALF. HANNAFORD & CO. LTD.

Specialising in Seed Grading



Get more room in barn

Plus 20 p.c. depreciation per annum

Protection from Vermin

Less effort

A Hannaford Grader working with Lysaght Elevated Seed Silos

Manufacturers of:

FARM CEREAL GRADERS
SUPER SEEDS PASTURE CLEANER
HANNAFORD CENTRIFUGAL
HEADER SCREENS
IDEAL DRY PICKLERS
HANFAST BAG CLIPS
ADJUSTABLE OAT CLIPPER

Agents for:

HEXCEBUNTELL WHEAT PICKLE
LEYTOSAN WITH LINDANE
MERCURIAL BARLEY AND WHEAT
PICKLE AND WEEVIL ERADICATOR
I.C.I. RURAL PRODUCTS
LYSAGHT SILOS
UNIFLOW LENGTH SEPARATORS
KIPP KELLY GRAVITY TABLES
OLIVER GRAVITY TABLES
NELSON AUGERS AND BINS
ELECTRIC MOTORS

Head Office:

932-942 PORT ROAD, WOODVILLE WEST SOUTH AUSTRALIA 5011

Livestock Selection

In the past few years much work has been published on the importance of selecting livestock for production in preference to type. Not denying that this is very important, I feel that with all the publicity given to production, we tend to forget the value of some of the lore of animal husbandry which has been learnt through experience. A number of scientific experiments are merely confirming beliefs that have been strongly held by breeders for many years. A trial at Trangie, N.S.W., established that rams with a high degree of wrinkle have less viable semen and are less fertile than plain bodied rams. This has been suspected for many years by stud breeders and they have been breeding away from the wrinkly type.

It has been said that the future of our livestock industries depends upon increased production. In the Merino world, the advocates of production say that this can be best attained by merely selecting on clean fleece weight in the stud flocks. My first objection to straight selection on fleece weight is that there is no mention of economic production, i.e. how much food was necessary to produce this fleece. Secondly, animals with the best capacity for production may not prove to be the best in such a test because of the influence of adverse conditions, e.g. a lamb born late in the season may not make the growth of its elder counterparts,

of selection, it would be discarded.

Another shortcoming of this method of selection is that few studs have clients whose sheep will be run under the same conditions as their own. By selecting on fleece weight only, the breeder may evolve a type of sheep which will produce heavily under one set of conditions, and indifferently under another.

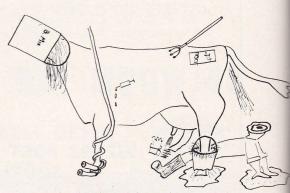
and so under purely mechanical methods

By keeping certain characters relatively fixed, e.g. body size, shape and constitution, the breeder can add certain variable factors, such as wool quality or density, to select stock for a certain environment. In this way, he is in a flexible position,

and is able to make maximum use of the variables. The effect of management is of the utmost importance in production, and by producing sheep with different capacities for production, the breeder is making allowance for the managerial limitations which will be met in the field.

It is the task of the breeder to make those compromises which lead to the production of flock sires, such as the compromise between cut per head and quality, requirements and limitations, production and uniformity.

P. I. Jones.



Quiet handling—that's the answer!

Letters To The Editor

Dear Sir,

Since my first days at RAC the great value of barrel medic pastures has been stressed to me. However, as yet, I have had reason to doubt its value in this arid environment. From my observations, the best pasture to grow here is old man saltbush, "Atriplex vesicarium". In the plant breeder pasture plots it is head and shoulders above all other species, and grows with outstanding vigour on the roadsides.

With these thoughts in mind, it would be far better to sow 40 lbs. of oats and 15 lbs. of saltbush next year and stop worrying about this medic fallacy. With saltbush's wool growing ability, our wool clip will rise and thus please the struggling sheep section. Baled saltbush will be the rage and the college will once again lead the fore in progressive agriculture.

Yours sincerely, "Observer".

Ed.—We could add it to soups and stews and encourage more "wild and woolly" or "hair brained" schemes. If not putting us to the forefront in agriculture it would at least gain a position on the psychiatrist's couch.

Dear Mr. Editor,

I think the name "Student" is rather uninspiring and not in keeping with the standard the magazine offers its avid readers. But since I'm only a first year jumping the three perpetual hurdles, plus a few that came out of "you know who's" pipe dreams, I can't put forward any inspiring name either. Also as the present editor seems incapable, I would like to suggest Alfred E. Neuman to replace him. Yours.

Alfred E. Neuman.

Ed.—You are a student? Yes, I agree that does seem to make it uninspiring, but we are not that hard up for a Neu man!

Dear Sir,

I have, in my possession, one of the finest collection of PHANTOM comics in the world. I have yet to see, or hear of a more complete collection. I am justifiably proud of my unique position in society, and have received letters from world authorities, begging me to lend some rare, early editions to libraries, art collections and fund raising displays.

The collection is, as you may well imagine, Priceless. I have studied each section of the total 339 published editions and I find that the philosophical and educational values of these brief but searching, inspiring stories can not go unread by any student of humanity. With this in mind, I have decided to deny my claim to fame, and award my dearest possession, No. 293, to the Tassie Library. Would you agree that a deep study of carefully chosen stories, picture by picture, would be a worthwhile addition to the new fourth year course?

Yours, GHOST WHO WALKS.

Ed.—Yes, Yes!! and could you lend me your copy of 321 as I never did find out how he got out of that smelter.



Mr. Foot—he was hired by the yard.

Dear Sir,

Roseworthy College has changed tremendously in the short time of three years. Gone are the barbaric customs that greeted first years of yester year; the continuous torment, and although the traditional steeplechase helps to bring the first years into a spirited group, the fear of interrogation that was steeped into all first years by half wit senior students, is gone; replaced by an amiable but firm relationship.

The cessation of excessive drinking and stupid pranks of the past has meant a better image of Roseworthy College students and diplomates being portrayed

to the Community.

The rising entrance standard has made Roseworthy a better place in both academic and sporting fields. However, the College can never be full of individuals, and every student must show the spirit that makes Roseworthy the best such College in Australia. New facilities, better qualified lecturers and staff, an improved and revised syllabus and better practical training in modern agriculture are making Roseworthy the trend setter. Although students dislike outwardly the discipline and improvement programmes imposed, surely inwardly they agree.

I am proud to be associated with Roseworthy and I hope you are too!

John R. Kohnke.

Ed.—Well said John!

Dear Ed.,

Being a city-ite at RAC, a serious problem that plagued me during my initial days at College was: "Can I fore-sake the familiar life of the city for a life in the country".

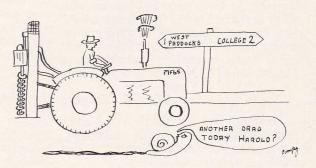
In my 3 years stay at College the answer was clear since those first few

months of trepidation.

Due to the overall countenance and friendliness of country families I have met through either college or personal contacts, and due to the indomitable asset of a country community being able to "make its own fun" the answer has been a resounding Yes. I hope one day I can attain the honour of being classed as a "country bumpkin".

Ex City Slicker.

Ed.—It seems you're there already.



First Impressions

The first impression burnt my brain and wondering if I'd be back again, I glanced wildly over the place. My stomach ached and my head was spinning but I caught a dusty photograph in my mind. To ponder over. The hot bodies jostle and sweat in an unreal atmosphere. Everything is false, ordered and dry. The P.A. system crackles and the speaker expels his nervous breath into the microphone, creating annoying sound-effects and making sensitive souls squirm in their cramped seats. Rough youths stride, with nervous looks, over a fimiliar floor to extend dirty hands in exchange for a reward they know they have earned. A few city folk converse with the whitecollared farmers, commenting on the weather and wondering if they should try to sound knowledgeable or excuse themselves as "ignorant city-slickers". The learned address is convincing, uninteresting and forgotten; and the trouble that the speaker takes to talk down to the audience is wasted or taken as an insult by the few who think they know. In the other corner of this dusty photograph, now blurring my brain, is a battered old group of sheds—intricate with their contents, and pathetic without; frightening in their potential hiding places for urgently required things. Building rubbish lies around, glaring at me, saying "Do you still want to come?" and forcing my eyes towards the gently moving jets of relief, sophistication and progress, spreading a green carpet of contentment and affluence over a fraction of the crackling picture. An eddy of powder whips across, engulfing the car in a sickly odour, only to turn and race back across the paddock chased by the tenacious smell of swine. My mind was a churning critic all the long iourney back, but unwilling to reveal its criticism without censor or modification. When the time came, my mind was unsatisfied but prepared in an armour of dust, and a language foreign and false, but acceptable.

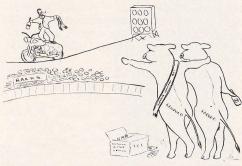
Now part of me has vanished and will, I hope, return in time. Without it I can be content, but with it, the desire to use it would prevail.

G. Brookman.

The Drought

The Season's dry sun, the problem of all and the rain of life ne're drops. It's like a wave of plague in strike pitted to test all men. Dust billows high and wafts into space but not from work by man, and as it passes like the day returns but indistinct A man thinks deep, and weighs out life the life, the hope, in growth The sun goes down, a shower falls but gaunt and little bulk. and paints a picture imbedded in mind, when life exists no more. The earth explodes and swells to burst, a crevice opens wide and begs for aid to close itself to stop the pain of death. the days are swallowed into months, as end of life draws tight. skies ever bright no sun's obscured and feeling are now the truth. A drought.

M. H. Babidge.



If Cliff continues celebrating, he could make a spectacle of himself.



Allan McArdle, formely of S.A. Dept of Ag. has doubled India's egg production in 5 years.

Have You Got It??

In this centre of learning there is so much healthy skylarking and frivolity that one is easily led into an "I'm alright Jack" attitude. But let's take a brief look at this world in which we occupy a cosy little corner.

Did you know in 1965-66 there was an an increase of 70 million mouths to feed in the world, but the world produced no more food than in the previous year? Do you know that in the Far East, Latin America and Africa where 60 p.c. of the world's population lives, food production dropped by 2 p.c.? Taking into account the increase in population, these people will have 4-5 p.c. less food to eat this year. You knew, I suppose, that 30 million are starving to death anually and huge numbers are so deficient in protein that they will die before they are 30. I could go on churning out the grimey facts but it amounts to this-"A huge percentage of the world's population will face famine by 1985 unless urgent steps are taken now!"—Mr. Arthur Goldberg, U.S. Ambassador to the U.N.

When we glimpse another aspect of this world we live in, the question comes, "What can we do about it?"

The answer is in our hands. F.A.O. experts say that the answers are in trade, aid and "applied knowledge" and this is where we fit into the picture. We have the opportunity of gleaning the basic knowledge here, but have we the guts to

apply it? The situation facing us has been described as the greatest challenge facing mankind in his history and one of the most exciting to be involved in. Surely you couldn't go and bury your diploma in a selfish little home property, or an enterprise which may be a burden to the Australian economy, when the world is screaming and pleading for your knowledge to be applied to its problems?

It's not a pretty picture facing us, but an urgent and exciting one and "knowledge" with determination and guts are

needed. How about yours?

Brian Polkinghorne.



I apply a yardstick to everything!

I Know Not What Fire

The wilted stones beyond repair Leaves nothing but tradition there. They leave the old and build the new That in its time will crumble too But in the age-old ash and stone Stand all the failures all alone. If they returned what would they say About the college of today. I'm sure that they would criticise About the things which hit their eyes. About the caged cannibals there That live on feathers and cold air: And then bare soil around they see Where can that precious water be? Of course! It's used on oval green So as to keep the sportsman clean. Yes into sport goes great expense We learn football and how to fence. For if we lose a trophy dear Our dining room would look quite bare. So then the head would have to pack that his picture could fill the gap. And there at last they finally found Nice new hot heaters all around. What would they say? What would they If all the truth they only knew.

But all in all they must confess
Our weed control to be the best.
For now they have a'claimed a law
That each first year pick near three score.
I know not what I am.
perhaps . . . G. Inverarity.

Fire!
Look at the fire!
Orange-red warm,
Golden jewels of lovely form.
Look at the fire!
Fire!
Watch the fire!
Black trees and faces without hope.
Watch the fire!

Chris Wurst.

A Round

Why is it that the proverbial sphere Geometrically round in reality square Is allowed to exist with its base over apex Show anything concave as emphatically convex.

Is many times viewed thru two digits vertical

Has really no equal and no absolute parallel?

Tis because of the tolerance of a great many circles

And a general indifference to tangential foibles.

I'm Stupid

Could be
Let's see
2 + 2 = What?
4 of course
How many legs has a horse?
4 of course
How many N.W. paddocks?
five.

R. Butler.



It's further down each year!

Code name of Roseworthy Occupational Therapy Centre. Attention Students! Intelligence reports that foreign research workers in conjunction with the S.R.C. (Subversive Research Committee) are studying occupational therapy at Roseworthy.

Careful selection of likely subjects is carried out by the Commandant Hier E.

Schmidtol.

Complete mental breakdown of the subject is assured by intensive housing under the control of Comrade Clovenhoof, and food rationing by Heir Von Gabels, incorporating gas chamber experience with further incinerations.

Subjects' progress is gauged by work points allocated according to the individual's overall incapability, lack of initiative and unquestioning obedience. Low work points indicate incomplete break-

down in early stages.

Therapy is conducted in several sub sections of the centre under direction of

specialist officers.

English defectors control the newly constructed convalescence Centre where long periods of rest are interspersed with floor sweeping exercises.

Zacula and his Knight control Horticultural Horrors with the theological

therapy of the Pope.

Fitting round eggs into square boxes is the therapeutic practice of Prof. Cluck-

wurst in his cackleberry clinic.

Probably the ultimate in technique is demonstrated at the model clinic at the P.B. Centre (Prolonged Boredom). Emphasis is placed on treatments with many, many, many, replications. Advanced subjects are given more responsible work such as filling little envelopes with grain for use in the fattening of show heifers amongst other things. Backward subjects are permitted to seal the envelopes. The brain behind the clinic is Prof. Kat, R.D.PB.

Count Angus Abnortion runs the outdoor clinic catering for the entire range of mental deficiencies with therapeutic games such as the "Emu parade for wire, nails, etc." Another gem is playing hide and seek with the ASS (Farm Supt.) until it was time for him to leave. Dodgem Tractors is popular.

Sporting therapy is simplified by having only "first base" for baseball and "4 hurdles" for athletics training but gambling still seems popular especially

when "the chips are down".

Subjects released at the end of 3 years are offered the choice of postgraduate studies at Parkside and Minda or lecturing at Roseworthy Agricultural College.

ANY SIMILARITY BETWEEN THE ABOVE CHARACTERS AND ANY PERSON, LIVING OR DEAD, IS PURELY DELIBERATE.

T. March, P. J. Ryan.



I Had a Vivid Dream

I saw first a great swirling cloud of smoke, and through it glimpsed a leader, and as I watched, he dashed his pipe and tobacco into the fire, and turning, walked across the waters of a lake towards a group of people, standing at the foot of three terrazzo steps.

One was very tall and appeared to hand all young men passing a bottle of beer "to be stored in a safe place". Another in a white cap was giving each a delectable morsel from a cooking pot and asking if it would suit for the evening meal. There was an inscription over the door which read . . "Leave unlimited".

A small distance off, worked a builder with a remarkable spirit level which when used in the construction of gable roofs actually kept them level.

Past this scene drove a bus, backwards, missing every stobic pole in sight. Watching him, green with envy was another who kept repeating monotonously the words, "knee high clover".

In the background was a huge edifice completely void except for a whitecoated attendant sweeping the floor; not saying aught, and two other blue overalled inmates busily working on an object, clearly labelled "Foreigner".

Just to one side of this was an army of slaves, busily hoeing weeds along an interminable roadway, yet as they passed weeds sprouted even thicker than before. The only sound was the music coming from a shed crammed with both cows and slaves. Each slave had his own particularly arduous task. One let a cow in, another washed its udder, another put on one cup and so on, right down to one slave filling containers with a pint measure which constantly changed in size. They were being trained it appeared, for their release and the realities of the world, for a character running hither and thither constantly asked "did they get the idea?"

There was a red brick building, an array of bottles and everyone passing through bowed low to a serene white gowned Buddha who reminded them that as his slaves they should not be "slap-

happy chappies", despite anything he said to the contrary in his teachings in "The Temple" on Tuesday nights. Beside him was a hairy, kilted monster who pounced on an occasional unfortunate, disembowelled him in a flash, and stamped the carcase clearly "cause of death unknown".

On a bare plain stood a newly annointed king with "cabbages" emblazoned on his chest. Here were slaves planting weeds in neat rows while the King proclaimed to the world at large "These are vegetables". In the background a small pope-like figure had just completed his ablutions in a bowl of malathion, and was dusting himself with D.D.T. powder.

I could see another clad only in his wrist-watch; for it was raining; madly ringing the scene with posts, no two of which were set at the same angle.

I then heard a voice saying, "How are the slaves behaving?" and felt I was being drawn into their midst, inexorably to become one of them. I broke into a sweat. I started to scream! I awoke!!



Cause of death! Unknown!

Every New Holland farm machine has proved this promise in the field.

DESIGN! DEPENDABLE

New Holland farm machinery is designed for you to depend on.

ACTIONI



NEW HOLLAND

Practical in design · dependable in action

TNH69

INCREASE YOUR LAMBING PERCENTAGE WITH



Meggitt SCIENTIFICALLY GORMULATED

SHEEP NUTS

Meggitt Compound Sheep Nuts (Min. Protein 18 per cent.) contains energy-giving carbohydrates, vitamins, linseed meal, essential proteins and minerals. Ideal supplementary feed when pastures are limited.

Meggitt Cottonseed Sheep Nuts (Min. Protein 40 per cent.). Pure Cottonseed Meal, an extremely palatable vegetable protein, and rich in essential nutrients. Most suitable when adequate roughage is available.

	COMPOUND NUTS	COTTONSEED SHEEP NUTS
	PUT OUT TWICE WEEKLY	
EWES	6 ozs./day, 6-8 weeks before lambing	2-3 ozs./day, 6-8 weeks before
RAMS	7 ozs./day	4 ozs./day
FLOCK SHEEP	4-5 ozs./day	1-2 ozs./day

MEGGITT STUD STOCK SHEEP NUTS

SHEEP NUTS
ALSO AVAILABLE
THROUGH YOUR STOCK
AND STATION AGENT

Manufactured by

Meggitt (S.A.) Pty. Ltd.
Cnr. Leadenhall and Ship Sts.
Port Adelaide
Phone: 4 3941

SITUATIONS VACANT

COMPANY REPRESENTATIVE

required by MEGGITT LIMITED

to promote Stock Feed Sales in near Adelaide area.

The successful applicant will be required to advise and service existing and develop new clients in all types of Livestock Production.

ATTRACTIVE SALARY : GOOD WORKING CONDITIONS
GENEROUS SUPERANNUATION FUND : A COMPANY CAR WILL BE PROVIDED

Apply in writing, giving full details of age, qualifications, experience, etc., to—Mr. R. C. Woolford, Marketing Manager, Meggitt Limited, P.O. Box 64, Port Adelaide 5015

PORTS SHERRIES
MUSCAT
VERMOUTH

ROVALLEY WINES

CLARET HOCK
RIESLING
SAUTERNES

B. LIEBICH & SONS, ROWLAND FLAT, S.A.

Salt

Hear me ignorant people of the 20th century. Modern Alchemists search for that which maketh life and that which maketh plants grow. They waste time and coin, for it has been known for centuries that there exists one thing which is all important, namely SALT. Do not mock, for it is true. It has been set down by the most erudite men of the age. It should shock you to think that each time you touch that little shaker you come close to the basis of life.

For those that are ignorant of the truth, I shall quote so that ye may read and believe.

"Salt whiteneth all things, is preserveth all things, it hardeneth all things, it giveth savour to all things, it is a masticke that glueth all things together, it gathereth and knitteth all mineral matters and of manie thousand pieces it maketh one masse. Salt maketh men merrie, it whiteneth the flesh, and it giveth beauty to all creatures.

It is salt that maketh all seedes to flourish and grow, and although the number of men is very small, which can give true reason whie dungue should doe anie goode in arable grounds but are ledde thereto more by custome than anie philosophical reason, nevertheless it is apparent that no dungue which is layde upon barraine gronds could in anie way enrich the same if it were not for the salt which the straw and hay left behind them by their putrefaction."

T. March.

Quote—"Farmers & Gardeners Reason Why", by Liebig, printed in London, 1860.

Shaw-Avian Style

Phil is such a gentle bloke, never rash, but slightly on the softer side with always a song in his heart. Being the end of the week he has great ideas of a good easy day and early knock off; and so he has all reason to be in fine form this morning. Remembering baskets from the kitchen and all the while being in that gay mood, a soft, soothing, clear whistle surges forth

from his gums.

He hops over the garden fence, across the lane and the lawn; deposits excess baskets and is off to do the morning inspection. Quietly walking down to the house. Phil is suddenly overcome by some mysterious magnificent stimulus to broadcast to the world his melody of good will. He flings open the big wooden door and greets the drowsy birds with a lusty whistle and cry sending "vultures" into a similar state. The greeting continues till neither party can breathe for litter dust, then Phil begins his inspection of feeders and waterers, then turns to egg collection.

The nest box lid is flung open and before the broodies have time to cluck they are sailing through the air—no one could pick out broodies like Phil!!! With all eggs removed, the nest lid comes thundering down only to end with a choked cough gasped from a now long necked vulture who has failed to retain all its appendages within the nest at that

specific time.

Through the partition and into the next house another stimulating performance results in one over-turned basket of oozing yolk and white; sufficient to upset Phil's delicate nature. This snaps him into an early session of football practice, avian style, with plenty of emphasis on dodging, tackling and the low drop punt.

He leaves the shed in this excited state and slammed the door shut, leaving one stretched cervical vertebrae dangling over the concrete step. The remainder of the houses are inspected in quick time and before the little green convertible arrives, Phil has executed a rapid but neat morning burial service, again avian style!

All is normal now and he has got over all his morning surges and looks forward to a quiet easy quick day prior to his evening convulsions.

R. Nicholls.



Keith Fairlie

Any student who has been associated with the College for the last 43 years would know Keith, who has finished a long term as gardener as the College. A very cheerful character, his ability for work has astounded many who have had to hoe weeds with him. He is extremely fit and seems able to keep his back bent all day, without straightening up.

He has a most comprehensive selection of yarns (both true and contrived) after many years experience with students, and a few students have had the pleasure of retiring into the bus on a rainy day and listening to Keith narrating his ex-

periences.

Keith has retired to his home in Gawler but is still very active; his main preoccupations being taking trips and painting houses. It was pleasing to see him again at Athletics Day, presenting the prizes.

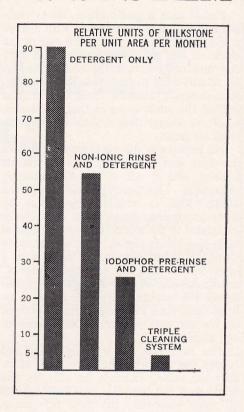
RESEARCH PROVES TRIPLE CLEANING SYSTEM

The Triple Cleaning System is a revolutionary new method for cleaning milking equipment. It was first developed by the research unit of the N.S.W. Department of Agriculture and approved by Dr. Whittlestone of Ruakura Agriculture Research Centre. This system reduces milkstone deposits, thereby minimising contamination. (See graph.)

Cooper's are happy to be associated with the extension of this information to the dairy farmer, as their range of dairy products is especially developed for this cleaning system.

> This graph was used by Mr. A. Twomey, Research Officer, N.S.W. Department of Agriculture, at a lecture to Australian Society of Dairy Technology on February 24, 1966, showing results of work carried out at the research unit, Hawkesbury Agricultural College.

- LESS MILKSTONE, BETTER "BLUE" TIME
- LOWER BACTERIAL COUNTS
- CLEAN FASTER, MORE EFFICIENTLY WITH—



THE COOPER TRIPLE CLEANING SYSTEM

ANABAC (IODOPHOR) PRE MILKING RINSE COOPASOL-D

NON IONIC POST MILKING RINSE BACTERGENT

LOW FOAM ALKALI DETERGENT



ALWAYS USE A FINAL RINSE OF BOILING WATER

Other Dairy Products in the Cooper range are Cooper's COOMAC Acid Milkstone Remover, Cooper's UDDER SOAP and Udder Soap Dispenser, MIN-A-VIT ORANGE BAND Mineralised Vitamin Supplements for cattle.

AVAILABLE FROM YOUR LOCAL COOPER AGENT OR DAIRY FACTORY

WC/300

These are the names to remember for best value in power farming

FORD

The Ford work force farms Australia, and the full range or Ford tractors and powermatched equipment comes from Moore's.



COUNTY SUPER 4 & 6

Offer Ford power (67 or 100h.p.) economy, dependability, PLUS the advantages of 4-wheel drive, with Moore's Australiawide backing.

TRACK MARSHALL

Australia's best crawler tractor value at \$8,350 complete. In South Australia alone nearly 200 are in use by Government Dept., in agriculture and industry. Track Marshall provides dependable lugging power where maximum traction is a must.

Remember these names, and for full information, demonstrations and advice contact . . .





MOORE ROAD MACHINERY
(S.A.) PTY, LTD.

(a Division of Malcolm Moore Industries)

475-481 MAIN NORTH RD. ENFIELD, S.A. Ph. 62 1111



Introducing The President

Harry Stephen came to Roseworthy in 1945 from Whyte Yarcowie, near Burra, in South Australia. After 3 years at College he stayed on first as Sheep Cadet, then as Technical Officer in the Animal Production Laboratory under the late Phil Schinckel. In 1958 the job of Poultry Superintendent attracted him and he spent eight years in this position, leaving Roseworthy in 1965 to become Poultry Adviser with the Department of Agriculture at Murray Bridge.

In the time that he was at College he undertook the job of treasurer, from 1951-1960 then that of secretary, from

1960 until 1966, when he moved from Roseworthy.

Being as interested as he is, an authority within R.O.C.A., Harry has seen fit to continue with his work for the Old Collegians as Vice-President in 1966 and now in the position of President this year.

As stated, he is an authority on matters of constitution, whereabouts of members, the Award of Merit; in fact anything at all to do with R.O.C.A. and no-one is better fitted to fill the position of President.

Past President's Report

It is my privilege and pleasure to present the 69th Annual Report of ROCA. It has been a year of steady progress and achievement. Thanks to the efforts of our committees and branches. active interest has been maintained at a high level. Reports from the Treasurer, ROCA Digest Editor and Chairman of the Aust. Agricultural Association Foundation Committee, Mr. F. B. Pearson, will bear this out. The high standard of Branch meetings and functions leaves the future of our Association in no doubt. I was fortunate enough to attend reunion meetings at Port Lincoln, Loxton and Naracoorte and was impressed with both the standard of debate and the splendid comradeship.

Membership for this year stands at 801, an increase of 11 over last year. This is made up of: Life 605 (597), Ordinary 196 (193), New members total 19, made up of Life 4, Ordinary 15. 13 Life have been removed from the roll following an unsuccessful attempt to determine their whereabouts.

It is with deep regret we record the deaths of the following members: P. J. BAILEY 1898-1901, E. P. YEATMAN 1904-05, E. O. BROWN 1906-09, P. A. TOD 1911-14, A. R. McTAGGART 1952-55. Also the death of Mr. BILL DALY, well known to many of us as a faithful servant of the College.

To the relatives and friends may we express our deepest sympathy.

The ROCA Digest has continued as a valuable part of the Association. Under the capable leadership of its editor, ROSS FORD, members have been kept fully informed of Association affairs, members whereabouts and activities. It has also kept us all in touch with the College. The increase in cost of production is more than offset by the value of its service to the Association. The Digest Committee consisting of Ross Ford, F. B. Pearson, W. S. Edge, R. S. Norton and J. Ryan, is to be congratulated on an excellent job. Ray Norton as manager of "The Student" is again to be congratulated on his continued success in producing a magazine without cost to anyone. In fact it is making a profit.

A dinner dance was held at the Hotel Richmond in November last year. Despite a small attendance, all present thoroughly enjoyed themselves. It is to be hoped that another will be organised for the coming year and that it will receive good support. Functions like this should be encouraged and supported, as they do much to strengthen the bonds of friendship within the Association and improve its image to the community. I was privileged to represent the Association at the College Speech Day and also at the Graduation

Ball at Richmond.

The Ball is a new innovation and again has much to recommend it as a means of improving the image of the College.

The Award of Merit, which this year attracted 4 nominations, will be made to Mr. R. I. HERRIOT. Our congratulations go to Mr. Herriot for recognition in particular, and the College in general. of his outstanding service to agriculture

Old Boys' Day has, in the past, been held at the College during October. It has taken the form of a Church Service and Tour of the College in the morning, with sports and afternoon tea after lunch.

An Open Day with the accent on showing the public what makes the College tick, is also held during October but on a separate day. While I and many others have enjoyed the Old Boys' Day, a gradual decline in attendance has occurred over the last few years. The Open Day was well attended last year. It is

suggested that perhaps the two days could be combined into one. I feel that this meeting should give some direction on this matter to the incoming Committee.

While Mr. Frank Pearson will later present a detailed report on the proposed Australian Agricultural Association, I want to say how pleased I am that a decision to form the organisation has been made. The meeting at Gatton was one of the most intensive and constructive I have ever attended (4 beers only). Several delegates were opposed to the formation of such a body at the start but the solid and purposeful case put by those those in favour and particularly the case put up by the representative from Papua, New Guinea, resulted in a unanimous decision. I might add that Frank Pearson and myself did not let the side down in any way, either.

There is still much to be done but in selecting Frank Pearson as Chairman of the formation committee, the job is not only in excellent hands but half way to

success already.

In conclusion I wish to thank the committee for their loyal support and the excellent contribution they have so unselfishly made to the Association.

John Gursansky has had the double problem of taking on a new position as Secretary and a New President. He has done well to cope with me, let alone the

position.

Bill Edge, Geoff Roe, Harry Stephen, Cliff Hooper, Richard Fewster, Ross Ford, Ray Norton, Jim Sobels, Colin Kay and Rob Ryan have all done their best. The members have played their part too, and I know that not only will the new president receive the same support as I did but that the whole committee will have the solid support of the members of ROCA.

J. Gore



Notable Old Collegian

PERCY JOHN BAILY was born on February 2nd, 1881 and died June 22nd, 1967. The span between these dates was taken up largely with his intense interest in the land and anything pertaining to it. He entered Roseworthy in 1899 and gained his Diploma in March, 1901. After leaving College he spent some time wool-classing through northern stations and later was farming at Freeling. In 1909, he joined the firm of Morphett & Co., who were pioneer owners and developers of the Murray Swamp areas of Jervois and Woods Point.

It was at Woods Point from 1909 to 1946, that Perce Baily became so well known. Through his planning and supervision, almost all of the reclamation work in this area was carried out. He was responsible, too, for the experimental work accomplished to determine what could be grown on the area and it was his vision that led to the development of the area into one of the highest carrying capacities in the world, and on which the city of Adelaide now depends so much for its milk supplies. The fact that few of his ideas and methods have been

improved on, serves to illustrate his capabilities as an agriculturalist. Because of his ability he served on the Advisory Board of Agriculture for many years. His love of horses led him into an interest in the local Hunt Club, Chairman of the Murray Bridge Racing Club and later for his services to racing clubs in the South East, he was made an Honorary Life Member of every club.

When the Woods Point area was broken up and part sold to the Government and part to private owners, Mr. Baily moved to his Naracoorte property "Kinnora", which became an example and show place of the district. While in the South East he upheld his interest for Roseworthy by serving as President of that branch of ROCA until 1954.

It should be made common knowledge that Perce John Baily was nominated for the Award of Merit of 1967, but his death deprived him of consideration, All will agree that he was of that calibre and most worthy to be classified in the ranks of one of Roseworthy's Notable Old Collegians.

1966

Diploma Holder Wins Award



A 1966 Churchill Fellowship to the value of \$3,151 was awarded to Mr. R. H. Badman, R.D.A., of Koppamurra near Naracoorte.

As a small seeds producer, Ronald Badman has been very active in promoting the industry, since settling on his South-East property 8 years ago. He has been President of the S.A. Seed Producers Association, a member of the S.A. Herbage Plant Liaison Committee and represented the A.P.P.U. at the Australian Wool Industry Conference and has done much to promote the industry as an individual.

His association with small seeds started in 1962 when the Department of Agriculture, looking for sources of seed to back their recommendations of high seeding rates of medic and clovers, held a meeting under the Chairmanship of Newton Tiver who had just returned from an overseas tour. At this time, there were six people interested in the prospect of irrigation for seed production. The first seedings were of Barrell 173 (now Jemalong medic), but in 1963, Currie Cocksfoot and both African and Dupuits Lucerne were sown. In 1959-60 certified pasture seed harvest was 1,200 bags, in 1964-65, it was 25,000 bags.

Yields have been—
Currie Cocksfoot—400 lb.
Sub Clover—13,000 lb.
Barrel Medic—800 lb.

Lucerne—1,200 lb./acre.

The problems have not been easy to overcome, but Ron has applied himself to them, and now his aim is for a net return of \$110 per acre.

Although a specialist in one field, he has shown his interest in all allied fields, and the fact that in addition to his small seeds production, he runs 2,500 B.L. x Mo. ewes with a 107 p.c. lambing bears this out. To visit him on his property, as did over 300 people in 1966, is an extremely interesting experience.

In his tour of the U.K., the Continent, Canada and Western U.S.A., one of the most outstanding aids to production he saw was the use of leafcutter and alkali bees used as pollinators. They are restricted by quarantine from importation into Australia, to replace the honey bee, a poor pollinator. In the U.S.A., a hybrid bee with 60 p.c. affinity for lucerne pollen was being developed.

He points out, that "we will never get big yields here unless we approach the problem of pollination differently". Another point was the use of overhead sprinklers during pollination which considerably reduced yields.

It is obvious that the award received by Ron Badman was granted wisely, and the knowledge gained by him will be disseminated in many ways, to the benefit of a number of sections of Australian Agriculture.

Roseworthy Diplomates—Their Role in South Australia's Development

Roseworthy Agricultural College (est. 1883) was the first Institution to commence official agricultural investigations in this State.

Work on testing of wheat varieties for numerous factors of economic importance commenced as early as 1890. Later, from 1905-1936, Professor Perkins, and W. J. Spafford, R.D.A. worked together, first at Roseworthy and then in the Department of Agriculture on problems of South Australian agriculture. It was in these early years too that Experimental Farms were established by the Department of Agriculture at many centres now well known.

These farms were in the main, run by Roseworthy Diplomates. Perhaps it is unfair to others to single out one man, but he was outstanding in his field; Len J. Cook (1963 Award of Merit). His work at Kybybolite with sub clover, phalaris and superphosphate is a legend today. This work was considered at the time to be advance of anything else in Australia. Others to follow him such as Worsley Johnston and Jack McAuliffe each added to the knowledge on problems in that area.

Of the original Experimental Farms, Minnipa is still active, having had almost continuous management by Diplomates starting with Len Cook in 1915, then laterly by Henry and Don Winn.

In this area on Eyres Peninsula many problems have been tackled, not the least of which has been the development of barrel medic pastures and trials on its resulting productiveness, run by Henry Day.

A similar story of work on the problems of the lower north wheat and sheep farms in soil conservation and fat lamb production to mention only two, comes from Turretfield. Again Parndana, established in 1941 by Rowland Hill (1961 Award of Merit) was taken over by the Department in 1949 and has been managed in latter years by diplomates who have contributed considerably to solving questions there.

Perhaps a part played by the Research centres in the various areas of the state, which is not appreciated, is in the train-

ing of young men.

Commencing as a Field Officer, a young diplomate learns to lay out and interpret field trials. By working on a problem in one district then another, he is able to develop a broad outlook to specific problems and learn to appreciate their economic effect. Once the Field Officer "finds his feet" he is promoted to Project Officer and gradually moves up through the ranks to become an adviser. Perhaps the only criticism of the system comes from the young men themselves, that in many cases, the move is all too gradual in a community needing more help from them.

As advisers, working closely with the farmer, many diplomates have had far reaching influence in their districts. Being trained with a knowledge of practical problems, they have been quick to appreciate the primary producers view-point and to adapt scientific findings to enable them to be applied in the field. One of these men, Frank Pearson, now Chief Agronomist, was also recognised by R.O.C.A. with an Award of Merit in 1965 for his services to Agriculture in this State.

It is obvious from a survey of the role of diplomates within this one organisation, that the training received at Roseworthy has been adequate to fit them for the role of extension. It is very obvious therefore that given a more intensive training to meet modern demands, the diplomate will be able to play a similarly vital role in the next 80 years of agricultural development in South Australia.

Student Roll, 1966-67

AGRICULTURE

Year III

BABIDGE, M. H. BROWN, R. CAUDLE, C. R. COCHRANE, M. J. CRAWFORD, D. M. CROSBY, R. B. DAWKINS, J. S. DAWKINS, R. M. G. ECKERSLEY, G. C. EVANS, J. W. FROMM, G. M. HAY, R. S. HOLLOWAY, R. E. HURN, C. R. HUTCHINSON, R. C. JONES, J. A. JONES, P. I. JONES, P. L. KOHNKE, J. R. MARCH, T. MORTIMER, B. K. NEWLAND, N. P. NICHOLLS, M. R. NICKOLLS, J. D. OSBORNE, R. J. PANNACH, D. D. PARTINGTON, R. E. RYAN, P. J. SCHRAPEL, G. L. SLUITER, K. E. SHAW, P. L. TWIGDEN, T. K. WOODS, K. M.

Year II

BOERTH, B. W. COOPER, J. P.

DAVIES, J. B. ELSDEN, W. A. GILES, W. G. GLAETZER, C. J. GLAETZER, J. C. HABGOOD, R. H. KIRKWOOD, G. McCALLUM, K. A. MIEGEL, D. E. MOWATT, G. H. PAYNTER, R. C. PHILP, B. W. RILEY, M. J. ROESLER, W. J. SCARBOROUGH, I. R. SHAKESPEAR, P. TAPLEY, I. J. TURNBULL, R. K. USHER, T. R. WATSON, W. D. WOMERSLEY, J. C.

Year I

BASS, A. W. BROOKMAN, G. T. BURNE, P. M. BUTLER, R. J. CLIFFORD, A. G. DORMAN, R. K. FRIEDRICHS, P. FROMM, D. J. GATES, S. G. GERLACH, A. GOOCH, D. J. H. GOODE, C. B. GRAVESTOCKS, D. W. GROWDEN, B. HACKETT, P. D. HANSEN, D. E. HEIN, W. R.

HILL, J. G. HODGSON, P. J. INVERARITY, G. R. KAESLER, F. E. KELLY, G. T. LIEBELT, W. J. LUCK, B. K. MACZKOWIACK, R. I. MABLESON, J. C. MASON, J. E. F. MILLER, R. C. O'FLAHERTY, J. B. OLIVER, A. T. OSBORNE, W. L. PEARCE, G. T. PICK, A. POLKINGHORNE, REV. B. T. REDDEN, P. F. RILEY, I. G. SCOTT, A. K. STEWART, R. J. ULBRICH, M. D. WASLEY, D. R. WRIGHT, L. D. WOOD, M. A. WURST, C. D.

OENOLOGY

ANDERSON, J. K.
BALDWIN, R. D.
CAMPBELL, C. B.
CARTWRIGHT, R. G.
HOEY, A. W.
KHURANA, B. N.
LIEBICH, R. E.
WALDECK, P. K.
WARD, W. W.