



Volume 1. No. 5.

April 1963



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ROCA Digest

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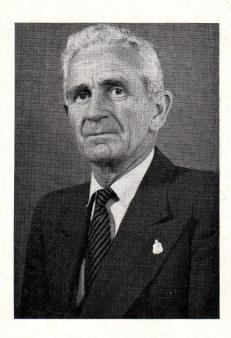
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IN THE MELTING POT



Controversy rages around agricultural education. "Agricultural college trained men have—and will continue to have—a very real and important part to play in the agricultural life and development of South Australia." So says Mr. F. B. Pearson, Senior Agronomist, South Australian Department of Agriculture.

Opposed to this view there are protagonists of degree courses who say, "Diplomas don't mean anything these days. Colleges can't teach you anything you can't get better in a University. They won't open the way to a useful or profitable career."

Let us look at the situation.

Two quite definite approaches to a professional career in agriculture must be recognised. One is the degree course, and the other is the diploma course.

It is a simple fact that although both are important the two types of training are poles apart. The two must not be regarded as competitive. They are complementary. Degree courses are becoming more academic and geared to the production of research workers. There is only one reasonable answer to it all. Agricultural colleges including Roseworthy must be geared to produce people thoroughly equipped to deal with the applied and more practical aspects of agriculture, including advisory, managerial and commercial work.

Over some years the standards of degree courses have been raised. It is appropriate that Roseworthy should lift its standards to bridge the gap and keep in step.

The ultimate standard of a Diploma cannot be raised without raising the entry standard. Basic

entry qualifications at Roseworthy are an Intermediate Certificate including Mathematics, Physics and Chemistry or alternatively Arithmetic, General Science I and General Science II. From them entry is by competition. It has been suggested that a specific minimum qualification such as the Leaving Certificate should be set. However, at the moment this is being achieved by selection as the number of candidates for entry rises. This is indicated in the Principal's annual report. "This year the average first year student has passed 4.1 subjects at Leaving level." It has not been possible to enrol every applicant. Many interstate lads have been excluded.

It is a fundamental point that the better the starting point, the higher will be the standard at the end of an intensive period of training. It is selection which must force the entry standard up. It would be unrealistic to restrict the number of entrants in order to set a raised standard.

We can anticipate that the intensity of training will continue to rise.

To encourage more candidates for entry to the College, the public standing of Roseworthy and its diplomates must continue to improve.

C. W. HOOPER

President, R.O.C.A.

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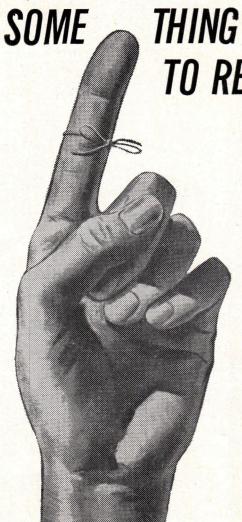
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From time to time Australian livestock interests express doubts about the need for the stringent quarantine regulations which are enforced here. They suggest that there should be easier entry for stud stock from overseas and play down the dangers involved.

Mr. W. Stephen Smith, Chief Inspector of Stock in the S.A.D.A., discusses for us the major diseases which could be introduced into Australia and the losses and problems of management which they cause.

Mr. Smith represented the four southern states at a Conference of Chief Veterinary Officers of Commonwealth Countries in London in September. He then spent five weeks in Uganda, Kenya, and the Republic of South Africa. He says "Rather than that there should be any relaxing of Australia's quarantine laws efforts must be made to close every gap in our quarantine barrier."

Australia is a livestock paradise. Let's keep it that

wau.

LIVESTOCK AND DISEASE IN AFRICA

Even a short stay in East Africa and the Republic of South Africa is enough to convince any person interested in livestock that Australia is a paradise. By African standards, we have not one serious disease. Our sole major problem is pleuropneumonia of cattle, and that is important only because of its nuisance value in restricting stock movements. It does not cause many deaths under the existing control measures, but in parts of Africa

it can still be a major source of loss.

To understand the reason for the seriousness of disease in countries such as Uganda and Kenya, it is necessary to know something of the climate, the people and the indigenous animals. Both countries are on the equator, but are more than 5,000 feet above sea-level, except for the coastal areas of Kenya. The rainfall is high, and the day temperatures fairly hot. Ticks of at least five different species abound and all seem to be capable of carrying and spreading at least one disease. Native game of the antelope type, such as Thompson gazelle, graze in association with sheep and cattle. Various wild carnivora of the cat and dog families are still present and these are capable of transmitting rabies to cattle and sheep by biting.

The native ruminants such as antelope, wildebeest, giraffe and many others are carriers of viruses and blood parasites to which they are largely immune. Although these animals do become infected with virus diseases such as rinderpest, foot and mouth disease, Rift Valley fever, Wesselbron's disease, blue tongue and lumpy skin disease, they do not usually show marked symptoms. They do, however, act as the reservoir from which the highly susceptible introduced cattle and sheep become infected and suffer severe losses, unless they are protected by

vaccination.

In addition to the fearsome list of diseases given above, most stock have to be protected by inoculation against anthrax, blackleg, brucellosis, Nairobi sheep

disease and others.

The control of ticks must represent one of the major economic problems of cattle. Throughout the summer months, most cattle are dipped every 7-10 days and every 2-3 weeks in winter. Even then, it is possible to find plenty of these parasites. Unless precautions are taken, many udder quarters are lost due to mastitis following damage by the long mouth parts of the Amblyomma ticks. East Coast Fever—a protozoan disease spread by ticks—is also a major source of loss.

Internal parasites, particularly of sheep, present a major headache. On one property where we were entertained by a former Tasmanian, Mr. Miles Fletcher, whose sons went to Roseworthy College,

the young sheep are drenched every 2-3 weeks, and the older ones every 4-5 weeks.

Add to all these such minor problems as beef measles, bile duct tapeworms, stomach and liver fluke, fungal diseases such as streptothricosis, Newcastle Disease in poultry, African Horse sickness and others, and you can see why persons such as Mr. Clay, Chief of the Division of Animal Health, Agriculture and Stock, Brisbane, who made the visit

with me, and I, were really impressed.

Many of the virus diseases are transmitted by biting insects such as mosquitoes and sandflies, and it is these which constitute such a big threat to Australia. Air travel has brought the African Continent very close to us. We left Johannesburg airport at 9 a.m. SaturJay and landed in Perth at 2 p.m. Sunday, landing only at Mauritius and Cocos Island. Deduct six hours for time lost flying eastward, and the trip took 23 hours in actual time, which is not long for insects to survive. However, we are safeguarded in that the cabin of the plane was sprayed on landing at each airport en route.

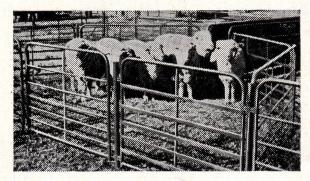
I mentioned earlier that some knowledge of the peoples of Africa was necessary before the animal disease problems of the continent could be understood. Cattle, sheep and goats are an integral part of the everyday life of the native African peoples. These are their wealth and their means of trade. Brides are valued in terms of cattle—60 to 100 head of cattle for a bride in one area we visited, down to 10 to 20 in another area. Quality of the cattle is not as important as that of the bride. Eradication of disease by slaughter or by any line of treatment which may result in deaths is generally out of the question. As many of the tribes are nomadic, moving on with their herds when feed runs out, disease control is difficult, and eradication often impossible.

The veterinary services in the Republic of South Africa are very well organised and very efficient. However, they have less developed countries on the North in which native animals abound. They also have the Kruger Game Park in their own territory. Foot and mouth disease is always present in the game, and as these animals tend to move south into the cattle raising areas of the Republic, this disease is a constant threat. To overcome this problem, South Africa has erected a 432 mile 6 feet 8 barb fence along the whole southern boundary of the Kruger Game Park. However, no one has told the animals what the fence is for, so it is continually being broken by elephants going for a stroll, giraffes falling over the top or smaller animals charging through when chased by lions. The younger genera-

continued on next page



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SECRETARY'S NOTES

Bowls Match.

Because of insufficient interest the proposed match between R.O.C.A. and Gawler has been dropped.

Unknown Addresses.

There has been a very good response to the appeal for current addresses. However, there are still a few incorrect addresses on my records and a few Digests are still "bouncing".

Non-Financial Members.

Remember section 11 (b)?

There are twelve people who are more than twelve months in arrears with subscriptions and they will NOT receive this Digest. If you happen to meet one of them complaining, perhaps you might have a whisper in his ear.

Award of Merit.

Have you given any thought to a nomination for this year's award? Nominations close at the end of May.

Re-union and Annual Meeting.

There will be a change in the venue of this year's principal functions. The Annual General Meeting will be held in the Railway Institute Hall at 5 p.m. The Dinner will follow at the Gresham Hotel. Full details will be announced later.

Committee Meeting.

An ordinary committee meeting was held on 15th February at Ian Fry's home at Beaumont. Main business was discussion of the '63 Re-union, the Swimming Pool Appeal, Visiting and Sports Day, and "R.O.C.A. Digest" report.

HARRY STEPHEN, Secretary.

continued from previous page

tion of animals is learning to respect the fence and breaks become less frequent as time goes on.

Within a distance of 30 miles inside the northern border of the Republic, all stock are inspected and counted every week by stock inspectors. Every owner has a tally card and all births and deaths are recorded. All dead animals must be post-mortemed to ensure that death was not due to foot and mouth disease or rinderpest or pleuro-pneumonia or other serious disease.

To an Australian used to our free and easy way of stock management with casual inspections to watch for nothing more serious than fly-strike, lice or losses due to entero-toxaemia, it was difficult to adjust oneself to stock management in Africa. The introduction of many of the diseases of Africa would mean a radical change in our management practices also. Labour in Africa appeared to be plentiful and cheap, and therefore the costs of disease control are probably far lower than would be the case in Australia.

We cannot afford to be complacent about the threat of African stock diseases entering this country. In recent years, bluetongue, African horse sickness, African swine fever, and African type foot and mouth disease have reached Euroupe. Rapid and plentiful air travel is increasing the chances of spread very considerably, and Australia, which is so dependent on its primary produce exports is in greater danger than ever before.

PHILLIP GURNER SCHINKEL

It is with deep regret that we report the recent death of a very noted Old Collegian—Phillip Gurner Schinkel, B.V.Sc., Principal Research Officer, Sheep Physiology Laboratory, Paramatta.

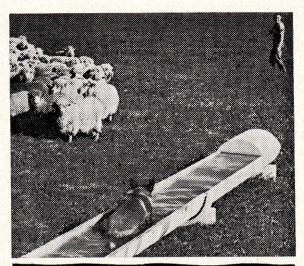
Phil. was educated at Prince Alfred College and graduated from Roseworthy in 1938 with First Class Honours, being Gold Medallist and winner of the Old Students' Cup. He then attended Sydney University, gaining a very good degree in Vet. Science.

In 1944 he was appointed Vet. Officer on the College Staff, and was promoted in 1947 to Senior Lecturer in Animal Husbandry, when the Animal Production Laboratory was completed. In 1950-51 he did a study tour of England and America and left the College in 1954 to take up the position at Paramatta. At the time of his death plans had been made for him to leave on a lecture tour of the world.

Phil. was the son of Mr. and Mrs. E. C. H. Schinkel, of Kybybolite. It was the early training in that district which prevented him losing sight of the practical approach to research problems and the far more important ability of being able to pass the results onto the producer at their level. In his field he was recognised as one of the top men in Australia, and his work has been quoted all over the world.

At the College he is remembered by the Staff as a member, who not only worked day and night at his job, but as one who could always be approached for help and advice.

We extend our deepest sympathy to Mrs. Schinkel and family in their recent sad bereavement.



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R.A.C. HARVEST SUMMARY

The grain returns for the past year show rather a big variation. Wheat on fallow averaged 27.4 bushels, while wheat on leyland yielded 28.2. Olympic gave the best return—33.4 bushels per acre.

Oats on fallow yielded 19.9 bushels (Avon 27.8) and on leyland 18.2.

Top barley yield was 43.2 bushels, with an average of 34.8.

Reserve fodder is in a sound position, and only 1,323 bales of hay and 200 tons of silage were gathered.

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First of all a plea to reserve the evening of Wednesday, the 17th of July, for the R.D.T.A. annual dinner. The place and the time will be announced in the June issue of the Digest. The night is the free night of the Dairy Factory Managers' Conference, which will be held on July 16th, 17th and

News of Members.

Several firms in South Australia have shown interest recently in developing soft cheeses for sale in this State. The Victorians have shown such a market exists, but it is not easy to break into this field.

Our President, Mike Lucey, has just returned from a trip to Victoria to get the "dinkum oil" on soft cheese. He was pleased to receive generous assistance from Cheese Adviser Brian Hannaford during his stay.

Mike was interested in an unusual project at Green Meadows, a suburb of Melbourne. The firm, Metro Holdings, are setting up a milk bottling plant, which will fill the bottles in the crate. The idea obviously sounds easy, but has its complications. However, this firm seems to have ironed out the problem.

I believe Eddie van Hooff is leaving Meningie to take up an appointment with the Myponga Dairying Company on June 1st. Members' Own Section.

I asked for notes from two members in the last issue and received 100% support. Thanks, chaps, you help to make my job easy. To clear up a you help to make my job easy. To clear up a point for you, John Arnold, if you are a member of R.O.C.A. you automatically become a member of R.D.T.A and no extra fee is required. I shall have to hold your notes over until next issue, John, as space is not available.

Over then to Alain Chartier. Alain is a Dairy Officer in the Tasmanian Department of Agriculture. His duties include supervision of dairy factories, daries, milking machines and herd recording, as well as addressing farmers' gatherings on matters relating to dairying. He is stationed at Smithton, where his

address is 14 Tatlow Street, Smithton.

CIRCULAR HEAD AND ITS PRIMARY PRODUCTION

Smithton is the business centre of the Circular Head Municipality, situated on the far north-west coast of Tasmania. The municipality covers an area of 1,163,400 acres, of which only about 85,000 acres, or 7.3%, is developed. About 80% of the total area is capable of being developed for agricultural purposes.

Soil type ranges from red brown basaltic soils on the hill country to sedimentary swamps and from sandy loam heath country to peatty swamps. All the country is well provided with natural water, as the rainfall varies from a 36 in. average in the north of the district to an 86 in. average 50 miles away in the southern portion of the district. There are myriads of small permanent creeks, all running into either the six main rivers in the district or straight into the sea on the north or west coast.

Rainfall incidence is throughout the year with heavier falls during winter and spring. Normally rain is recorded on approximately 250 days each year.

Natural vegetation is heavy hardwood forests on the highland and sedementary swamps. Dense tea-

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tree and hardwood on the peatty swamps, low heath and tea-tree and button grass on the poorly drained

sandy loam country.

Costs of developing this country from its natural state to reasonable pasture varies from £30 per acre for the heath country up to £100 per acre for highland forests, and £130 per acre for heavy timbered swamp country which needs draining.

Climate conditions are very mild; average summer temperatures are about 65 deg. F., whilst average winter temperatures are about 45 deg. F.

The district population is approximately 10,000; of these about 3,000 live in Smithon, 700 in Stanley (the intra-State shipping port for the district). The remaining 6,300 constitute the farming community.

The main sources of income in the district is derived from dairying, timber, fat stock and vegetable

growing, in that order.

There are approximately 520 suppliers of dairy produce to the factories in the district, a further 30 supply the factory in the neighbouring district. Suppliers range in size from house cows to herds of 180, the overall average herd size being 55 cows. This is increasing each year. At present the total number of dairy stock in the district, i.e., cows, heifers, calves and bulls, would be about 38,000; this is an increase of at least 1,000 a year in the past six years, and it is expected that this trend will continue for a number of years.

The average production per cow in the district leaves much to be desired, as it is only about 200 lbs. of butterfat. The average for herds under grade herd recording is about 265 lbs. butterfat per cow. This can be attributed to the better management of the herds, particularly the higher herds, which have an average of 350-375 lbs. of butterfat per cow. Approximately 8,000 cows were artificially inseminated during the 1963-63 maturing season in this

Concentrate feeding is not carried out in the district, but grazing is supplemented with forage crops silage and hay, but then only early and late in the season. Seasonal calving is general in the district; the bulk of the cows calve in July and August.

All pastures are improved and main pasture species are Perennial Rye Grasses and Cocksfoot and clovers, mainly White Dutch and Red clover. Top dressing is usually carried out at the rate of 2-4 cwt. of superpnosphate annually, overall areas. Lime, potash and trace elements, particularly copper and molybdenum, are recommended where and when required.

The main types of forage crops grown for supplementary feeding are turnips, rape, chou mollier, oats and Japanese Millett. All hay and silage is made

from the improved pastures.

At present a test and slaughter campaign for C.A. is in progress in the district and incidence now is negligible. Other diseases which appear to be of major importance are, infertility, mastitis, bloat leptospirosis, as well as lung and stomach worms, not forgetting the inevitable milk fever and acetomea.

There are the usual pasture pests which play havoc with pastures if uncontrolled. Those of major importance are the corbi grub, cockchafer, army caterpillar, lucerne flea and the white cabbage moth

which attacks the major forage crops.

During the 1961-62 season approximately 5,000,000 lbs. of butterfat was forwarded from the dairy farms to the dairy factories, 4,354,000 lbs. of this was sent to the Duck River Butter Factory in Smithton as cream, 268,000 lbs. was forwarded to Cadburys Condensing Plant at Edith Creek, 10 miles south of Smithton, in 717,600 galls. of milk. 122,000 lbs. was sent in milk to the two small cheese factories in the district, whilst the remaining 156,000 lbs. of butterfat was sent to the butter factory in the neighbouring district.

The Duck River Butter Factory at Smithton has just on completed modernisation and is now capable of an annual production of 4,000 tons of butter before it needs to extend. A production of 20 tons daily in an eight hour shift is possible in the flush of the season. 85% to 90% of the cream received at the factory is choice grade. Approximately 50 tons of print butter is wrapped each week for the local trade and this is of sound choice grade. In the flush of the season approximately 50% is packed for export. This normally grades 94 points several thousand boxes of 95 point export butter was packed during November and December, 1962.

A Vac. 16 cream treatment plant is used for pasteurising the cream at the rate of 1,200-1,500 galls. per hour, depending on quality and acidity. Salt brine is used for cooling the cream after pasteurisa-

A 100 box stainless steel Anderson and 3 x 40 box all metal churns are used at present, but one of the 40 box churns is to be replaced by another 100 box Anderson before the 1963-64 season com-

All cream used is collected from the farm every second day in the flush of the season, which is for a period of about five months, three times weekly for a further four months, twice and once weekly, depending on supply for the remaining three months. The longest pick up trip is only an 80-mile round trip, whilst the shortest is 14 miles. At the peak of the season 20,000 lbs. of B/F would be picked up on the said 80-mile round trip every second day.

The skim milk from the 500 dairies supplying cream is fed to pigs, which is quite a big industry

itself.

Approximately 45,000 bacon and porker pigs are fattened annually in the district. About 25,000 of these are slaughtered and processed locally at the Duck River Bacon Factory. A good percentage of this is exported to the Sydney and Melbourne markets. The remaining 20,000 pigs fattened are slaughtered and processed at works outside the district.

It may be interesting to note that some of the more progressive farmers are obtaining an annual gross income of £50-£60 per acre from butterfat pigs and culled dairy stock, or £90-£100 per cow

Cadburys Condensing Plant at Edith Creek is only a relatively small plant. During the 1961-62 season they received 817,000 gallons of milk from their 32

suppliers.

The peak daily intake at this plant is about 4,700 This is condensed down to a 4:1 ratio in an old tripple stage continuous condenser which has been modified to give a through put of 500 galls. per hour. Milk collection is in cans, but the concentrate is transported to Cadburys, Fry & Pascall Chocolate & Confectionery factory at Claremont, Hobart, a haul of 250 miles in 3,000 gall. stainless steel road tankers.

Continued on Page 11

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The two small cheese factories are owned and operated by the Duck River Co-op. Butter Factory Co. One has been in continuous operation for over 60 years and still going with little if any modernisation. Its maximum peak daily intake is 1,000 gallons. The other factory is of similar design and standard, but has a peak daily intake of 1,500 gallons. Pasteurisation of the incoming milk is not carried out, so the quality of the cheese varies with the quality of the milk received, plus a few other factors.

Cheese is made up into 5, 10, 20 and 40 lb. cheddar cheese and sold mostly in Tasmania. None is

exported.

The timber industry provided a relatively large source of employment. There are 10 sawmills in operation in the district. Between them they would employ 500 persons in the mills, their logging works, transports, kiln dryers and planing sheds, racking yards and offices.

The timber milled is the natural timber in the district, i.e., Tasmanian Oak (Stringy Bark), Blackwood, Celery Top Pine and Myrtle. Since the timber slump two years ago the export of rough sawn timber has declined rapidly, but this has been replaced by an increase in dressed timber, particularly hardwood flooring, weatherboards, furniture timber,

For quite a few years the Forestry Commission has been carrying out extensive work to find the best methods of reafforesting the logged out areas with natural species. Some quite interesting work has been done and results seem to be satisfactory provided extensive bushfires don't destroy the valuable

work being done.

The fat stock side of the rural industry is mainly a side line on the larger dairying properties. It consists of approximately 14,000 beef animals, mainly Hereford and Hereford cross animals, as well as 30,000 breeding ewes, mostly for fat lamb production. The Duck River Bacon Factory ex-tended their bacon factory several years ago so that they could do all the slaughtering for the local butchers and their own small goods needs. This small start soon grew and now a considerable quantity of beef is slaughtered by the company for Melbourne and Sydney markets. All of the export fat lambs are slaughtered at works outside the district.

A considerable number of fat cattle, chopper cows, lambs and sheep are sent from the district to the Launceston and Hobart abattoirs for local con-

sumption.

Vegetable growing has been quite a large source of income to the district in years gone by, particularly during the second world war, when a vegetable dehydrating plant was operating in the district. This plant has since been converted and now processes

frozen and tinned peas and beans.

The main crops grown each year now are about 400-500 acres of potatoes, 300-400 acres of swedes, 500-600 acres of peas and 10-20 acres of beans. The area of potatoes and swedes acreage has dropped considerably in the past few years with the increase in handling and shipping costs as well as the slump on the Sydney potato market and Melbourne swede market, but the acreage of peas seems to be on the increase.

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"The Grapevine"

by IAN FRY

The old bush telegraph has been rather quiet lately. I'm not sure whether this means that members haven't been doing anything or whether they just aren't talking. How about dropping us a line? Your friends are interested in the gossip you have picked up too.

It is with regret that we mention the passing of

several Old Collegians.

The death of Mr. David Thompson in February records the passing of one whose death will bring back memories to many Old Collegians. David was a graduate of Hawkesbury College and was Instructor in Sheep Husbandry at Roseworthy from 1937-49. He then transferred to the Tasmanian Department as Senior Sheep Husbandry Officer, later managed Rippling Waters in N.S.W., and at the time of his death was with the Brewarrana Pastoral Co.

Dick Maxwell, a graduate of 1958, was accidently killed in Western Australia early this year.

Mr. J. R. H. Warren, 1921-24, passed away several

vears ago. Mr. A. D. McDonald, of Leighton, via Burra, passed away on November 30th, 1962.

Mr. F. M. Feuerheerdt, formerly of Highgate, passed away about two years ago. He had served in Japan at the end of World War II.

We extend our sincere sympathy to the families

of these Old Collegians.

There will be sparks flying up in the Darling Downs soon. Roger (Curl) Gregory has written saying that he has been fortunate enough to draw by ballot a block of 4,322 acres in the Brigalow belt of the Western Downs, about 40 miles south-His address is Burradoo, Tara, west of Tara. Queensland.

The Management Committee has got a broad grin over its collective face. A willing worker appeared on the horizon heading from R.A.C. to Adelaide and he was soon co-opted to do a bit of work. It was Ross Ford, who recently joined the D. of A. He is helping quite a lot with editing. Thanks, Ross.

Howard Kerr Smith is keeping pretty busy in his new job with Elders-G.M. at Port Augusta. As merchandise officer, his job is quite interesting, but there seems to be a bit of reservation when he says, "but it involves quite a bit of desk work"—prefers to be out in the open. The shearing season is well into gear now and with Elders looking after about 60% of the stations in the North-West, Howard is kept pretty busy supplying their needs.
"Screw" Driver will be off to Britain in a few

months' time with some of Nerranderah's cattle.

Lucky man!

Dick Buckett, after spending two years at "Fell-

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IN SERVICE TRAINING SCHOOL

It was "back to school" for a number of Old Boys who have joined the Department of Agriculture over the last year or so. Principal officers of the Extension Division of the Department instructed officers in the art of extension work from February 6th-15th.

Periodically a school is held at Roseworthy by the Department of Agriculture to give officers an opportunity to learn the latest ideas of extension work.

Extension simply means the spreading of ideas throughout the farming community with the object of producing change. It is usual for a farmer who adopts new methods to get some benefit, which ultimately expresses itself in higher income.

There are many forms of extension. However, the use of these depends on whether knowledge is

College Chatter

The provision of more suitable accommodation for students has made considerable progress during the past two months. Perhaps the biggest difference to be noticed is in the Corridor—where walls have been plastered, floors covered, ceilings installed and new beds and cupboards purchased. A similar facelift has been completed in the upstairs rooms. Suitable armchairs have been placed in the common rooms, new chairs in the diningroom and new desks in the lecture rooms. This should be an incentive for you to come back and have a look around.

Speech Day was held on the 8th March, when Mr. D. Brookman, Minister of Agriculture, presided, and Dr. Evans, Principal of the Institute of Technology, presented diplomas and prizes.

With a probability of 40 students in first year, we should have almost a capacity house; 32 in Second Year, 17 in Third Year and 7 doing Oenology.

Meet the New Staff

Graeme Quick, B.Mech.E., Dip.M.E., is Senior Lecturer in Farm Engineering. After completing his degree, Graeme spent 12 months as sales engineer with Caterpillar Australia and was Lecturer in Agriculture Engineering at Dookie for three and a half years. He had considerably experience on farms in the Geelong district and should bring to the course a practical approach. We welcome Mr. and Mrs. Quick and their three sons to the College.

Nick Hutchins, Dux of the 1963 Graduating Class,

Nick Hutchins, Dux of the 1963 Graduating Class, has decided that South Australia is better than his home State, Tasmania, and has been appointed Assistant Horticulturist.

David Woodruff, B.Sc. (of Bangor, North Wales) has joined the staff as Biologist. David was previously employed with Vilmorin-Andrieux in Paris doing pathological work in cereal breeding. He had a very sudden change from the freeze of England to the summer of South Australia.

being extended to large and diversified audiences, smaller group meetings or simply from one person to another. Where large numbers of people are involved it is necessary to use the radio, TV, press, posters, etc. Small groups of people, e.g., Agricultural Bureau can hold field days, schools, tours, competitions, lectures or discussion groups. Each is designed to give information to the audience.

As well as learning what extension methods are available, practical examples of how to prepare bureau talks, how to give a radio address, what aids to use, e.g., films and charts, and more importantly, when to use these aids, were explained, and we were encouraged to practise what we learnt while at school

Although the days were fully used for instruction and practice, there was ample time for recreation. Almost everybody came prepared in some way or other for enjoying leisure hours. All College sporting facilities were made available and used frequently.

During the first week we had a couple of very hot days. Most cars headed north and enjoyed the cooler more refreshing atmosphere provided at Wasleys. No special equipment was needed to enjoy this recreation.

Of the 28 officers present eight were Old Collegians. Naturally chins wagged when Harry Nash and Robert (Red) Hodge got together.

Mr. Don Russell, a graduate of the war years, has settled in the Department of Agriculture in the Animal Production Division. Don went onto a River block after the war and then went farming over in W.A. He is now living in Adelaide and attended the school.

Mr. Bert Ninnes has been at Kybybolite now for nearly a year and kept up the tradition of tall men with Peter Gegtenbeech and Rob Hodge, who joined them in January, 1963. Bert and Red were there soaking up all that was presented.

Alan Hincks was also present. Allen is a Field Officer in the Weeds Section, where he is kept busy chasing skeleton weed or doing trial sprayings on Noogoora burr and such.

Ian Donald has lately joined the Department in the Agricultural Division. Formerly he was with a tractor company. We couldn't quite persuade him to join in on evening cards—the stakes were too low, I think!

Ross Ford and Tom Davidson, both in the Weeds Section, were there. Ross took the opportunity to practise his tennis. Unfortunately I didn't see much of Tom, but I guess he was quietly enjoying himself.

Billiards proved a popular evening sport. It reminded me very much of the days at College when meals were bolted in order to get a game in immediately after tea.

Everyone agreed that the school was a grand success in all respects. We learnt a lot, which, when applied to our work, cannot help but improve extension of ideas to the farmers, helping them to increase output and income.

HAROLD NASH.

"... There has arisen a spirit of staff and student co-operation that has allowed us to triumph over

adversity and I think the year must go down as a successful one for the College."

THE PRINCIPAL REPORTS

Speech Day, early in March, saw the completion of Mr. Herriot's first year as principal. A very significant year. It sets the pattern for the future. Mr. Herriot's annual report was in two parts, a formal report which was printed and distributed, and an address. We are pleased to print his address in full

MR. MINISTER, DR. EVANS, MEMBERS OF THE COUNCIL, HONOURED GUESTS, LADIES AND GENTLEMEN.

If you will agree, Sir, I would like to take the formal Annual Report as read and talk on College affairs in more general terms.

At this time last year I was very new to Roseworthy, and was somewhat bewildered with my lot. Whilst talking to you I made the point that both Agriculture and Education were dynamic. Each day, almost, brings new problems in both spheres.

The thing that worries me now is that I feel a lot more than 12 months older, and this, I think, goes for every staff member and student in the place. Together, we've stacked a tremendous amount into that 12 months. What has been done is, of course, not all obvious to you; but for those of us who have been through it, however much older we feel, I think I can say that it has been an enriching

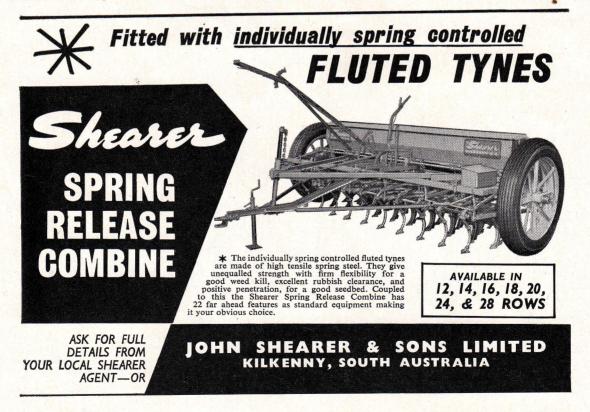
experience

I am a firm believer in the general policy of taking things one at a time, and shortly after taking over, decided that this year just past would be given over mainly to improving living conditions and teaching facilities in the College.

In this project we have had tremendous support from our Minister (Mr. Brookman), and I would like to say here, before this audience, Sir, how much easier my lot has been because you too, have thrown your full weight into this project. And I would like to couple with this, Mr. Slade, the Director of the Public Buildings Department. His men and his money have been with us all the way. Before College opens, after Easter, most of the

Before College opens, after Easter, most of the old furniture in this place will have been replaced by new; the old corridor block will have been thoroughly remodelled; Student Common Rooms will have been completely refurnished; the kitchen will have been modernised, and there will be a lot of other improvements all aimed to give living condition in this place comparable with those offering at the recognised University residential colleges.

I think I can say with some confidence that this programme will continue throughout 1963, and that all of you with sons in this place may look forward



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with some pleasure to what you might see on your next visit.

I need hardly remind you, however, that we are headed into a quite expensive project. We have both money and organisational troubles. We can only go just so far, but the spirit is good and co-operation everywhere is excellent. That's a very good starting point.

I would like to turn, now, for a few moments to

an educational problem.

What sort of a mind must our future Diplo

holders have?

The modern farmer is almost immersed in Capital. Before he can go farming, say in the midnorth of S.A., he must, somehow, acquire upwards of £40,000. It is somewhat frightening when we first realise that one man or perhaps two, requires this kind of capital support, and that the costs of servicing fixed and current assets far outweighs the returns for work. But that is how it is. I don't know, but I imagine that this sort of capital support per man employed, is not often matched in so-called industry, where there are both managers and workmen, if you'll excuse the distinction.

Gone are the days when a man could head off for the bush with an axe and a swag and finish up a farmer. We are in a very different work, even from that of our fathers, and we must educate to

meet it.

This, of course, brings under fire everything we do with students at a place like Roseworthy College. It is no longer sufficient, that a desire to go farming shall, of itself, be an adequate qualification for entry to this institution. There is no future in wasting human resources and those of the College on students who have no hope of making the grade to successful farmers or his technical advisers.

A sound secondary education is necessary, and it is pleasing to note that, although our basic qualifications for entry is the Intermediate Certificate, including Maths., Physics and Chemistry, in this coming year our average First Year student will have passed

4.1 subjects in the Leaving.

We have note been able to take everybody offering. Many Interstate lads have had to be excluded.

Having got an appropriate enrolment, however, it is not sufficient to pile notebooks full of technical information. Our students must be made to thing not only in the technical terms of Agriculture, but in managerial terms as well.

This is the educational problem of the day. Our courses will have to be redesigned so that Agricultural facts are always considered in a managerial setting. This, of course, is quite a tall order and you can't just issue an order and find yourself there.

We will have to grow into it.

Our Third Years this year, worked through a project over about three months, that required them to value a farm they knew, buy it, finance it, and work it on paper for the past two seasons. Some did surprisingly well, a few didn't make the grade, but one thing is sure; they're all most better graduates for having tackled it.

And now, if you will bear with me for a moment, I would like to address a few words to those who are attending their last Speech Day as students.

Over the last three years you fellows have been the living image of this grand old College. You've made many lifetime friends, and each in his own way, has contributed something to Roseworthy. You are now about to take something away from it.

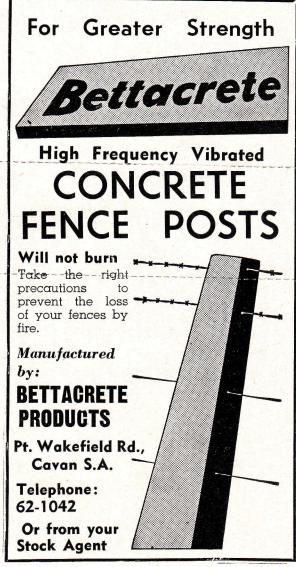
Roseworthy leaves a special sort of a mark on all its students, and I can assure you that it is a mark that will stand you in good stead. But Roseworthy will still need your goodwill and support, and it will always be interested in your progress.

Good luck to all of you.

Might I suggest that you all join your Old Students' Association and thereby maintain an official association with your mates and this place.

At this stage I would like to say how pleased I am to have Mr. Hooper, President of the Old Students' Association, on the platform with us today. We, of the College, do value the interest that is taken in us by the Old Students' Association.

In conclusion, I must say too, how much I owe



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"Grapevine"

wood" getting to know the South-East, is on a thousand acre block between Robe and Kingston. He is running dry sheep and "a handful of breeding cattle" at the moment, but hopes to breed sheep later on when fencing permits. Several artesian bores flow in the district and so Dick is hopeful of striking

What has been doing on the matrimonial front?

Well-

Des Warner was married on February 23rd to Miriam Mann at Mannum. They are living on the home dairy at Murray Bridge.

Jack Stain has recently become engaged to a Waikerie High School teacher, but we haven't got the full details.

John Potter, stationed as Soils Adviser at Loxton,

now has a third son, Stephen, born in February.
Allan and Mary Dades, of "Old Canowie", Hallett, also have another son, Robert William, born on 14th December, 1962. They now have one daughter and two sons.

Mick Slee and Teresa Jones were married on 16th March. They will be returning to New Guinea soon and so our special greetings go with them. Until they leave their address is c/o Mr. C. Slee, 21 McKeon Avenue, Renown Park.

John Woodward and Rob Bennett are also on the engaged list.

Apparently "Blackie" Laffer is in N.S.W. settling into his future with the wine industry. He graduated in Oenology, starring in wine tasting. According to Harry Nash, years of solid practice have paid off.

We can soon expect an interesting story on life in New Guinea. There are now six or seven old boys up there either growing coffee, teaching or developing country. One of the less fortunate ones is Ian "Ski" Thomas, who was hospitalised with severe kidney trouble for some time. He is on his feet again now though.

Recent diplomate, Graham Wishart, has joined the D. of A. Soils Branch and is finding his feet in Adelaide before a country appointment comes

along.

Peter Watson was in the wars recently at "Old Canowie" with Allan Dawes. He had an argument with a motor bike while loading it onto a Land Rover. His injured hand is better again now.

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THE PRINCIPAL REPORTS

to the hard work and loyal support of the College staff and their ladies, who worked so hard for the success of our Open Day in November. Without them and the good work of the Student Council and the student body generally, we could have achieved very little. It has been a wonderful experience to work with them all.

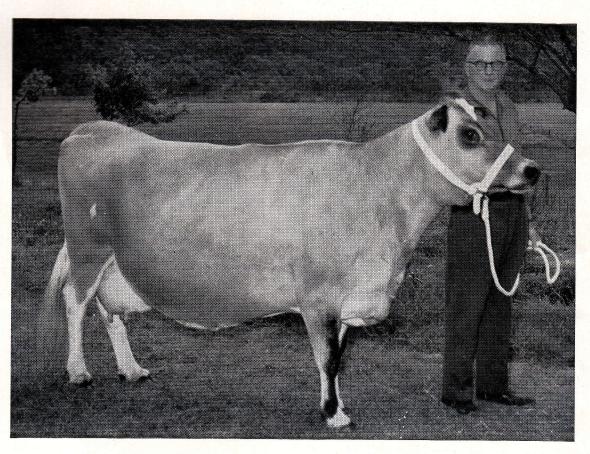
MEMBERSHIP APPLICATION FORM

MEMBERS! If you do not need it for a renewal yourself, tear this form out and hand it to the next Old Collegian friend whom you meet who is not a member of R.O.C.A. If you have finished with it, hand him your Digest, too-he will be interested to read it, too.

(Tear along dotted line.)

The Treasurer, Roseworthy Old Collegians' Association, Agricultural College, Roseworthy, South Australia.		
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Page Sixteen	R.O.C.A. DIGEST	Γ, APRIL, 1963

AUSTRALIAN RECORD Vynette Gadget's Dainty, who completed her 1962 lactation with 638 lb. fat, has established an Australian Jersey lifetime production record with 8,594 lb. fat from 13 lactations. This is only 341 lb. below the all breeds' lifetime record. Dainty was 14 years and 7 months when she finished her lactation on September 1. Breeders and owners are Messrs, M. R. & J. E. McKenzie of Tooperang, S.A. — stud breeders and holders of many Blue Ribbons and production records.



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