

R. O. C. A. DIGEST

OFFICIAL JOURNAL OF ROSEWORTHY OLD COLLEGIANS ASSOCIATION

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

EDITORIAL MATERIAL TO:

Ross J. Ford Bundarra Road. Marino, S.A. 5049 MANAGEMENT COMMITTEE:

R. J. Ford, Chairman

F. B. Pearson

W. S. Edge

R. S. Norton

J. Ryan

Volume 4, No. 4

AUGUST, 1970

Price 2 cents

1970 ANNUAL GENERAL MEETING AND REUNION

The Annual General Meeting will be held on Saturday, 5th September at the Earl of Zetland Hotel, Flinders Street, Adelaide.

BUSINESS:

President's Report.

Treasurer's Report.

Recognition of Diplomates by Employers – report from sub-committee.

Amendment of Constitution – Section 4 (1).

A.T.A. Report on A.G.M. to be held in Melbourne during August.

Any other business. Election of Officers.

Nominations are required to be lodged with the Secretary not later than Friday, 28th August, for the following positions on the Committee. (Names of the present Committee are shown in brackets).

President

(R. J. Ford)

Past President Vice President (R. S. Norton) No nomination required.

(D. D. Suiter)

Secretary

(J. A. Jones)

Treasurer

(C. Hooper)

One Committee Member of Graduating Class of 1969 (M. Babidge)

One Committee Member who left College more than one and less than 10 years ago - (B. Wigney)

Four Ordinary Members (J. Gore, W. Edge, T. March, R. Fewster).

Auditor (B. C. Philp).

REUNION: This will be held at the Earl of Zetland Hotel, corner of Flinders Street and Gawler Place, following the Annual General Meeting.

The charge will be \$4.00 payable in advance to the Treasurer. Please fill in the form on page 2 and return not later than Friday, 28th August. Your co-operation in this will assist the Hotel and the organisers.

10 year age group

Leith Yelland will contact the 1960 group.

25 year age group

Reg. French will contact the 1945 group.

Mr C. W. Hooper, R.O.C.A. Treasurer, Agricultural College Roseworthy, S.A. 5371.

I will/will not attend the re-union on	the 5th September and enclose \$4.00 to cover cost of dinner.
I do/do not require a receipt.	

NAME:
ADDRESS:
Postcode

NOTICE OF MOTION - AMENDMENT TO CONSTITUTION

That Section 4 (1) of the Constitution of the Roseworthy Old Collegians' Association be changed from:

'Executive – The executive shall consist of the President, Immediate Past President, Vice President, Secretary, Treasurer and Principal of the College', to read as follows—

'Executive – The executive shall consist of the President, Immediate Past President, Vice President, Secretary, Treasurer, and Principal or Vice Principal of the College'.

COLLEGE SWIMMING POOL FUND

It appears unlikely that work will commence on the proposed new pool in the near future. The Principal, Mr Herriot, indicated that he will bring the matter up at the next triennial of the College in 1973/74 hoping that financial assistance will be provided by the Commonwealth and State Governments.

There is quite a substantial balance in the fund at present and this will further build up over the next three year period.

REPORT ON THE UPPER MURRAY BRANCH OF R.O.C.A. ANNUAL PICNIC From Peter Lock

Sunday, 7th June, provided beautiful weather and Lion Park, an area with spacious lawns under red gum trees on the riverbank near Loxton, was the location for our family day picnic.

About a dozen members with their families and friends arrived for a barbecue lunch, with good river wine, supplied by a well-known Loxtonian. A few latecomers arrived after lunch to be in time for speedboat rides provided by Jack Stain and Ian Bond. Ice cream, etc., for the younger set late in the afternoon concluded a very enjoyable outing.

Members present were:- Roger Inglis, Bruce Hall, Gerry Woodroffe, Jack Stain, Ian Bond, Trevor Loxton, Allan Hincks, Warwick Hack, Greg Bothing, Allan Emerson, Ron Tuckwell and Peter Lock. Among the visitors were Ken Wetherby, Ned Lynch and Andrew McCord.

This being our first family day in the Upper Murray can only be regarded as a success, which we hope will be repeated in future years. I would like to remind members that the 1970 Annual Dinner of the U.M. Branch of R.O.C.A. will be held on the 23rd September and a very prominent speaker will address the meeting. A good roll-up is essential.

UPPER MURRAY A.G.M. & RE-UNION DINNER *PLEASE NOTE CHANGE OF DATE *

The Upper Murray A.G.M. and RE-UNION DINNER will be held at Loxton on WEDNES-DAY, 23rd SEPTEMBER. A prominent guest speaker will be invited and all members are urged to make every effort to attend this function.

For further details pleast contact - Roger Inglis,
Branch Secretary,
Box 411, Loxton, S.A. 5333

DIPLOMATE'S ROLE IN RURAL FINANCE

In a previous issue of the Digest I made mention of those Old Collegians employed by the Commonwealth Development Bank in this State. In discussions with some R.O.C.A. members it is apparent that only a small percentage know of the actual functions of the Bank and the type of work that we as diploma holders are doing. I hope the brief outline below will explain these points and maybe prompt other members to let us know details of the work they are doing.

SCOPE OF DEVELOPMENT BANK

The Bank's main functions are to provide finance to primary producers and industrial undertakings. Funds are provided by way of medium to long term loans over a normal maximum of 20 years, and also for purchase of plant and equipment on a short term hire purchase basis.

The Development Bank has a unique place in the Australian banking system and on term loans –

- (i) It can only provide finance that is not available from other sources on reasonable and suitable terms and conditions.
- (ii) It supplements but does not compete with other banks or sources of finance.

(iii) All major trading banks act as its agents.

(iv) The Bank is primarily concerned with the future prospects of an enterprise and not necessarily to the value of the security available.

It is normally expected that the finance provided will result in an increase in production or improved productivity.

Loans over all fields are considered, e.g., clearing, fencing, water supply, farm irrigation, pasture improvement, erection of essential buildings including houses, purchase of plant and the basic stock needs of a property. Developmental aspects are important.

Industrial loans go mainly to the manufacturing, construction and transport industries but other industrial activity is not necessarily excluded.

Applicants to the Bank are expected to have a reasonable equity in their undertaking, but efficiency and integrity, and especially prospects of success in the economic sense, are the main considerations in granting loans. The Development Bank often lends against second and subsequent charges over land and other assets and an applicant's security arrangements with his normal bankers are usually left undisturbed.

In appropriate cases finance is provided for the acquisition of plant and machinery under hire purchase arrangements. Items financed include agricultural tractors and implements, industrial plant and transportation equipment.

The Bank has operated only since 1960 and, in its specialised field, has enabled many primary producers and small industrialists to progress on a basis which would not otherwise have been possible. Total assistance for year ended June, 1969 was \$85 million.

THE ROLE OF THE DIPLOMATE WITH THE BANK.

Basically, the Diplomate, or rural officer as he is known in the Bank, acts in an advisory capacity in the course of which he employs his basic knowledge of all rural matters.

In appropriate cases he carries out a full field investigation during which he assesses every facet of the farm's operations, e.g., the development programme, stocking policy, balance sheet position, management, income and expenditure, etc. At the same time he has to value the property and arrive at a current fair market value so the Bank can assess the worth of the proposed security. Following the inspection, he compiles a comprehensive report and budget; the latter as a guide to the applicant's ability to meet all intending borrowings.

Each case is different and must be treated accordingly and so a very wide range of investigations are carried out.

By the time the investigation is completed the rural officer has a very clear and concise picture of where the applicant is heading.

The work performed by Diploma holders in the Bank is extremely varied and interesting as contact is made with all sections of the rural community throughout each State.

"SMALL FARMS"

Taken from A.B.C. Talk given by Frank Pearson.

Lately there has been a good deal of talk about the quick 'phasing' out of small farms—and talk in one quarter at least of there being a quarter of a million less farms in Australia within five years, by 'take-over' of small farms—amalgamation of neighbouring farms to make bigger units—and some vague talk about Government pressures to do away with small farms in the interests of economic efficiency.

As I see it much of this talk is based on guess work—not fact—it is untrue in the sense that many of our smaller farms, not only in South Australia but in all States, are more efficient, run on more economic grounds, and are capable of satisfactorily and profitably producing much of our agricultural produce at equally low costs with the so called economic big units.

Size of itself has never brought efficiency of economic production and management, proper planning and good preparation for working procedures and their correct carrying out are at least as important in big farms as they are on their smaller neighbours.

But what concerns me more in all the loose thinking and loose talking about everything going the way of big units is the effect both on the country and the countryside.

If the small farms do go we will lose desperately needed country population. We hear a lot of lip service paid to decentralisation—and to my mind one of the first—if not the first thing—we can do about this is to keep our country population where it is by every means that we can command.

Something over a quarter of our agricultural farms in South Australia—not counting the horticultural and dairy properties or anything smaller—are under 640 acres. Nearly half of them are under 1,000 acres. And much the same proportion probably exists in the other States.

If we lose country population we lose country amenities—local shopping—good minor roads—good telephone and postal services—school facilities and a host of other things which wouldn't be justified for the reduced 'big farm' population.

We would increase the flow to—and the size of the monstrous coastal city complexes which already hold some 2/3rds of Australia's population—most expensively and dangerously in 10 to 15 concentrated spots.

Almost ever since foundation Australia has largely financed itself on rural production—and still more than half our overseas money earning exports come from this source. Compared with mining production for overseas sale, which is currently looming very highly and in many people's minds, very importantly, agricultural exports only see the sale of our annual production—they don't see the bartering away for a mess of pottage some of our irreplaceable assets, as the sale of minerals is doing.

PHILPY'S MEMOIRS by Ray Norton.

Student 'characters' have been noticeably absent from this account, but one which came to light in the troubled times of Principal Birks, was a Russian refugee Baron de Ropp. He spent many hours in the principal's office for numerous misdemeanors and a feud between the two developed. While 'on the mat' he wouldn't utter a word, even when invited or ordered to speak, much to Birk's chagrin. One of his main troubles was an untidy, unkempt appearance which if noticeable at Roseworthy, was really saying something. Classical music was his one passion and the only subject on which he could be drawn into a discussion. One of his acclaims to fame was a Russian brew made from oranges, strictly for his own consumption, for when some of his year took to sampling it, he doctored a consignment sending them queuing outside the 'five holer'. The Baron used to frequent the chem. lab. at the unusual hour of two or three in the morning, probably seeking the raw material, such as methylated spirits or the like for his Russian type 'screw driver'.

During one vacation he was found by a police patrol wandering the streets with a kit of tools suitable for breaking and entering and in addition a hypodermic syringe. Just prior to this De Ropp had been storing lemons in the cellar of the principal's residence. Knowing he was hated by the wayward Russian and assessing the possible uses of a hypodermic, Mr Birks had all the lemons destroyed, probably because he knew he would never make it in a dash, from the hill to join the queue.

The Baron claimed he was a baron in his own right, but aristocracy or not, he was eventually deported. He acted, says Mr Philp, as though he thought the whole world was against him and I guess this attitude was well reinforced when he landed back in Russia.

Another student, Ken Shepley, was a character who went to sleep at any odd time of the day in all positions, standing holding a ladder, pitching hay; anywhere! One day he was in a dray when the horse stopped and he landed beside the dray being fast asleep until he hit the ground. On another occasion driving the vet. around, they passed their destination with 'Shep' asleep at the reins. He once had a boil and someone tried the 'hot bottle trick' to remove the core. This was one instance when 'Shep'

stayed awake as I understand and was very voluble.

Between the end of the Birk's era and 1932 when Dr Callaghan took up his appointment, Mr Spafford 'held the fort' for about 5 months. He was at the time Deputy Director of Agriculture under Professor Perkins. With the comings and goings of so many principals and Deputy Principals, Philpy occupied a unique position in that he worked very closely with, was confident of and in many instances counsellor to, quite a few principals and deputies. He was in a position to have seen disciplinary action and management decisions taken in previous circumstances and could draw parallels which must have been of immense value to these men. He was taken into their confidence on many occasions and asked for his evaluation and his proferred opinion was often accepted and acted on. Those who know him will appreciate why, for second best for him is not good enough. Mr Spafford would have appreciated Philpy in keeping the status—quo in the interim period. Being an outspoken person, Spaff would have soon told him otherwise. A story of illustrating his directness is of a meeting where he was trying to explain the drawbacks of continuous wheat cropping, but one bragging farmer wouldn't accept it and asked how his exceptional yields could be accounted for. 'Spaffs' assessment was that it must be 'a bloody good piece of land'.

Dr Callaghan came in 1932 from the N.S.W. Dept. of Agriculture. He was a young man with amazing drive, 'a regular little dynamo' in Philpy's words, a Rhodes Scholar, a good sportsman and one who through his personality and perception could communicate with both staff and students. He was young, therefore understood young men and started off an extremely active and interesting period in

Roseworthy's history.

THE GRAPEVINE

It is almost time again for the A.G.M. and Re-union and I hope that members who are able to attend will make the effort to be at the Annual General Meeting which starts at 5.00 p.m. Your Committee looks for your support in all matters to be dealt with and it would be encouraging to have a good roll-

up at the meeting session, as well as the Re-union Dinner.

I received quite a lengthy letter from Frank Pearson recently and he hopes to be returning from his overseas trip on about 26th September. The seminar in Turkey at which he presented two papers was a tremendous success, and before leaving the country Frank was invited to visit Iraq, Afghanistan and India for survey trips on his way home and will be spending one week in each place. He has also been invited back to Rome and Turkey in August to act as consultant for a few days to organise the sowing of comparative trial work comparing Australian seeding preparations and sowing procedures with those at present in Turkey. Ford Foundation in India have invited Frank to join them in three to five months at the University of Ludhana and both Oregon State University and Nebraska have asked him to visit the States to discuss dryland farming. And if funds can be found he could be visiting Pakistan some time next year as well. Further details from Frank's letter will be appearing in the next A.T.A. Journal.

John Eyre and Dav. Pannick both finished their National Service training some months ago. John is now working as a valuer with the State Valuation Department and Dav. is a cadet valuer with the

Federal Taxation Department.

Congratulations to Peter Friedrichs who is now a regular player in the Sturt league side. Peter graduated from College last year. There are two other Roseworthy Old Collegians in the Sturt side also doing well and these are Daryl Hicks and Peter Yeo. Keith Patterson is the only other R.O.C.A. member playing league football and Keith is with Glenelg. Peter Jones started off the season well with South Adelaide but apparently the pressures of work at Lucindale forced him to give Adelaide football away for the time being.

COLLEGE CHATTER by Cliff Hooper

Well, you can be lucky. Writing this at the beginning of July, the College has so much feed that the slasher has already been in use. Perhaps we should be patting Ray Norton on the back, but he is hard enough to live with at any time. The harvesting and then planting of relatively large amounts of

clover has not only given up more feed but better feed. The early buying of ration sheep is desirable as a help in controlling feed.

The cropping programme is much the same as usual-440 acres of wheat, 130 acres of oats and 680

acres of barley. The feeding of increased pig and dairy numbers will use up much of this.

Alaine Chartier plans to run 75-100 breeding sows with an annual turn-off of over 1,000 pigs. A new Progeny Test Building is under construction at the piggery and this will be followed by an Experimental Fattening House. The milking herd will remain around 40, but unwanted females will be mated to Poll Shorthorns. So if you want some good half-bred females, there will be a supply in a year or two.

The College building programme is gradually getting further behind. The wine cellars are still far from finished and the new accommodation block, supposed to be available for 1971, is still on the drawing

board.

The 'A' grade footballers are still struggling-they managed to beat the two top teams, but last week lost to our old friends, Willaston. The 'B' grade are top of the premiership list and must be around the place in finals.

I have a couple of nice beef for Adelaide, but competition is so keen and improvement so rapid in

the breed, that I will not make a guess.

Magy Mina has been appointed Lecturer in Science-Poultry. He gained his B.Sc. in Agricultural Science at the Alexandria University in 1963, worked as a demonstrator at the University 1963-68, gaining his Master of Poultry Science in 1968. He worked on a Poultry Farm in Victoria and was teaching at the Essendon High School, before coming to Roseworthy. We welcome Mr & Mrs Mina and family to the College Community.

It is anticipated that the positions of Lecturer in Agronomy and Horticulturist will be filled shortly,

giving the College the best staff position for years.

Ray Norton received a letter from Gavin Eckersley. Gavin headed for England after gaining his R.D.A.T., specialising in poultry, to get further experience in the industry. He has been working with a large poultry breeding firm. At the end of September, he returns to Adelaide to take up a position with Windsor Poultry, but will spend 21/2 months touring England and Europe before he returns. He intends spending two weeks with Peter Martin at Port Moresby on his way home.

John (Joe) Hardy visited while on leave from Chile. Appears to be enjoying his work and still favours Hereford, despite all my talking. He will attend a Beef Cattle Symposium in U.S.A. on his way back to

Chile. Mick Frost was mentioned and John sees him periodically.

Ian Watt writes from Goroka, New Guinea, where he is now stationed as Pig Husbandry Adviser for the Territory. The work entails a lot of travelling by plane and he talks of visits to Lae, Hagen, Rabaul and Southern Highlands. He still thinks that Glenelg has a show for the premiership.

Russell Partington writes from Warramboo where he teaches at Wudinna Area School. Following his study of Politics and Philosophy at the University, he teaches more Social Studies than Agriculture.

Recently visited Mr & Mrs Max Burton in Melbourne. Max is enjoying his course at the University but admits that they have really got him stretched out.

Max Seppelt has returned to South Australia and is now living at Tanunda. In May a son was born (Simon James).

SECONDARY SCHOOL AGRICULTURAL CENTRES AND TEACHERS OF AGRICULTURE

School	Agricultural Teachers	Qualifications	Position
Balaklava High	Trevor March	R.D.A.	A.B.
Birdwood High	Harold A. Reschke	R.D.A.	A.A.
Booleroo Centre High	M. Paul Hewton	B.Sc., R.D.A.	H.M.
Bordertown High	John L. Flynn	R.D.A.	A.A.
Brinkworth Area	Brian W. Boerth	R.D.A.	A.B.
Cleve Area	Kym M. Woods	R.D.A.	A.A.
Coomandook Area	Peter M. Loan	B.Sc.	S.M.
Cummins Area	L. Bruce Thyer	R.D.A.	A.A.
Eudunda Area	Ross G. Solly	R.D.A.	A.A.
Glossop High	Gerald W. Pope	B.Sc.	S.M.
Grossop mg.	George R. Woolmer	R.D.A.	A.A.
Loxton High	Colin M. Krause	R.D.A.	S.M.
	Ronald L. Tuckwell	R.D.A.	A.B.
Lucindale Area	Peter L. Jones	R.D.A.	A.A.
Millicent High	Melton T. Mowbray	R.D.A.	A.A.

School		Agricultural Teachers	Qualifications	Position
Millicent High		David F. Woidt	B.Sc.	A.A.
Minlaton High		James P. Cooper	R.D.A.	A.B.
Mount Barker	High	Thomas Guerin	R.D.A.	A.A.
Mount Gambie		Robert J. Osborne	R.D.A.	A.B.
	-	William M. Conley	B.Ag.Sc.	S.M.
Murray Bridge	High	Bryan W. Thomas	R.D.A.	A.A.
Naracoorte High		Karsein E. Sluiter	R.D.A.	A.B.
Nuriootpa High	1	David P. Purser	R.D.A.	D.H.M.
, ,		Roxley J. Hall	R.D.A.	S.M.
Oakbank Area		Rolin J. R. Raison	R.D.A.	S.M.
		Milton R. Page		A.A.
Parndana Area		Barry K. Mortimer	R.D.A.	A.A.
Renmark High		John A. Stain	R.D.A.	A.A.
Urrbrae Agricu	ltural High	Raymond A. Bailey		A.B.
		F. Wayne Barnden	B.Ag.Sc.	S.S.M.
		Mervyn J. Hoile		A.B.
		John J. Jones	R.D.A.	A.A.
		John R. Lees	B.D.H.	A.B.
		Lindsay Matthews	B.Ag.Sc.	A.A.
		Robert A. Murray	B.Sc., R.D.A.	A.A.
		Brian M. Smyth	R.D.A.	S.M.
		Ian J. Wilson		A.B.
Waikerie High		Jonathan C. Womersley	R.D.A.	A.B.
Willunga High		Richard T. Flower	B.A., R.D.A.	S.M.
		Guy Kirkwood	R.D.A.	A.B.
Wudinna Area		Robert C. Osborne		
		Russell L. Partington	R.D.A.	A.B.
Yankalilla Area	ì	Christopher R. Caudle	R.D.A.	A.A.

LETTER TO THE EDITOR

Dear Sir,

The information on me was a trifle out of date by the time it got printed. I left my job at Singleton in May 1969 to become Assistant Manager of a vineyard being developed by Hungerford Hill Vineyards at Hungerford Hill, Pokolbin—in the heart of the Hunter Valley. I stayed there until the end of October, when I was moved up here to Wee Waa to manage the office at J.V.H. Cofton, a subsidiary company of Hungerford Hill Limited. So I'm not managing a cotton property. I'm just a book-keeper in an air-conditioned office. There's a fair bit to keep track of.

The property comprises some 5,000 acres of rich black clay loam, very flat with odd creeks meandering through it. The soil is about 20' deep without a change in the profile but over the length of the property it changes from a heavy clay loam to a sandy clay loam. The black soil is impossible to drive on with anything but four-wheel drive vehicles when it is wet as it builds up on tyres and eventually jams non-driving wheels. Even tractors become impossible to control. All this is in a 26" rainfall.

Fortunately there is plenty of good gravel in the creek beds—which is used for capping the major roads. About 200 acres of cotton are grown a year, with sorghum, linseed, wheat, corn, oats and sown pasture for cattle feed making up the balance. About 4000 acres is arable. The rest is made up of creeks, roads, country not worth clearing and water storages. 2,500 acres is furrow irrigable.

Water for irrigation is pumped from the Namoi River about a mile from one end of the property. Two floodlifters pump into open channels to bring water onto the property. Water is also available from bores and while there are no problems getting sufficient water, as the bores are round the 160 foot mark, they are expensive to run. We have bore capacity for only half our crop. Our river water allocation is usually just sufficient to see us through the cotton irrigation without recourse to the bores. Storage capacity is about 1000 acre feet of water on the property.

Cotton is planted in October in rows 40" apart on soil which has had pre-emergent weedicide incorporated. Planting conditions are critical. The soil must be warm, moist and the seedbed well compacted. Cotton is a sucker for just about every pest and disease going. If the soil gets too wet (from poor grading resulting in poor drainage) the roots suffer a fungus attack. If the soil is too dry the crust hardens and the cotton stalk cannot expand so it ringbarks itself. Insect attack is a constant problem. Spraying starts usually in mid-November and while the cotton is young round rigs spray a weedicide and insecticide

combined spray in a band over the rows. Initially there is an interval of about a fortnight between insecticide sprays. This is reduced as activity steps up, to once a week. When the cotton starts to close in, aircraft are used. Most spraying is done at night as DDT is dangerous to use at high temperatures and all sprays are difficult to use from an aircraft in hot weather as the application rate is 1 to 2 gallons per acre of spray and evaporation becomes a major problem. Ground rigs have a much heavier application rate of course. Overall, cotton is sprayed normally fifteen times for insect control.

Weed control is a major problem. As mentioned, a pre-emergence pre-planting weedicide is used and usually at least one and more often more weedicide sprays are applied after planting. Mechanical cultivation with both rolling cultivators and sled cultivators is constantly used right up until the end of January. The cotton would be cultivated fortnightly on average. This both kills weeds, breaks the crust in the irrigation furrow to allow more penetrating irrigations and helps to build up the hills on

which the cotton is grown.

Usually in mid-January a side dressing of anhydrous ammonia is applied. (I'm putting the cart before the horse—I haven't mentioned ground preparation, which includes anhydrous ammonia application.)

The crop usually gets five or six irrigations depending on the season. Irrigation commences either before planting (pre-irrigating) or very soon after, and is repeated at fortnightly intervals until mid-March.

Picking starts mid-April, after the cotton has been chemically defoliated. The crop is picked twice and sometimes three times. Cotton is carted to gins. We cart to two gins, both within a mile of the property. At present the pickers are being prepared for the coming season. A picker costs in the vicinity of \$25,000 new and requires setting up and removal of parts in the picker heads averaging \$4,000 every season. At present we have six pickers, which is insufficient for our crop -250 acres per picker is considered a good guide but usually in the picking season there is picker capacity available.

From the end of January on, land preparation starts. We have on the property a fully equipped D8 and D7 – bulldozer – rootrake – rippers, etc.; a Cat Traxcavator, a D6 crawler, two 5020's, two MF 1100's, a Case and a 4020 and an armada of 3020's used primarily for spraying and cultivation and

planting.

At present the scraper is being used in conjunction with a crawler and land plane to level a field which was left out of production because it had a dip and a hump and so would not irrigate properly. The big crawlers are deep ripping some new ground prior to levelling. It is being picked of sticks at the same time.

The heavy wheel tractors are being used to prepare ground for cereal and linseed crops. These crops

will be sown during picking.

Immediately picking finishes, the stalks will be slashed, then heavy discs behind the crawlers turn the lot in. The ground is then deep chiselled, to about 2', then disced a few more times to chop up all the cotton stalks. The crawlers with deep chisels are used for anhydrous ammonia application prior to planting. After anhydrous ammonia application the ground is usually listed out, then pre-emergence weedicide is applied and incorporated with go-devils. Proper incorporation is particularly important. Sometimes it is necessary to pre-irrigate before planting. I've finally got round to where I started.

In the future we are hoping to extend our irrigable area by using a Targetmaster on country which is too expensive to level for furrow irrigation. We are growing sunflower this season as a trial, using pipes and sprinklers because the rainfall has been too erratic. We are extending our linseed acreage at the expense of wheat, and once again the Targetmaster should permit an application of water in periods of crop moisture stress. The soil and climate is good enough to grow anything. The only fertiliser we apply is nitrogen, except for corn, where, just to make sure, we put on a mixed fertiliser.

Regards,

Mike Greenfield, Box 271, Wee Waa, N.S.W. 2388. August, 1970