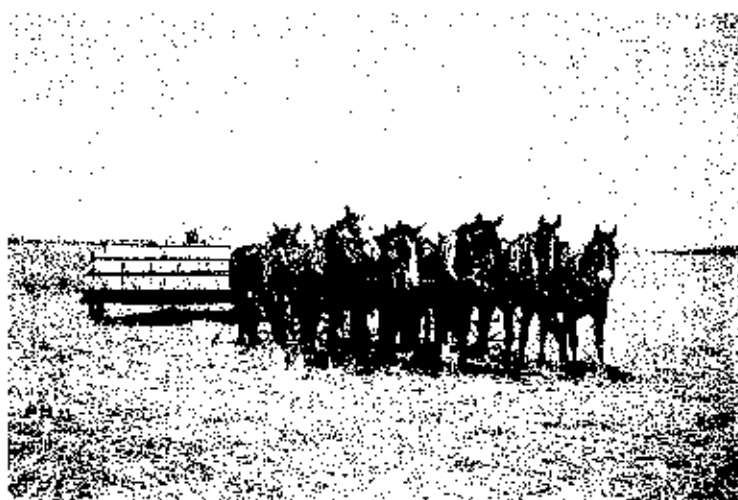


Winds of Change

A history of the Murray Mallee Soil Conservation Board

**Celebrating
50 Years from
1948 to 1998.
Incorporating
material from
the original
report.**



ACKNOWLEDGEMENTS

This history is based on an earlier (1981) review prepared by Richard Wood and myself. It does not claim to be a comprehensive account of the many and varied activities of the Board over the past 50 years. To do justice to that would require a small book.

I wish to thank the following people for their help with printed material and recollections - Jo Murphy, John Berger, Neville Wurst, and Peter Butler.

Magill, April 1998

Bill Matheson

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FOREWORD

When 1981 the Board published its history covering the first 100 meetings - *Winds of Change* - it was predicted that its role could broaden to become a Land Use Board encompassing pest plants, vertebrate pests and soil erosion.

The winds of change have indeed blown strongly in the past 17 years and although these predictions have not yet been fulfilled, the role of the Board has burgeoned enormously.

From its early beginnings when wind erosion problems dominated its agenda, it is now intimately involved in issues of soil, land and water management, native vegetation management, revegetation, education, legislation, training, co-ordination, co-operation, district and property planning, publications, local action planning - regional planning monitoring and research.

Board members now deal in complex issues e.g. integrating a wide range of environmental issues, commenting on draft environmental legislation, assessing applications for funding and fulfilling statutory requirements.

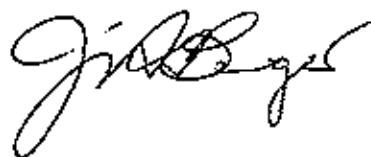
The rate of change shows no sign of abating - indeed in a rapidly changing political, social and economic environment the Board will be asked to deal with increasingly complex issues.

Over the past 50 years the Board has acquitted itself with distinction. It has been innovative, creative, pro-active and diligent.

The strength of the Board resides in its members and local communities which support them. They have been tried and tested in many difficult situations, and have not been found wanting.

The Board does not work alone - it acknowledges the assistance given by government agencies, especially Primary Industries and Resources.

I am confident that the Board will meet the challenges which lie ahead and continue to lead by example. May the next 50 years be equally productive.

A handwritten signature in black ink, appearing to read 'John Berger', with a stylized, flowing script.

John Berger, Chair 1998

INTRODUCTION

In 1945 the Advisory Committee on Soil Conservation persuaded the Playford Government to introduce a Bill to amend the Soil Conservation Act 1939. The Bill provided for the proclamation of soil conservation districts providing more than 60% of the owners or occupiers of land in the proposed district supported the proposal.

However section 6b of the amended Act also provided for the proclamation of a soil conservation district in any area covered by Part IV of the Sand Drift Act 1923.

The original Murray Mallee Soil Conservation District was proclaimed under this provision in 29/5/47. It consisted of the District Council districts of Loxton, East Murray and Browns Well, and the portions of the District Councils of Mannum and Mobilong east of the River Murray - *Figure 1*.

The first Board was appointed on 12/3/1948. Its chairman was R.G. Beck of the Soil Conservation Branch, and the members were E.M. Edwards, Paruna (Council representative) J.R. Rackham, Wynarka; A.T. Dohnt, Forster; and A.R. Birch, Nangari. It held its first meeting on 15/4/1948 at an unknown location, possibly Karoonda. Also present were the Director of Agriculture, W.J. Spafford, and the Soil Conservator, R.I. Herriot, who gave a detailed presentation on the Soil Conservation Act.

The duties of the board were:

- to foster local interest in soil conservation by lectures, demonstrations, conferences and discussions
- to collect information as to soil erosion and soil conservation in its district
- to make reports and recommendations on soil erosion and soil conservation
- to make orders under the Act.

The acting secretaries for the first two years were members of the Soil Conservation Branch, C.W. Rice, W. McGee and A.W. Moore.

Soil conservation adviser J.P. Blencowe was appointed Chairman in 1949, and was succeeded in 1951 by E.M. Edwards. All subsequent Chairmen have been farmers, and the secretaries have been soil conservation officers or landcare officers.

The current chairman is John Berger, Mindarie and Ms Jo Murphy, Murray Bridge, secretary.

A total of 42 farmers have served on the Board for terms varying from two to 21 years. J.A. Meissner was a member for 21 years including six as chairman and E.W. Hage served on the Board for 19 years. Among others to give distinguished service to the Board were Doug Fullston, a member for 15 years,

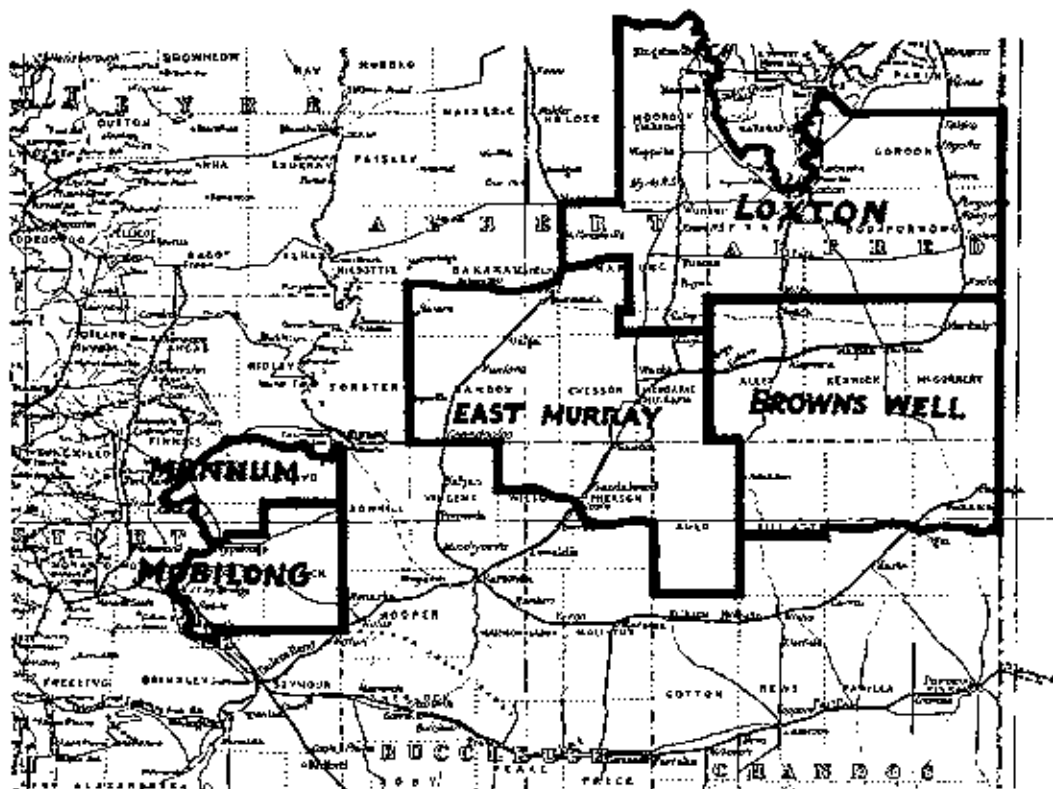
including nine as Chairman and Mike Kluge, a member for 18 years, including nine as Chairman.

Only R.T. Kimber has the distinction of serving two separate terms on the Board, 1969 - 1972 and 1975 - 1978, both as District Council representative.

Jack Blencowe who as district soil conservation adviser was actively associated with the Board for ten years, for two as chairman and eight as secretary, made a tremendous contribution to the work of the Board. He worked untiringly to promote sound land use, and was widely known and respected throughout the Murray Mallee.

A complete list of Board personnel for the past 50 years has been compiled - Appendix I.

FIGURE 1
Murray Mallee Soil Board District,
at proclamation in 1947



THE CHANGING BOARD DISTRICT

As mentioned earlier the district covered by the Board originally comprised the District Councils of Loxton, East Murray, Browns Well and those portions of Mannum and Mobilong east of the River Murray.

Additional territory comprising the former District Councils of Karoonda and Marnie (the portion east of the River Murray) was added on 23/10/1948 following a successful petition of owners and occupiers of land in those areas. *Figure 2.* In November 1951 the hundreds of Sherlock, Coolinong, Malcolm, Seymour, Baker and Bonney were included in the Board district. The District Council of Waikerie (excluding the hundred of Cadell) and the hundreds of Nildottie and Bakara were included in June 1954. - *Figure 3.*

In 1970 an unsuccessful attempt was made to include the Hundreds of Paringa, Murtho and Cadell in the Board district.

In 1978 legislative changes greatly simplified the extension of existing Board districts and it was no longer necessary to get petitions supported by at least two thirds of the owners or occupiers of land to agree.

A majority of owners and occupiers voting at a poll to approve a recommendation to enlarge a district or form a new district was the chief requirement. Local councils in the proposed area must have first approved the recommendation.

The 1989 Soil Conservation and Landcare Act made provision of the Minister to declare soil conservation district after negotiation with owners of land within a proposed district or with local government as appropriate.

The District Council districts of Lameroo and Pinnaroo were added to the District in this way in 1989.

In 1991 there was a move to include agricultural land north of the River Murray including the Hundred of Parcoola, and land in the Renmark Irrigation Area, the District Councils of Berri and Barmora, the Cobdogla Irrigation Area, and other land out of Hundreds.

Nothing appears to have come of this proposal, but the Hundreds of Mataranka and Pooginook in the former District Council of Waikerie also north of the River Murray are now in the District apparently as the result of an approach by the Council in 1985.

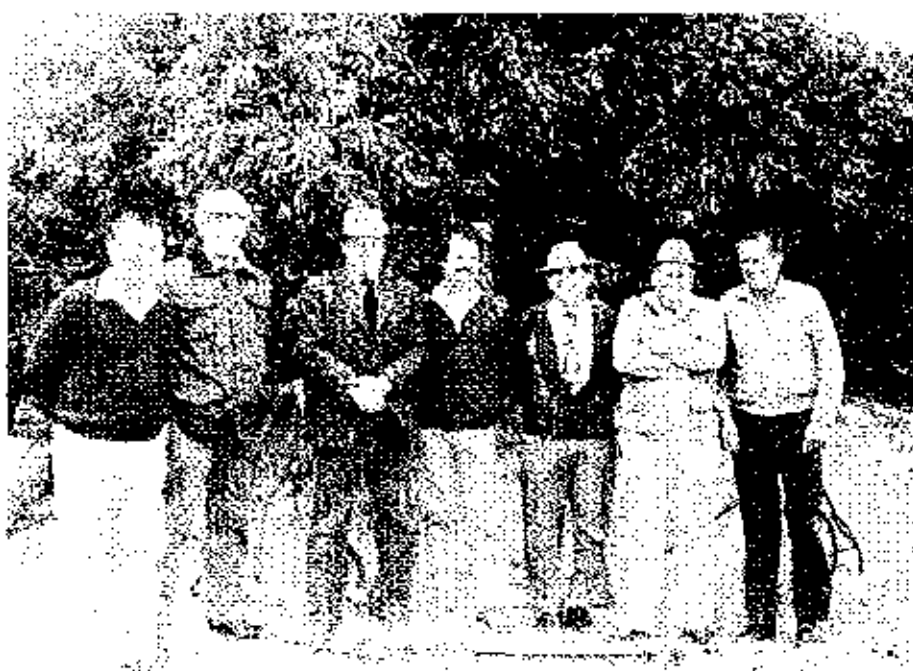
Currently the Board district comprises the district council districts of Renmark and Paringa, Loxton-Waikerie, Karoonda East Murray and Southern Mallee, and the portions of Mid Murray east of the River Murray - an area of some 20,000 square kilometres. - *Figure 4.*

There are about 800 dryland farms producing about 10% of the State's wheat and barley.

There are now 27 soil conservation districts covering essentially the whole of the agricultural and pastoral regions of South Australia.



The first Board, 1948
From left to right - A.T. Dohnt, A.R. Birch, E.M. Edwards,
J.R. Rackman, R.G. Beck (Chairman)

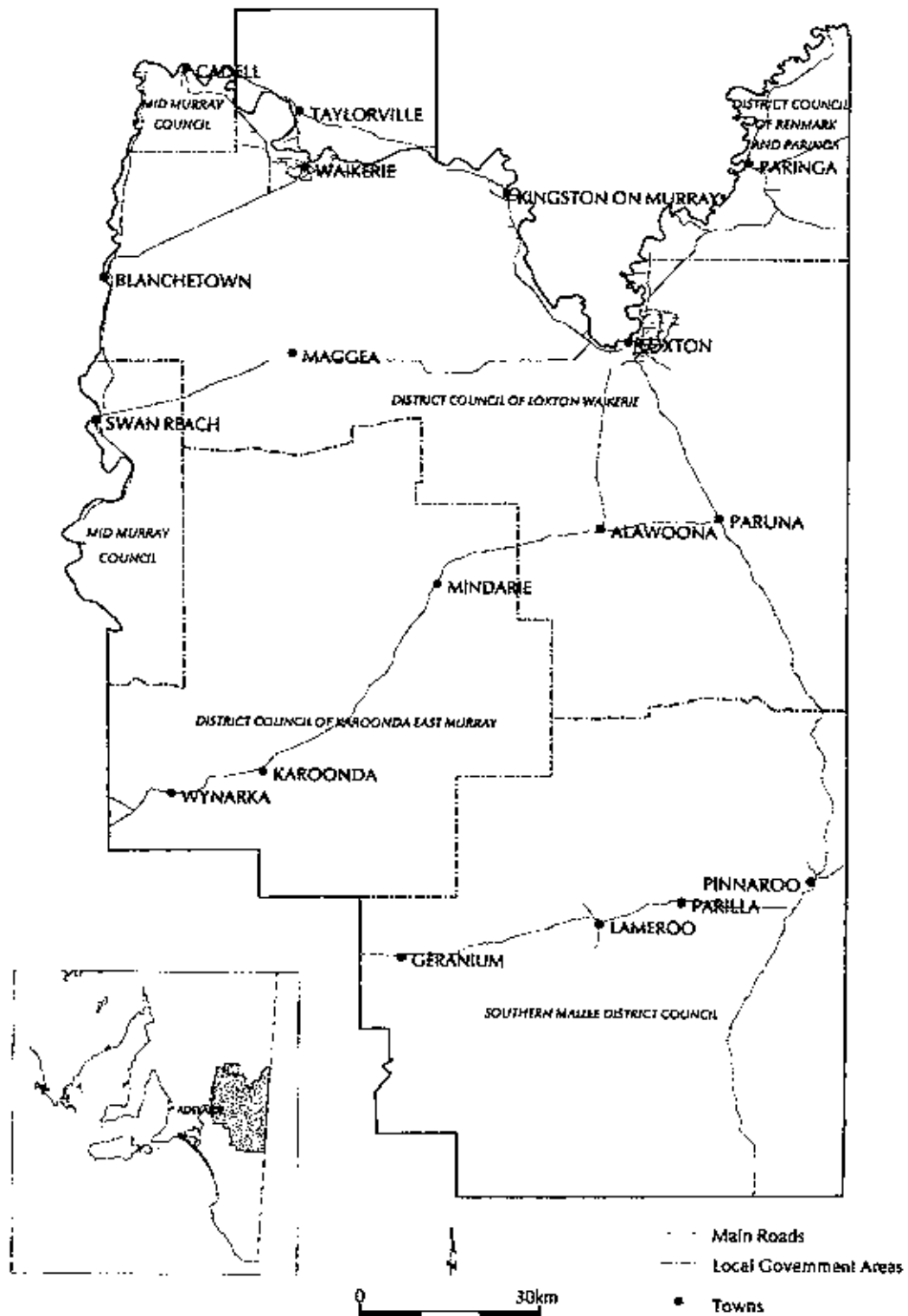


Soil Board in 1983
From left to right, M. Kluge, John Dinham, Richard Jacka, Glynn Schmidt,
Mel Fielke, Jack Schubert, Jack Boughen.

A detailed map of the Murray Mallee Soil Conservation District in South Australia. The district is outlined in a thick black line. The map shows the district's location relative to neighboring districts and states: New South Wales to the north, Victoria to the west, and South Australia to the south. Major towns and cities are marked, including Adelaide, Melbourne, Sydney, and Perth. The Murray River is shown flowing through the district. The text 'MURRAY MALLEE SOIL CONSERVATION DISTRICT' is prominently displayed in the center of the map.

[illegible]

Figure 4 - Murray Mallee Soil Conservation District 1998



IN THE BEGINNING

At the first meeting on 15/4/1948 the Chairman, R.G. Beck reviewed activities leading to the formation of the Board. Mr. R.I. Herriot, the Soil Conservator, then spoke of plans for establishing 13 districts throughout the State. No doubt he would have been more than impressed to know that there are now 27 soil conservation districts in South Australia.

He explained that the duties of the Board were to see that farmers protected their soil resources "enthusiastically", to keep farmers up to date with information, and to protect farmers from the bad farming practices of their neighbours. He believed that consultation and co-operation rather than legislative action, were the best means of achieving this goal.

While this attitude was probably accepted in principle, in practice considerable confidence in "coercive legislation" was to be maintained for many years to come. However the attitude of the Board is understandable in the light of the intransigence of some landholders, one of whom tested the patience of the Board for more than 20 years, as well as :

- the enormity of the problem facing the Board, in terms of drift, poor production and low morale
- the lack of previous experience as a guide - the Act remained the one tangible avenue of action
- the personal involvement of the Board members in the district and their antipathy toward irresponsible landholders
- the paucity of technical information on which to base an extension program

The first action of the Board was to circularise all farmers setting out the Board's aims, powers and intentions - Appendix II. This was largely misunderstood - in fact quite unjustified resentment of "Government interference" was shown both by farmers and local government bodies

The main publicity in this first year was in relation to sowing cereal rye for drift control, and the need for 'rough' fallows.

The Board participated in the 1948 Royal Show which featured an exhibit on soil conservation including photographs of good and bad fallowing practices in the Murray Mallee. Other matters occupying much of the Board's attention were possible regulations to control fallowing, and slow deliveries of superphosphate to the Murray Mallee.

In September 1948 the Board met in Adelaide, far from its home territory, so that the Board could inspect and approve the exhibit arranged in its name at the Royal Show.

During its first 50 years the Board has met on 167 occasions at 24 locations, but almost 75% of the meetings were at either Karoonda, Wanbi or Loxton - Appendix III. Special meetings are also listed - Appendix IV.



Royal Show Exhibit, 1948

LOCAL COMMITTEES AND LANDCARE GROUPS

The amendments to the Soil Conservation Act in 1946 which established the basis for the soil conservation district and boards, also provided for the establishment of local committees. It was foreseen that as board members would have to cover large territories, the support of local committees would be vital to the operations of members.

Local committee members have played an important role in the Murray Mallee, conveying farmer opinions to the Board, and relaying information from the Board to the farming community.

Local committees also provided a source of new board members with experience of the role, functions and operations of the Board through regular meetings with the local Board member and Board secretary.

The duties of local committees included -

- getting people interested in soil conservation and board management issues
- monitoring soil erosion problems locally
- making investigations and reports on behalf of the Board
- highlighting actual and potential problems to the Board.

The effectiveness of the Board over the years has been greatly enhanced by its local committees.

The current legislation provides for the appointment of committees including local committees to which the Board can delegate most of its powers and functions.

The State Landcare program began in 1989, and Landcare groups soon became established in the Murray Mallee. Landcare groups could seek registration with the Board - this provided groups with cover for public liability, professional indemnity and personal injury through Primary Industries and Environment and National Resources. This support recognised the importance of the contributions of voluntary groups to State and Federal Government programs.

Once affiliated with the Board, landcare and catchment groups are also covered by the corporate status of the Board, and are able to seek funding from government programs in their own right e.g. the former NSCP and NLP and the current Natural Heritage Trust.

In mid 1984 the first community landcare coordinator Anne Woodard, was appointed to Murray Bridge - her duties included

- the co-ordination of community landcare projects in the Murraylands region
- the development of regional plans

- facilitating the establishment of a new soil conservation district in the upper south east (The Coorong and Districts Soil Conservation District) - this resulted in the rearrangement of boundaries with the Murray Mallee and Murray Plains Districts.

Among the first landcare groups established in the Murray Mallee District were the Karoonda and Garralands revegetation groups, both incorporated under the Board's aegis in February 1991.

For a complete list of incorporated bodies see Appendix V.



Soil Board 1993

Left to Right - Roger Wickes (Soil Conservator), Peter Butler (Secretary)
Fred Maynard, Neville Wurst, Meredith Arnold, Russell Smith, Mike Kluge,
Colin Durdin, Ann Woodard (Landcare Officer), John Berger, Andrew Johnston
and Glen Gale (both Primary Industries support).

ERODED FARM INSPECTIONS

On 4/11/48 the Minister of Agriculture called for a full report on the erosion in the district, and in 1949 the Minister asked the Board to locate, investigate and provide appropriate reports on all badly drifting farms in the Board's district.

In April 1949 the District Councils were requested to submit names of owners of badly drifting farms.

The investigations commenced in July 1949 - meetings were held at various centres and owners were called to appear before the Board. Later interviews took place on the farm. A soil conservation officer inspected each farm and submitted a report to the Board. 105 were inspected - 54 were rejected as being not badly eroded!

By 4/7/50 members were making follow up inspections of properties previously investigated.

The final report, completed by 8/7/52, (Birch and Blencowe, 1966) can briefly be summarized:-

Number of farms 51 (51215 ha)

average size cereal farms	470 - 1 078 ha (12 < 800)
swamp dairy farms	4 - 142 ha

Area of drift 3 900. ha (7.6%)

Causes - lack of cultivation and insufficient superphosphate.
 - overstocking.

Drift commenced before	1929 - 8 farms
	1929 - 1944 - 26 farms
	Rest unknown

Stocking rates (after 1944) - 46 farms 1 sheep/2.23 ha
 5 farms Nil

Main pastures - turnip, mediterranean grass,
 barley grass, white daisy.

Cropping - Before 1944	26 farms - fallow, wheat
	9 " 4 year rotation
	17 " not known
Since 1944	36 " 6 year rotation
	15 " Nil

The main needs highlighted by the investigation were:-

- education - a prerequisite was the need for a research program to solve the most pressing problems associated with mallee farming.
- water points and fencing - were inadequate on almost all farms inspected, and were aggravated by material shortages.
- superphosphate - shortages prevented many farmers from sowing their drift.
- finance - farmers were reluctant to borrow money to finance drift control.
- farm size - at least six of the farms were considered to be too small to be viable.

Subsequent activities to 1966 in this area are summarized below Appendix V.



Seeding rye on the Wanbi Research Centre, 1953

During the late 1960's and early 1970's, the list of eroded farms was kept up to date at the annual Local Committee meetings. The amount of seasonal drift increased in the dry years (1967, 1972) but progress on the "hard core" properties was negligible, unless a change in ownership occurred.

In 1975, the eroded farms list was reviewed and 29 of the 60 properties listed were visited by the Soils Adviser/Secretary. The survey followed two bumper years, and it was seen as an excellent opportunity to revise the list, note the severity of erosion and record the attitude of current management. For the results of this survey see Wood (1976).

The problem of long term erosion on badly drifting farms is not primarily seasonal. As the original investigations by the Board showed, it is the management of the individual landholder which counts in the long run. The key management factors identified by the study which are still relevant are:-

- adequate subdivision and watering for stock.
- a regular cropping and fertilising program.
- control of rabbits.
- sowing all negotiable sand dunes with cereal rye in each paddock when it is cropped.
- resowing fresh drift with cereal rye as soon as conditions permit.

Insufficient working capital and failure to see erosion as a problem have prevented owner initiative in erosion control on their properties.

For many years, the Board expressed concern at the lack of progress on 'hard core' eroded farms. The matter was discussed by the Advisory Committee, resulting in the former Department of Lands taking a firmer line on leasehold blocks. The Board supported a proposal that badly eroded farms be reallocated - similar to the provisional allotment scheme of the 1940's. The compulsory acquisition of a property at Narrung in 1976 following a Soil Conservation Order was applauded by the Board - see next chapter.

The Local Committees play an important role in monitoring the eroded farm situation, and provide valuable feedback to the Board and the district soils officer. Committees meet annually with their Board member and district soils officer to review the situation in their territory.

COMPULSORY PROPERTY ACQUISITION

The compulsory acquisition of a property at Meningie in 1976 ended a long and frustrating chapter of the Board's activities. A 1,000 ha property adjoining the Coorong north west of Meningie was badly wind eroded and a constant annoyance to neighbours and the Meningie District Council for many years.

Despite a series of soil conservation orders between 1965 and 1974, little progress was made with erosion control. On several occasions the Board authorized the necessary work to be done when the owners failed to comply with the order. However continuing mismanagement nullified any gains made under the orders.

Finally in 1974 steps were taken to acquire the property under section 8 of the Soil Conservation Act. The Minister of Agriculture gained control of the property late in 1976. In 1977, following the removal of stock and a comprehensive rabbit control program, practically the whole area of drift (80ha) was stabilized. The remaining small area was stabilized in 1978.

Following the successful rehabilitation program, portion of the property was sold to neighbours and the remainder was transferred to the Coorong National Park.

The Board saw compulsory acquisition as an effective means of coping with hard core erosion situations, and actively promoted the use of Marginal Lands funds for this purpose. The proposals had the support of the Director of Lands, and an appropriate amendment to the Marginal Lands Act was considered. However, when Treasury learned of the Marginal Lands Fund, they soon took it over, and the proposals fell by the wayside.

SURVEYS OF SOIL EROSION AND FARMING METHODS

In 1972, at the instigation of the Board, a survey was carried out in the Wanbi area to determine

- i) whether sand drift was increasing
- ii) the relationship between the area of drift, the area farmed and the area of sandhills, to the availability of capital and labour, and
- iii) the relationship between the area of drift and the adoption of recommended practices for controlling drift.

The survey showed that the amount of erosion was closely related to managerial skills and the adoption of good farming practices. Poor management resulted in low incomes, providing little finance for stabilisation work and general farm maintenance. Farmers on low incomes were anxious to sell their properties, indicating a general lack of interest in farming in general, and in controlling drift in particular. None of the badly eroded farms had improved in the previous eight years (McCord 1973).

There was no evidence of an increase in sand drift in the area. However old eroded areas had deteriorated, making rehabilitation much more difficult. Most farmers recognised the importance of additional fencing and watering to control drift, but lack of funds limited this work. The Board saw the provision of Commonwealth funds as a solution to this problem, and subsequent events bore this out.

The Board played an important part in the initial approach to the 30 farmers involved in the survey, and through their efforts co-operation in the survey was 100%.

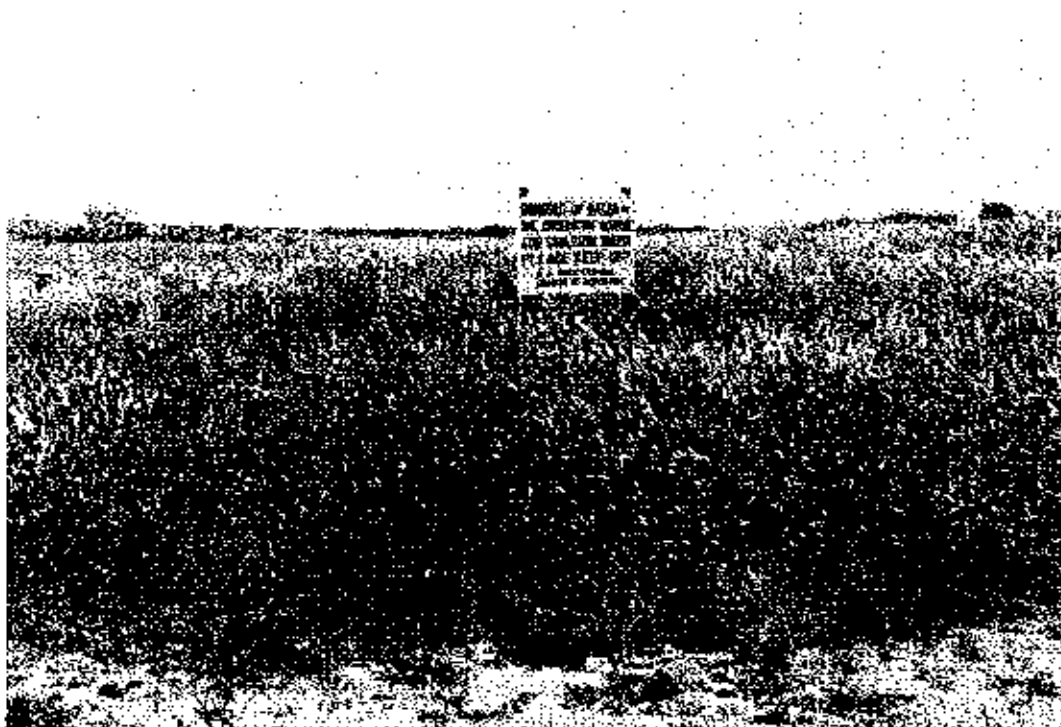
The 1992 District Plan identified wind erosion as a major issue in the Mallee, and highlighted the need for good fallow management, particularly in relation to wind erosion control.

In 1995 the Board initiated a survey of 60% of northern Mallee farmers, 71 in all, in the Hundreds of Paringa, Kekwick, Bookpurnong, Bandon and Holder to examine their farming practices. (Denys Slee et al 1996)

The study showed that while mechanical fallow was a well entrenched practice in the Mallee, most farmers did not aim to maintain bare earth, and in fact sought to manage their fallows with some form of plant cover because of the value placed on the need for grazing in the Mallee mixed farming systems.

Northern Mallee farmers were found to appreciate the value of stubble retention and were aware of the principles of conservation farming such as reduced tillage.

Nevertheless the practice of long term fallow, however carefully carried out, remains of considerable concern because of the increased exposure of vulnerable soils to wind erosion.



Successful rehabilitation of the Meningie land, 1977.

VISITS BY THE ADVISORY COMMITTEE ON SOIL CONSERVATION

The Advisory Committee has visited the Murray Mallee on many occasions. The first two visits were in 1941 and 1946, prior to the formation of the Board.

In 1954 the Advisory Committee met the Murray Mallee Board at the Wanbi Research Centre and inspected the work there. Lengthy discussions took place on the need to amend the Act to provide penalties for allowing sand drift to encroach on to neighbouring properties. This concern occupied the Board's agenda for many years, and eventually resulted in an amendment to the Act, section 6j.

In 1956 the Advisory Committee again visited the Wanbi Research Centre, where it met both the Murray Mallee and Upper Eyre Peninsula Boards and inspected work in progress. Further lengthy discussions took place on the need to amend the Soil Conservation Act.

Following further submissions from the Board, the Advisory Committee submitted a recommendation to the Minister in 1959, and in 1960 the Soil Conservation Act was amended to include section 6j.

In 1961 the Committee spent three days in the Board district and inspected all major drift problems with the Board and the Soil Conservator, Mr. J.A. Beare. A lengthy discussion took place on the problems of local committees in dealing with offences under section 6j.

In 1968 the Committee spent three days with the Board, including an inspection of the so called "tiger country" then being considered for development south of Pinnaroo, well outside the Board's district. This is now included in the area covered by the Ngarkat and Scorpion Springs Conservation Parks.

An interesting Board comment made after this Advisory Committee visit was that "the visit did not achieve any specific purpose".

The 1973 visit of the Committee focussed on improved farming methods, revegetation in the Murtho Forest Reserve, and various erosion trouble spots in the Northern Mallee.

Once again there was a lengthy discussion at a joint meeting with the Board on proposed amendments to Section 6j of the Act relating to the responsibilities of landholders to pay for the costs of removal of sand drift caused by them.

During the Committee's visit to the Murray Mallee Board in 1981 the evergreen subject of amending section 6j surfaced yet again. Fortunately by this time a sub committee of the Advisory Committee had done its homework and the Board was grateful to learn of the proposed amendments, in particular section 6j(2) "a person who commits a breach of subsection (1) of this section (i.e. allows soil wash or drift onto other land through bad management) shall be guilty of an offence and on conviction shall be liable to a penalty of one thousand dollars, and shall be liable for the payment of costs or part thereof of removing the soil".

This saga lasted 27 years - a testament to the tenacity of the Murray Mallee Board. Ironically there was never a prosecution under section 6j.

The Advisory Committee was back within two years. The major drought of 1982/83 prompted an early return visit to inspect conditions, especially east of Loxton towards Paruna.

The most recent visit of the Soil Conservation Council, the successor to the Advisory Committee on Soil Conservation, was in July 1997.

CO-OPERATION WITH DISTRICT COUNCILS

From the beginning the necessary involvement of district councils with soil conservation was recognised. The Board has always attempted to work with councils, sometimes in the face of stiff opposition. The district council representative on the Board is elected by the Councils within the district and has the special task of maintaining liaison with the Murray Mallee councils.

In 1949 the Soil Conservator, R.I. Herriot, spoke to all Murray Mallee councils, and E.A. Rollbusch was commissioned to do likewise in 1953. He was well received by the Loxton Council, but the others were hostile.

Eventually councils saw benefits in co-operating and by 1959 only Browns Well and East Murray refused to co-operate. After further discussions in late 1959 Browns Well councillors supported the Board.

Following the 1959 drought the Board sought the assistance of all councils in assessing road drift problems, and provided considerable assistance in handling the problems. By 1968 co-operation with councils proved so successful that roadside erosion was virtually non-existent.

The occasional roadside drift problem which arises is now dealt with by the particular council concerned. Only in extreme situations do the councils seek assistance from the Board or the district soils officer.

Throughout the 1960's and early 1970's, liaison with District Councils was maintained through the elected Council Representative on the Board. In 1977, the Board decided to send a copy of its minutes to each Council, but after several meetings, it was considered better to send a newsletter. Soil Board News was subsequently distributed to Councils highlighting the issues of mutual importance.

During the 1982/83 drought drift onto council roads was a major problem, especially east of a line from Loxton to Alawoona. Councils were able to access a 75% financial subsidy from the Primary Producers Emergency Assistance Fund to remove sand drift from roads.

Currently Board contact with local councils is maintained through the local government representative on the Board, and copies of Board minutes are once again sent to local councils for information.

THE BOARD AND LEGISLATIVE CHANGES - A NEVER ENDING STORY

The Board from its inception sought to impose restrictions on cultivation. It saw soil conservation orders as ineffective because they were a case of shutting the stable door after the horse had bolted. Considerable discussion took place on the need to introduce an amendment to the Act which would prevent irresponsible cultivation.

Discussions with the Advisory Committee are detailed elsewhere, but some detail on Board deliberations is given below.

19/4/49 - The Board recommended "that all landholders give one month's notice of their intention to break up any land between July 1st and June 30th in any year, to all adjoining owners or occupiers" This recommendation was rejected by the Advisory Committee.

4/7/50 - An attempt to have clauses compelling erosion control inserted in leases was rejected by the Land Board.

23/7/51 - The control of fallowing was discussed at a combined meeting of boards and the Advisory Committee in Adelaide.

24/9/53 - The need for notification of intent to fallow was re-appraised.

4/3/54 - The Board suggested a new approach for a possible amendment as follows:

- a) farmers to declare their intention to fallow
- b) offenders to be subject to a penalty.

23/3/55 - After receiving notice that this approach was unacceptable, a deputation (A.R. Birch, T.G. Vowles, E.A. Rollbusch) was sent to see the Minister of Agriculture.

20/3/56 - It was reported that the deputation got a sympathetic hearing.

8/8/57 - The matter had not been resolved, and another deputation was planned.

5/12/57 - E.A. Rollbusch attended a meeting of the Advisory Committee in Adelaide, and made a strong case for amending the Act. This proved to be the turning point, and the Committee began the lengthy procedure of amending the Act, which included the addition of section 6j in 1960. However this did not fully satisfy the Board.

In March 1977 the Board asked the Committee to amend section 6j to make provision for the recovery of the cost of removal of sand from roads and neighbouring properties. This proposal arose out of the inability of councils to recover the cost of removing drift sand unless a soil conservation order was in force. Even then recovery costs only applied to sand drift occurring after an order had been made.

In February 1989 the Board was briefed on the proposed Soil Conservation and Landcare Act by the Chief of the Soil and Water Conservation Section, Roger Wickes. The Board obviously felt comfortable with the new legislation and made few comments at its meeting in July 1985 after reviewing the Green Paper. More recently proposed amendments to the Act were considered by the Board in 1996.



100th Board meeting, March 1981
Reg French, Bob Herriott, Allan Beare - the State's first three Soil Conservators.



150th Board Meeting, August 1994
Past and present Board members and support staff.

SOIL CONSERVATION ORDERS

The first application for a Soil Conservation Order was received in November 1948 - very soon after the Board's formation.

This was very much a test case and considerable interpretation of the Act was necessary to establish appropriate procedures. The procedure adopted has largely been followed since, except that evidence was taken on oath on this occasion and this has since been deemed unnecessary.

To 1980, 26 applications were received but only 12 hearings were been necessary and 11 orders actually made.

At the end of 1980, only two orders were in force (Nos. 25 and 26), both in the Wellington East area. The land subject to order no. 24 was acquired by the Crown in 1976 under Section 8 of the Soil Conservation Act.

Application	Results
1. Karoonda Council v. A.W. Cushion	Withdrawn after hearing
2. Mrs. O.E. McGuinness v. C. & M. O'Malley	<u>Order made 1950</u>
3. G.S. Evans v. F.G. Berger	Withdrawn prior to hearing
4. Loxton Council v. W.A. Freundt	Withdrawn prior to hearing
5. J.R. Fraser v. H. Seidel	Withdrawn prior to hearing
6. Karoonda Council v. C.R. Venus	Withdrawn prior to hearing
7. R. Thorpe v. C.R. Venus	Dismissed (Section 13D)
8. Loxton Council v. E.D. Hanisch	Withdrawn prior to hearing
9. A.G. Wooldridge v. W.G. Newell	<u>Order made 1958</u>
10. M. Darling v. H. Ziegler	Dismissed (Section 13D)
11. C. Matthews v. J. Chambers	Withdrawn prior to hearing
12. Mannum District Council v. J. Chambers	<u>Order made 1958</u>
13. Minister of Agriculture v. L.S. Mann	<u>Order made 1959</u>
14. C.T.S. Shilton v. A.H. Page	Withdrawn prior to hearing
15. Brown's Well Council v. H. Wallis	Withdrawn prior to hearing
16. R. Hutchinson v. Mrs. B. Little	<u>Order made 1962</u>
17. D. Evans v. W.G. Schubert	<u>Order made 1963</u>
18. Brown's Well Council v. P. & C.D. Paul	Withdrawn prior to hearing
19. Karoonda Council v. B.G.&E. Berno	Withdrawn prior to hearing
20. Mrs. R.E. Francis v. Mrs. N. Jude	Withdrawn prior to hearing
21. Meningie Council v. Mrs. K.S. Potter	<u>Order made 1965</u>
22. Meningie Council v. Mrs. K.S. Potter	<u>Order made 1974</u>
23. J.D. & N.L. Enright v. I.E.E. McCulloch	Withdrawn prior to hearing
24. Minister of Agriculture v. R.E. Potter	<u>Order made 1974</u>
25. J.A. Hawke v. Placid Estates Pty. Ltd.	<u>Order made 1978</u>
26. Mrs I. Marra v. Emerald Securities Pty Ltd	<u>Order made 1978</u>

Following the proclamation of the Soil Conservation and Landcare Act in 1989, the Soil Conservation Council prepared detailed procedures for making soil conservation orders. The emphasis is still strongly on achieving voluntary co-operation. However no orders have been made in the Murray Mallee District since 1978.

GENERAL PUBLICITY AND PROMOTION

In the early days, drift control was the chief concern of the Board. Publicity was directed towards careful cultivation and the use of rye for stabilizing sand drift. The Board's first field day was held at Loxton in conjunction with the Murray Valley Development League, the Loxton District Council and the Loxton Agricultural Bureau in late 1952, when the properties of T. Anderson and R. Thiele were inspected.

By 1951 there was a greater awareness that soil conservation was more than controlling sand drift. Better farming methods, pasture improvement and rabbit control were frequently discussed. The Board asked that research be carried out on suitable pasture species and the failure of rye straw to persist for more than two years after sowing. The Wanbi Research Centre was established at this time and Board members made their first visit on 11/3/53. They noted "that snail clover had made a good showing!"

Farm plans were prepared for Board members E.M. Edwards and J.R. Rackham as a guide to future development, and to demonstrate the benefits of farm planning.

In 1956 the Board began more active promotion. Slides were collected for use at Bureau meetings. The value of super ammonia for sowing drift was emphasized following successful trials at Wanbi.

In 1959 members began to write articles for local papers, and preparation of a booklet on mallee farming began. Unfortunately this was not persevered with.

In 1958 clover demonstration plots were sown and this work continued on a range of sites until 1963.

In 1962 it was decided that general publicity on drift control was now largely unnecessary but that there was a need for improving soil fertility on most farms in the district.

The program was aimed at increased superphosphate use, the introduction of legumes, and better all-round land use and management.

Research work at Wanbi Research Centre had provided the basis for this program, Harbinger medic had proved itself and for the first time the basis for a sound by farming program was available for the drier areas.

In 1963 a major program was planned and carried out:-

Members addressed 10 Bureau branches.

K. Wilson addressed 6 councils. A series of six press articles were published, 37 drift control posters were distributed and three radio talks given on drift control.

Displays were exhibited at three Bureau conferences.

A booklet "Sand into Soil" (Murray Mallee District Soil Conservation Board, 1963) was prepared for distribution to all farmers together with advice at field days.

Pre-view field days were held with local committees; the booklet was distributed to 1600 farmers plus District Councils and Rural Youth Clubs.

Six field days were held with total attendance of 325 farmers.

This intensive program in 1963 helped to create a new environment in the Mallee as farmers became much more receptive to new information. The extension program of the Department of Agriculture in the Mallee capitalized on this situation. Attendance at Field Days at Wanbi Research Centre Jumped from 100-150 in the 1950's to 400-500 in 1964. Harbinger medic sales in the Mallee went from 6 tonnes in 1964 to 76 tonnes in 1966.

Murray Mallee Soil Conservation Board will conduct a SOIL FERTILITY

FIELD DAY

at

WYNARKA

on

WEDNESDAY 16TH OCTOBER 1963

Beginning at 1.30 p.m.

Everyone interested in Soil Conservation is invited to attend

YOUR BOARD MEMBER IS.....

MR. H.W. Petras, Karoonda.

LOCAL COMMITTEE MEMBERS ARE.....

KAROONDA

BORRIKA

MR. G. Blackett

MR. A. Addy

MR. J. French

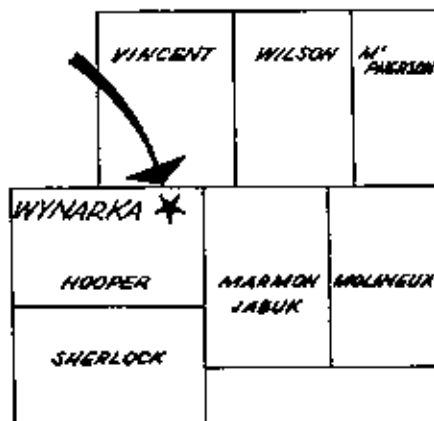
MR. A. Jones

MR. C. Mickan

MR. R. Whitbread

MR. M. Rosensweig

MR. S. K. Yelland



During the early '60's, cereal rye plots were sown on farms to demonstrate its value to provide initial cover on drift sand. The value of 3:1 super-ammonia was also demonstrated at these sites, and at the Wanbi Research Centre.

Interest in stock management also improved dramatically. There was more interest generated in integrated land management, farm subdivision, and watering plans than the advisory staff could handle during the mid to late 1970's. (see McCord and Potter, 1972).

Superphosphate Use

Publicity toward increased use of superphosphate was a major concern of the Board and therefore deserves special mention.

12/7/48 - The Board recommended that the Minister of Agriculture approach Fertilizer Sales Ltd and S.A. Railways re early delivery of super.

4/7/50 - Fertilizer Sales Ltd., was asked to give priority to eroded farms when supplying super.

- 23/7/51 - The severe effects of super rationing was discussed at a meeting in Adelaide
- 21/9/51 - Fertilizer Sales Ltd., was requested to set aside super for drift control - member to submit names of deserving farmers and inspect results.
- 26/2/52 - Fertilizer Sales Ltd., advised that super set aside was exhausted by November 1951.
- 25/2/64 - At the invitation of the Board representatives of Fertilizer Sales Ltd., met the Board at an informal meeting. A program of co-operation was formulated.

This was a very comprehensive program involving extension through formal bodies such as Agricultural Bureau Councils and specific groups set up at meetings arranged by Fertilizer Sales Ltd. Publicity was through on-farm contact, brochures and newsletters to all farmers.

In addition numerous demonstrations were set up - the main ones being paddock scale superphosphate demonstrations on which records were accumulated.

During the 1962-66 period, close liaison with Fertiliser Sales Ltd., was maintained and the district use of superphosphate recorded. The causes of farmer reluctance to purchase extra super were determined.

Tonnage Superphosphate (Murray Mallee)

1962/63	40	524
1963/64	51	033
1964/65	57	758
1965/66	61	118

However, with the demise of Fertiliser Sales Ltd., a joint fertiliser sales body, records of individual companies were not readily available and the listing was discontinued.

A joint symposium in 1965 between Fertiliser Sales Ltd and the Board entitled "The Production Potential of the Murray Mallee" was received enthusiastically. As a result restraints in bank lending to farmers were eased, enabling greater use of superphosphate, with the promise of greater production.

BIG CROWD AT FIELD DAY

A very good attendance of over 70 followed the Agricultural Field Day last Wednesday at the properties of Messrs E. J. Vowles, R. Arnold and Max Westbrook of Loxton.

Mr. John Potter, the Conservator of Soils, introduced Mr. T. M. G. Vowles, who welcomed Messrs Bob Baker, A. Tideman and members of the Loxton Branch of the Department of Agriculture and the farmers who were present.

Mr. Vowles said he was particularly pleased to see a good attendance of young farmers at the field day as, years ago, particularly in England, the young people with below average mentality were put into agriculture, but things were far different today with the young people taking a keen interest in the latest agricultural developments. He continued that the young people were the ones to foster

Mr. Vowles continued that he thought that this country would not reach its peak for another 40 years, and it was essential that super was put into the ground and a good cover be left on the soil as a good lesson could be gained from the north coast of Africa, which was virtually a waterless treeless region which has come about through man's carelessness in allowing erosion to get out of hand.

Mr. Potter said in his short address that the main aim of every farmer should be to improve the fertility of his soil and this would naturally grow better crops. He added that in the Loxton district there were some good crops, others he said were not so good; and during the afternoon the field day would move to different properties to inspect plots undergoing trials.

At the conclusion of his address the gathering moved:

Department of
Agriculture
FIELD DAY
Wanbi Research
Centre
Tuesday, 1st October
1963
at 1 p.m.
OPENING ADDRESS:
Mr. A. J. K. Walker,
Chief, Division of Plant
Industry
PROGRAMME:
Nitrogen on Cereals
Barley Varieties
Sheep Weaning
Afternoon Tea
Everybody Welcome

off to the property of Mr. Roy Arnold, where Mr. Bob Baker explained that most soils in this district lack two plant nutrients, nitrogen and phosphate. Phosphate can be put back by regular applications of super either when sowing crops or the top-dressing of stubble pastures or pastures, and the cheapest way of replacing nitrogen was the establishment of legumes. However it could also be supplied from the bags.

Fertiliser

Each of the wheat trials plots had an application of one hundredweight super and plot one nil nitrogen, plot two 11 pounds nitrogen, plot three 23 pounds nitrogen. After the inspection of the wheat and nitrogen trials the tour moved to the property of Mr. E. J. Vowles, where Mr. Peter Mowett outlined the important points in the establishment of annual legume pastures. The first being the sowing rate which is important for the first year, as the plant must be able to set seed for the next year. The recommended rate is 2 lbs. per acre, the time for sowing as early as practicable, depth of sowing 1.5-2" in the light sandy soil.

Method of Sowing

There are two methods of sowing, both with advantages and disadvantages. The first method of sowing through under the cereal crop is the cheaper method. However the ensuing struggle for survival against the cereal crop could have an adverse effect on the legume, also if the crop is sprayed by weedicides which would affect the setting of seed of the legume.

The other method of sowing legumes is to sow on stubble ground, preferably drilled in dry before the opening rains to allow the seeds to get the maximum benefit of moisture. However the greatest drawback in this method is the possibility of a false break and the germination of seed and no follow rain.

The gathering then inspected the trial plots of clover which had been sown. The first plot contained Barbel Clover, the second contained Patrol Medic 173 as

new species, and the third Harbinger Medic which had shown excellent growth on the light sandy soil where it was growing. The three plots were sown at the rate of three pounds of seed per acre with one cwt. of super.

The gathering then inspected a stand of lucerne on another paddock which proved to be in good heart.

Pasture Ground

Mr. Potter said that although lucerne had been proven as a pasture and will grow well on light sandy soil it was not recommended practice to sow it on better cereal growing paddocks, which were required for continual cropping.

Mr. Peter Mowett added that lucerne pastures respond and repay handsomely to regular top dressing of superphosphate, but it is necessary to renovate the stand of lucerne by regular cultivation preferably every second year. Mr. Mowett said that the grazing of lucerne as a pasture needed some care to see that the crown of the plant wasn't damaged, as on this the plant depends for its energy to build up again.

Grazing

The best way of grazing lucerne was explained that it should be heavily grazed over a short period; then the stock should be removed from the paddock altogether, and the paddock should be left untouched until the plant begins to flower again.

Onion Weed

Another demonstration which drew a lot of attention was the programme of eradication of onion weed on another section of Mr. Vowles' property. Mr. A. Tideman said that onion weed was causing a great economic loss in cereal growing areas. One way he said of eradication was a four year programme of building up fertility and pastures to compete with onion weed as it doesn't like competition. But the programme must be adhered to or failure of the eradication was inevitable. The recommended four year programme for onion weed control: the first year is dry cultivation in February or March; the second year, dry cultivation and the sowing of a cereal crop; the third year the stubble should be sown with a pasture to compete with the weed; and the fourth year, the pasture should be top-dressed with superphosphate. Mr. Tideman said in conclusion that the eradication may take up to ten years for complete success, but would win in the long run.

(Continued on Page 3)

MOVING MOUNTAINS THE CHESSON - MINDARIE PROJECT

The Board was concerned for many years about the presence of large, unstable sand dunes which were unsightly, a haven for weeds and rabbits, a threat to the stability of adjacent land, and although occupying in total a very small area, gave the Mallee a bad name. The Mindarie and Wanbi areas were high on the list of concerns.

The Board was therefore most interested in July 1975 to learn about proposals for a Federally funded soil conservation program which was to provide \$110,000 for capital works in South Australia. The Board saw a golden opportunity to deal with these problem areas, and was anxious to submit proposals.

After many meetings proposals for a major project were developed, although as it happened the Board was not included in the first round of projects.

At first the Board proposed using the funds to buy a large 4WD bulldozer to be made available to landholders to level drifting and ridges prior to seeding. The bulldozer would be available at subsidised rates and be managed by a local council or contractor.

In October 1979 following further news about the likelihood of Commonwealth funding being available it was resolved:

"That the Board commence with a group project in the Hundreds of Chesson and Mindarie".

By then it had been decided that it would be better to engage private earthmoving contractors to do the bulldozing, as the logistics and management of a Board owned bulldozer would create problems.

There was much discussion on the levels of subsidies to be paid but little progress was made with activities because of delays in funding.

Finally in September 1981, six years after the first intimation of project funding the Board was advised that \$30,000 would be available under a State funded Expanded Soil Conservation Program (ESCP) which mirrored the National Soil Conservation Program (NSCP) funding for group projects.

In November 1981 details of the proposed project were outlined at a joint meeting of the Board with senior Agricultural Department personnel at the Wanbi Research Centre. A sum of \$28,000 was allocated for the project for capital, operating expenses and subsidies to June 30, 1982. At this meeting the Board approved the proposals and ratified a priority list of 16 properties for consideration.

When nothing further had happened by mid February 1982, and with time for land preparation for seeding running out, the Board Chairman wrote to the Minister of Agriculture seeking a deputation to push the matter.

Finally on March 4th 1982 the Minister announced the inauguration of the ESCP and the initial allocation of funds totalling \$151,400 Statewide.

The Board swung into prompt action and convened a meeting on March 23rd attended by 18 landholders, representing 13 properties of which 10 were nominated for inclusion in the project.

Project agreements were drawn up and signed during property visits which began on March 29th after which works summary sheets were prepared for each property.

The first bulldozers moved in at the end of March and despite the late start some 140 ha of unstable dunes were levelled and a total of 495 ha sown to rye with super ammonia by June 30th at a total cost of \$10,868.

Despite a severe drought in 1982/83, most project areas grew a satisfactory cover - a tribute to the methodology developed over many years of research and experience in the Mallee (Blencowe, 1957). This success provided the impetus for sceptical landholders to get involved in the project and take advantage of the cost sharing incentives (Allen, 1987).

Following this protracted, uncertain start the project went from strength to strength driven by the enthusiasm and determination of the Board and the technical officers supporting it - Richard Wood, who gave great support during the first year, and later Peter Butler and Geoff Kew.

By the end of the project in December 1987 a total of 900 ha of unstable dunes had been bulldozed, 2000 ha sown to rye and super ammonia and 9km of temporary fencing at a total cost of \$162000 of which \$100400 was provided by the ESCP. The total did not take into account at least another \$35,000 incurred by co-operating landholders in levelling, clearing, burning debris after bulldozing, seeding operations, seed and costs of erecting fences (Berger, 1993).

The overall impact on the Mallee has been outstanding. The Chesson Mindarie project significantly reduced hard core land degradation and stimulated the community to tackle the causes of land degradation. The nett result is that the reclaimed areas are now part of the Mallee's production base and are contributing to the region's profitability and sustainability.

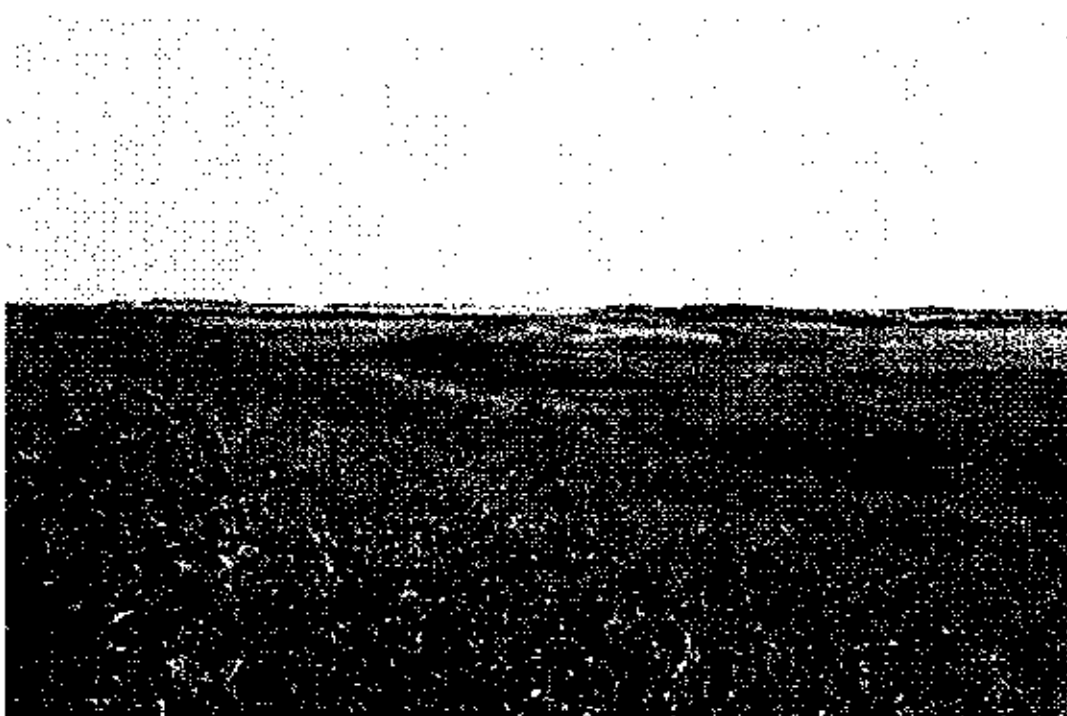
The Chesson-Mindarie project was the subject of the first major report by the Board in almost 40 years (Berger, 1993) It was in sharp contrast with an earlier report which dealt solely with the problem of badly drifting farms (Birch and Blencowe, 1966).

The Chesson/Mindarie Project was the forerunner of a number of similar projects. These were the Browns Well, Holder, Borrika, Nildottie and Forster/Bandon projects. The Browns Well project was funded by the National Soil Conservation Program, the others by the expanded Soil Conservation Program.

A total of 89 landholders participated in these group schemes to which State and Federal Governments contribute \$211,000. Total farmer inputs are unknown but are probably of the order of \$150,000.



Before, 1983.



After, 1993

Stabilising sand dunes at Wanbi under Mindarie Chesson Scheme.

THE DISTRICT PLAN

In 1989 the Soil Conservation and Landcare Act 1989 replaced the old Soil Conservation Act. A major innovation of the new Act is the requirement for a soil conservation Board to develop a "district plan" for all the land in its district (section 36).

The district plan should identify for all the land within its district :

- the classes into which the land falls
- the capability and preferred uses of the land
- the uses to which the land is being put
- degraded areas of land
- the nature, causes and extent of that degradation
- the measures that should be undertaken for the rehabilitation of each particular type of degradation and
- the land management practices best suited to preventing the degradation of the various classes of land.

In addition boards are required to develop a program outlining their proposed activities for the next three years (commonly known as the three year plan) for the conservation of land within the district, for the rehabilitation of degraded land and for all other activities proposed in implementing the Act during this period - a somewhat daunting task the first time around.

On 4/10/1989 the Board held a special meeting at Wanbi to initiate the development of its first district plan which was to be prepared concurrently with the West Broughton Board's first district plan. Glenn Gale, a senior soils officer stationed at Jamestown was appointed to develop both plans under the direction of the two Boards.

At the meeting many suggestions for content were discussed, but above all the necessity for the Board to "own" the plan was emphasised. Members were asked to provide the background details and the recommendations which would be drafted and edited to the Board's satisfaction.

A supplementary publication would also be prepared for distribution to all landholders in the district.

At the next meeting on 25/10/89 more details of the proposed district plan were given under the following categories -

- a description or stocktake of the district
- land management problems in the district
- appropriate management recommendations to address the problems
- extension activities and programs to develop and implement the three-year program
- other relevant information.

On 10/4/91 the first drafts of portions of the district plan were presented to the Board for comment, and at the following meeting on 3/7/91 three priority issues for the three year plan were identified -

- property management planning
- soil fertility / pasture / rotations
- rabbit eradication.

The gestation period proved to be lengthy. This was understandable as the Murray Mallee and West Broughton district plans were the first in South Australia. However by February 1992 the draft district plan was released for public comment, and public meetings were held at Loxton, Lameroo and Karoonda to discuss the contents.

By June 1992 the plan was "ready for printing" but there was a delay because the maps which form an integral part had been held up in production. Members were so concerned at the delay that the Board wrote to the Soil Conservation Council expressing its concern about the hold up of the district plan release and the fact that "the credibility of the Board is at risk in the community".

It was a great relief to the Board, when after one or two false starts the district plan was jointly launched with the West Broughton district plan by the Minister of Primary Industries the Honorable Terry Groom, at Murray Bridge on 15/2/1993.

The two district plans set a benchmark for other boards which had begun the process of preparing their district plans, and many followed in the next 2-3 years.

The cost of preparing the first two district plans were met by the National Soil Conservation Program. Some 800 copies were printed, and such was the demand that few remain.



Launch of District Plan, March 1993

Chair, Mike Kluge (right) with Hon Terry Groom, Minister of Agriculture

The day after the launch the Board met at Murray Bridge and resolved that "bonified (sic) land owners from the Murray Mallee be given a copy of the district plan", apparently on request, and that others outside the district would have to pay \$10.00 a copy.

At the same time as the district plan was launched, the Board issued a supplementary bulletin "Are you farming for the future?" which dealt with proven solutions to problems identified in the district plan - wind erosion, decline in soil organic matter and fertility, decline in remnant vegetation, rabbits and saline groundwater recharge.

The goals of the three year program can be summarised as follows -

- adopting sustainable land management
- increasing soil stability and productivity
- eradicating rabbits
- improvements to the district plan
- developing a land care ethic
- improving the Board's effectiveness

It was recognised that it was most unlikely that all these goals would be achieved in three years, and this has proved to be the case.

The legislation provides for the review of district plans every three years, and updating where necessary. The district plan has since been reviewed but is held up pending the proclamation of new amendments to the Soil Conservation and Landcare Act so that it can focus on specific issues to be identified.

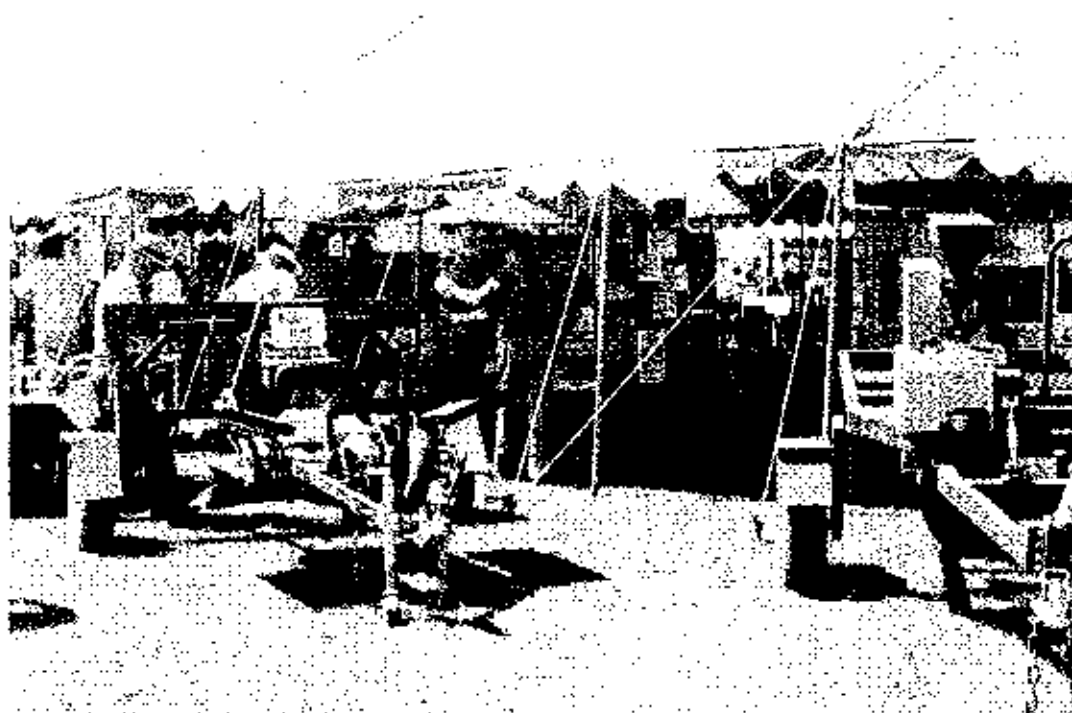
The proposed changes will require greater consultation with similar bodies, e.g. animal and plant control boards and catchment water management boards wholly or partly within the district.

The existing three year programs will be extended to four years, and a review of district plans will only be necessary every five years.

Currently Local Action Plans [LAP'S] are being prepared.



Soil Board Display



Display at Karoonda Sheep Fair, 1994

MANAGING NATIVE VEGETATION - REGREENING THE MALLEE

During the early discussions on the Chesson-Mindarie project in 1981, the Department of Environment and Planning expressed concern that government funds might be used to clear mallee scrub.

This concern was the result of a survey published in 1976 which described the dramatic decline in remnant vegetation in the agricultural districts of South Australia.

By 1992 some 73% of the Murray Mallee had been cleared, and a further 7% was severely degraded. Apart from conservation parks, only 8% of the Mallee comprised non degraded native vegetation.

The Board's response was that the removal of trees could only be sanctioned where existing erosion was being aggravated by scattered trees. There was no intention of sanctioning clearing on stable dunes.

Following the introduction of clearing controls under the Planning Act in 1983, it became necessary for landholders to apply for approval to clear scattered trees. Applications on project areas were given high priority.

Regulations under the Planning Act proved unsatisfactory in slowing down the rate of clearing, and a new Native Vegetation Management Act was introduced in 1985 to provide tighter controls over clearing. The Board agreed to help with inspections and to give advice on erosion hazards.

However the matter did not rest there. In 1990 the Native Vegetation Council asked the Board to develop a policy on the clearance of scattered trees as a method of controlling current soil erosion problems. The Board agreed to inspect trees creating a soil erosion problem and to determine ongoing land management options with landholders. These included a requirement that twice the number of trees removed should be established in a more suitable location.

Subsequently in 1991 the inspection process was formalised so that a Board member accompanied Departmental officers making inspections of native vegetation to give advice on stabilisation methods.

Currently the Board is asked to comment on all applications except those dealing with brushcutting or woodcutting.

The issue of native vegetation decline was highlighted in the 1993 District Plan and the accompanying publication "Are you planning for the future?" The latter described appropriate practices to conserve native vegetation, and listed the advantages of retaining native vegetation.

In the same year the Board adopted a set of fencing principles for Heritage Areas. These were developed in conjunction with the Department of Environment and Natural Resources, and dealt with fence placement, the

location of gates for stock and vehicle access, fence proximity to treelines and to high hazard areas.

In 1994 the Board decided to give native vegetation management a higher priority and as part of the Local Action Planning (LAP) process agreed on active vegetation management as one of "three new goals". Although it was agreed that key targets be set for action, the issue did not surface again.

In 1993 Primary Industries staff presented a draft Murray Mallee Revegetation Strategy to the Board for information and comment. The strategy (Good, 1994) has as its chief aims :

- to show that revegetation can assist farm productivity and sustainability as well as playing a role in reversing the decline of soil, water and biodiversity
- to provide information which can be used by the Murray Mallee community in planning and implementing revegetation projects.

It also identified the highest priority land requiring treatment to reduce groundwater recharge, between Cadell and Nildottie, and priority areas for wildlife corridors.

In 1996 the Board was invited to integrate its activities with the revegetation program of the Murraylands Local Government Association (CARE revegetation project) - some 27 sites were planted in the Board's district over the three year project.

The Board has also made a practical commitment to native vegetation management by using project funds to buy and modify a tree planter costing \$8,500 and make it available for use by landholders.

THE CARE PROGRAM COMMUNITY ACTION FOR THE RURAL ENVIRONMENT

This initiative which began in 1991, a joint effort between the Murray Mallee, Murray Plains and Coorong and Districts Soil Conservation Boards and the River Murray Water Resources Committee, was funded by the Murray Darling Basin National Resources Management Strategy.

The initial objective for the program was - to reduce land degradation and promote rehabilitation of natural resources in agricultural industries and the wider community by providing a framework for focussed community participation in natural resource management in the South Australian region of the Murray Darling Basin.

The CARE program now much expanded, has provided a framework for community leadership, control and participation in natural resource management. During the past seven years a wide range of activities in the region was funded by the CARE program.

The initiatives for the first three years in the Murray Mallee included soil pit field days, a review of the District Plan and Three Year Program, promotion of Property Management Planning Workshops, the "Diesel, Dollars and Dust" field day at Borrika in March 1993, and an Alternative Tree and Shrub Crop seminar.



Diesel, Dollars and Dust Field Day, Borrika 1993

From 1994 the emphasis has been on Local Action Planning introduced and promoted by the Murray Darling Basin Commission to promote integrated planning and implementation of on-ground works dealing with natural resource management issues. Local Action Planning Committees have been formed throughout the South Australian Murray Darling Basin area, including one in the Murray Mallee.

For example increased groundwater recharge is a major issue in dryland areas of the Murray Darling Basin in South Australia. It contributes to increased salt loads to the River Murray. A study was made in 1995 to determine the extent and severity of recharge as a basis for identifying priority areas for Local Action Planning.

Other activities included a survey of farming practices in the Northern Murray Mallee, (Denys Slee et al 1996) and a subsequent background report which focussed on barriers to the adoption of the sustainable farming practices identified in the 1996 survey (Hannam, 1997). The result of the survey highlighted the need for more focussed research in the Mallee region.

Subsequently the Board and other interested bodies became involved in negotiations with the Grains Research and Development Corporation (GRDC). A tri State (S.A. N.S.W. and Victoria) project has now been supported to assist in the further development of profitable and sustainable farming systems for the Northern Mallee.

The Board will work closely with the LAP Committees and the proposed outcomes for this project are:

- continued support for research and investigations by agencies and research groups to develop minimum tillage systems
- financial support for individuals developing machinery prototypes to improve minimum tillage systems
- support for investigations/joint ventures for the development of new machinery in collaboration with farm machinery manufacturers and engineers.

These outcomes are consistent with the first two of the Murray Mallee Local Action Plan.

EPILOGUE

Remarkable achievements in soil conservation and land use practices have occurred over the past 50 years. When the Board began its work in 1948, the Soil Conservation Act was virtually untried and wind erosion was a feature of the whole farming landscape. The Board has played a vital role in promoting sound farming techniques, in spite of adverse seasonal, financial and personal (farmer attitude) problems.

Tremendous progress occurred through the 1950's as farm income from sheep improved and more superphosphate was used. Cereal rye sown early with the limited machinery available showed great benefits, but the fertility 'boom' of the late 1950's and early 1960's was remarkable. The Board played a vital role in demonstrating the value of medics and higher rates of superphosphate.

Optimism faded a little in the later 1960's as a series of dry years and wheat quotas took their toll. Sheep carried many a family through these leaner years, despite a severe drought in 1972 which forced a number of farmers to leave their properties and seek outside employment. Seasonal erosion increased.

Following two phenomenal seasons in 1973 and 1974, adverse cropping seasons were again experienced from 1975-77. However, there was little serious soil erosion, which affected surprisingly few properties, because of lessons learned in previous drought years. Farmers were wary of preparing more land for crop than the seasonal conditions permitted.

During the 1970's and 1980's there was increasing emphasis on cereal cropping - mainly wheat and barley as returns improved.

There was also a rapid increase in conservation farming techniques - mainly using blade ploughs, with some rod weeders, chisel ploughs and trash workers (see Department of Agriculture, 1989). The Board promoted a field demonstration of stubble mulch farming machinery at the Wanbi Research Centre in 1979 and showed a continued interest in tillage trials at the Centre until it was closed in 1996.

The winds of change have been just as striking in the Murray Mallee as in most farming districts. What does the future hold?

The trend to bigger tillage and seeding machinery will continue as farmers strive to achieve economies of scale, larger areas will be cropped, and paddock size will increase to accommodate these changes. Stock management will be more difficult with larger paddocks, and this may result in reduced emphasis on stock.

The trend to bigger farms and fewer farmers may be partly countered by the development of localised areas of intensive irrigation exploiting the groundwater resources of the Murray Basin. This development is capital intensive, but as the traditional market gardening areas closer to Adelaide decline because of urbanisation and other problems, opportunities for more distant areas will increase.

The current explosion of wine grape plantings is also taking over dryland farming areas within 5-6 km of the River Murray and represents a huge capital investment with establishment costs running at about \$25,000 / ha.

Rapid rises in the price of cropping land occurred in the late 1970's and early 1980's, many properties got bigger and farmers moved into the larger towns. There was concern that farms of 4,000 ha or more would prove too big for one person to manage leading to greater weed and rabbit problems. Also many subdivision fences were removed to allow bigger cropping plant to be used, again increasing the risk of land degradation.

By the 1990's, fallows still played an important role in Mallee farming and 2-3 workings were done prior to cropping there was a good understanding of the benefits of reduced tillage and stubble retention (Denys Slee et al; 1996). Cropping was still dominant because of depressed wool and sheep prices, but there was a recognition of the value and importance of well managed medic pastures and the role they can play in boosting soil fertility and grazing potential.

Over the last 50 years the Murray Mallee Board has carved a tortuous path through considerable obstacles often against unwarranted opposition.

Born in the face of serious problems, with an untried Act as its only weapon, its achievements are remarkable. The general improvement in the Mallee is largely a monument to those who farm it but without the assistance of the Board, it is doubtful whether so much would have been achieved.

The Board continues to support activities which will lead to improvements in the general welfare of the district - the District Councils, Agricultural Bureau, Department of Primary Industries and Resources, fertilizer companies, banks and the Board are all working together to provide a better way of life for Murray Mallee farmers.



Soil Board trialling a land condition monitoring program using wind screen survey technique with Andy McCord (in the back of the car), 1996

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APPENDIX I

TERM I

1948-1951

E.M. Edwards, Paruna - elected Council

Representative 12/3/48

R.G. Beck, Department of Agriculture, Chairman

A.R. Birch, Nangari

J.R. Rackham, Wynarka

A.T. Dohnt, Forster 19/4/49

J.P. Blencowe, Department of Agriculture, Chairman,
- vice Beck (transferred)

TERM II

1951-1954

E.M. Edwards, Chairman

J.R. Rackham

A.R. Birch

L. Von Doussa, Mindarie

J.B. Haby, Forster - vice Dohnt (deceased)

J.P. Blencowe - Secretary 1/51

H.K. Bakewell, Namung 1/7/52

E.A. Rollbusch, Nadda, Council Rep - vice Edwards
(retired)

A.R. Birch, Chairman 1/3/53

T.M.G. Vowles, Wanbi - vice Von Doussa (ill health)

TERM III

1954-1957

A.R. Birch, Chairman

J.R. Rackham

J.B. Haby

H.K. Bakewell

E.A. Rollbusch

T.M.G. Vowles

J.P. Blencowe, Secretary 2/9/54

J.A. Meissner, New Well 20/3/56

E.A. Rollbusch, Chairman

H.W. Petras, Karoonda - vice Rackham (retired)

J.M. Shannon, Loxton - vice Birch (retired)

TERM IV

1957-1960

E.A. Rollbusch, Chairman

J.B. Haby

H.K. Bakewell

T.M.G. Vowles

J.A. Meissner

H.W. Petras

J.M. Shannon

J.P. Blencowe, Secretary

TERM V

1960-1963

T.M.G. Vowles, Chairman

J.A. Meissner

H.W. Petras

J.M. Shannon

K.R.G. Wilson

S.A. McFarlane

P.D. Guerin, Secretary

V.N. Henschke, vice Shannon (retired)

J.S. Potter, vice Guerin (relieved)

TERM VI

1963-1966

H.W. Petras, Chairman

T.M.G. Vowles

J.A. Meissner

K.R.C. Wilson

E.W. Hage

S.A. McFarlane

V.N. Henschke

J.S. Potter, Secretary

TERM VII

1966-1969

H.W. Petras, Chairman

J.A. Meissner

K.R.C. Wilson

E.W. Hage

V.N. Henschke

M.C. Schulz - vice Vowles (retired)

D.J. Fullston - vice McFarlane (retired)

G.N. Thomas, Secretary

TERM VIII

1969-1972

J.A. Meissner, Chairman

M.C. Schulz

E.W. Hage

D.J. Fullston

V.N. Henschke

G.C. Blacket

R.T. Kimber, Council Rep.

K.G. Wetherby, Secretary

TERM IX

1972-1975

J.A. Meissner, Chairman

G.C. Blacket

M.J. Drogemuller

D.J. Fullston

E.W. Hage

V.N. Henschke

G.M. Wall, Council Rep.

J.B. Schubert - vice Henschke (resigned)

K.G. Wetherby, Secretary

TERM X

1975-1978

D.J. Fullston, Chairman

B.G. Schmidt

M.J. Drogemuller

J.B. Schubert

E.W. Hage

G.C. Blacket

R.T. Kimber, Council Rep.
R.M. Wood, Secretary

TERM XI

1978-1981

D.J. Fullston, Chairman
G.C. Blacket
V.H. Altmann
B.G. Schmidt
J.B. Schubert
M.J. Kluge
H.S. Wood, Council Rep. (deceased)
A.T. Pedler, Council Rep. vice Wood (deceased)
R.M. Wood Secretary

TERM XII

1981-1984

D.J. Fullston, Chairman
J.B. Schubert
M.J. Kluge
G.C. Blacket
B.G. Schmidt
M.E. Fielke
J.F. Boughen, Council Rep.
R.M. Wood, Secretary

TERM XIII

1984-1987

M.J. Kluge, Chairman
J.F. Dinham (died 12/5/1985)
C.T. Durdin vice Dinham
M.E. Fielke
R.H. Jacka
G.G. Schmidt
J.B. Schubert
J.F. Boughen, Council Rep.
R.M. Wood, Secretary to 31/12/1984
W.J. Davies, Secretary from 1/1/1985

TERM XIV

1987-1990

M.J. Kluge, Chairman
M.E. Fielke
G.G. Schmidt
R.H. Jacka to 30/6/1989
J. Berger vice Jacka from 1/7/1989
C.T. Durdin
K.D. Jaeschke
D.C. Hocking, Council Rep.
W.R. Hack, Secretary

TERM XV

1990-1993

M.J. Kluge, Chairman
R.R. Smith
M. Arnold
C.T. Durdin
M.A. Wurst

J. Berger

F.R. Maynard, Council Rep.

W.R. Hack, Secretary to 31/12/1990

P.R. Butler, Secretary from 1/1/1991

TERM XVI

1993-1996

J. Berger, Chairman
R.R. Smith
N.A. Wurst
J. Roberts
M.J. Kluge
T. Schiller
F.R. Maynard, Council Rep.
P.R. Butler, Secretary

TERM XVII

1996-1999

J. Berger, Chairman
N.A. Wurst
J. Roberts
K. Burdett
J.R. Sibly
T. Schiller
F.R. Maynard, Council Rep.
P.R. Butler, Secretary to 31/12/1996
J. Murphy Secretary from 1/1/1997.

APPENDIX II

Department of Agriculture, Adelaide. 12th July, 1948 MURRAY MALLEE
DISTRICT SOIL CONSERVATION BOARD CIRCULAR

During the short time that the Murray Mallee District Soil Conservation Board has been in operation, its members have received numerous requests for information concerning the operation of the Board and its relationship to farmers and District Councils within its District.

This leaflet has been prepared with a view to setting out these matters, and clarifying if necessary, any misconceptions which you as a farmer, or a District Council may have had concerning its functions.

The boundaries of the Murray Mallee Soil Conservation District, as at present constituted, are shown on the accompanying map.

The duties of the Board are clearly stated in Section 6e of the Soil Conservation Act 1939-47, which reads approximately as follows:

- To foster local interest in soil conservation
- To collect information as to soil erosion and soil conservation within its district
- To make any investigations required by the Minister of Agriculture or the Central Advisory Committee on Soil Conservation.
- To make reports and recommendations to the Minister or the Advisory Committee, on Soil Erosion and Soil Conservation.
- To make orders in accordance with the provision of Section 13b of the Soil Conservation Act (see later paragraph).

The aim of your Board is therefore firstly to develop the interest of the community in which we live, in the prevention and control of soil erosion, and secondly, to see that any farmer desirous of controlling erosion is not unduly hampered in carrying out that desire by existing policy or any matters of administration which are capable of some adjustment. We share our educational and investigational functions with the Soil Conservation Branch of the Department of Agriculture, and believe that this will add to the valuable work already done in our District by that Branch. Considerable confusion exists concerning section (e) of our duties - those concerning soil conservation orders.

The Board has no power to initiate any coercive action against any farmer or District Council. It is the first responsibility of the farmer or District Council to peacefully approach the adjoining landholder with a view to discussing preventative measures and problems and arranging some mutual solution to the satisfaction of both parties before any approach can be made to the Board.

APPENDIX II : Continued

The Board then has to hear both sides and give a judgement which has no effect until it is confirmed by the Central Advisory Committee on Soil Conservation in Adelaide. This latter body is also responsible for seeing that its orders are carried out.

We should remember that each season's fallowing programme will play an important part of the amount of drift in our district during the ensuing 12 months. Prevention is far better than cure. Therefore you should discuss your fallowing programme frankly with your neighbour to ensure that his interests and public utilities are safeguarded.

This Board, as constituted, provides an avenue through which farmers can approach Government on matters of Policy. This object cannot be reached without your wholehearted co-operation. We invite you to give consideration to matters concerned with Soil Conservation which affect your welfare and that of your neighbours., and we will be pleased to receive any suggestion which might be offered. Some matters may not require a great deal of investigation, but if your suggestion has something of merit, and on which the Board would like further information, you will be invited to meet the Board to discuss the matter. Because of the necessity to arrange our affairs well ahead, it is regretted that attendance at Board meetings will, of necessity, be by invitation only. Any matters you wish to raise may be done through any of the Board members or better still by correspondence, addressed to the Chairman, Murray Mallee District Soil Conservation Board, Department of Agriculture, Flinders Street, Adelaide.

The Board Members and their addresses are :

R.G. Beck, Assistant Soil Conservator, Department of Agriculture, Flinders Street, ADELAIDE (Chairman)

A.R. Birch, Farmer, NANGARI

E.M. Edwards Farmer, PARUNA (representing all District Councils within the District).

A.T. Dohnt, Farmer, FORSTER.

J.R. Rackham, Farmer, WYNARKA.

APPENDIX III

NUMBER OF SOIL BOARD MEETINGS AND VENUES

<u>Venue</u>	<u>Number</u>
Wanbi	57
Karoonda	39
Loxton	27
Waikerie	7
Murray Bridge	5
Meningie	4
Paruna	4
Tailem Bend	3
Swan Reach	3
Mannum	2
Claypans	2
Lameroo	2
Adelaide	1
Alawoona	1
Forster	1
Nangari	1
Pepponda	1
Purnong	1
Browns Well	1
Paringa	1
Morgan	1
Mindarie	1
East Murray	1
Unknown	1
	<u>167</u>

PEPPONDA

APPENDIX IV

Special Meetings and Inter-Board Visits

- 1954 Visit of Advisory Committee on Soil Conservation
- 1954 Visit of Murray Plains Board
- 1956 Visit of Advisory Committee on Soil Conservation and Upper Eyre Peninsula Board
- 1958 General Meeting of Board and all Local Committees
- 1961 Visit of Advisory Committee on Soil Conservation
- 1963 Visit of Murray Plains Soil Conservation Board
- 1964 Visit of Fertiliser Sales Representatives
- 1965 Visit of West Broughton Soil Conservation Board Symposium - "Production Potential of the Murray Mallee"
- 1966 Visit from Upper Eyre Peninsula Soil Conservation Board
- 1967 Visit to Upper Eyre Peninsula S.C. District
- 1968 Advisory Committee Visit
- 1971 J. Brommell, Vermin Control Matters
- 1973 Advisory Committee visit lasting 3 days
- 1976 Visit from the Upper Eyre Peninsula Board
- 1976 Visit to the West Broughton Soil Cons. District
- 1977 Combined Meeting with LCM's at Wanbi
- 1978 Research Needs in the Murray Mallee report
- 1981 Visit of the Advisory Committee
- 1983 Visit of the Advisory Committee at the height of the 1982/83 drought
- 1985 Combined meeting with Murray Plains Board at Swan Reach
- 1986 Jubilee 150 joint Boards meeting at Clare
- 1991 Visit to Eastern Eyre Peninsula and Central Eyre Peninsula Boards.
- 1994 Joint Board's visit to Murraylands Region - Eastern and Central Eyre Peninsula and West Broughton
- 1997 Soil Conservation Council visit to Murray Mallee

APPENDIX V

Groups Incorporated under the Murray Mallee Soil Conservation Board

<u>Date of</u> <u>Incorporation No.</u>	<u>Meeting</u>	<u>Name of Landcare Group</u>
1/2/91	136	Karoonda Revegetation Group
1/2/91	136	Garralands Revegetation Group
9/11/91	139	Pinnaroo North Farm Revegetation Group
29/10/93	148	Soil Boards CARE Committee
6/2/96	157	Swan Reach - Nildottie & Districts Landcare Group
6/2/96	157	Central Riverland Corridors Project
15/4/97	164	Murray Mallee Local Action Plan Steering Committee
		Northern Mallee Perennial Fodder Group (Northern Mallee Native Vegetation Group)
		Forster Bandon Landcare Group
		Wanbi Region Land Management Group
		Murraylands Low Moisture Revegetation Group
		Moorook Tree Planters
		Mantung - Maggea Land Management Association
		Borrika Land Management Group

APPENDIX VI

MURRAY MALLEE MILESTONES

- 1938 REPORT OF THE SOIL CONSERVATION COMMITTEE -
RECOMMENDED SETTING UP A SOIL CONSERVATION SECTION IN
THE DEPARTMENT OF AGRICULTURE.
- 1939 THE FIRST SOIL CONSERVATION ACT
- 1941 BOB HERRIOT APPOINTED - FIRST SOIL CONSERVATOR
- 1945 SOIL CONSERVATION ACT AMENDED TO SET UP SOIL
CONSERVATION DISTRICTS
- 1947 MURRAY MALLEE SOIL CONSERVATION DISTRICT PROCLAIMED
- 1948 MURRAY MALLEE BOARD APPOINTED ON MARCH 12TH
MURRAY MALLEE BOARD FIRST MEETS ON APRIL 15TH
- 1950 MURRAY MALLEE BOARD'S FIRST SOIL CONSERVATION ORDER
- 1953 BOARD'S FIRST VISIT TO NEWLY ESTABLISHED WANBI RESEARCH
CENTRE
- 1954 ADVISORY COMMITTEE ON SOIL CONSERVATION MAKES ITS
FIRST OFFICIAL VISIT
FIRST INTER-BOARD VISIT FROM MURRAY PLAINS BOARD
- 1956 FIRST VISIT FROM UPPER EYRE PENINSULA BOARD (NOW
EASTERN EYRE PENINSULA)
- 1963 BOARD RUNS MAJOR PROGRAM TO BOOST SOIL FERTILITY
- 1965 FIRST VISIT FROM WEST BROUGHTON BOARD
- 1973 A DESCRIPTION OF THE LAND IN COUNTIES ALBERT, ALFRED AND
PART EYRE IS PUBLISHED
- 1974 THE FIRST NATIONAL SOIL CONSERVATION PROGRAM -
THE MURRAY MALLEE MISSES OUT
- 1981 100TH MEETING OF THE BOARD AT KAROONDA
- 1982 MINISTER OF AGRICULTURE LAUNCHES THE EXPANDED SOIL
CONSERVATION PROGRAM
DOUG FULLSTON AWARDED A.M. - MEMBER OF THE ORDER OF
AUSTRALIA
- 1983 CHESSON/MINDARIE PROJECT BEGINS IN MARCH
- 1985 JOINT MEETING WITH MURRAY PLAINS BOARD AT SWAN REACH

APPENDIX VI : Continued
MURRAY MALLEE MILESTONES

- 1987 CHESSON/MINDARIE PROJECT COMPLETED IN DECEMBER
- 1989 SOIL CONSERVATION AND LANDCARE ACT PROCLAIMED
LANDCARE MOVEMENT BEGINS
- 1990 YEAR OF LANDCARE
DECADE OF LANDCARE BEGINS
FIRST WOMAN MEMBER OF BOARD - MEREDITH ARNOLD
- 1991 FIRST MEETING OF LOCAL ACTION PLAN MANAGEMENT GROUP
- 1992 MIKE KLUGE AWARDED MCKELL MEDAL FOR SOIL
CONSERVATION SOIL BOARDS' CARE PROGRAM LAUNCHED
- 1993 DISTRICT PLAN LAUNCHED AT MURRAY BRIDGE
- 1994 JOINT BOARDS TOUR OF MURRAYLANDS
REGION 150TH MEETING HELD AT LOXTON
- 1995 JO MURPHY SECRETARY OF JOINT BOARDS
- 1996 SURVEY OF FARMING PRACTICES IN THE NORTHERN MALLEE
WANBI RESEARCH CENTRE CLOSED
- 1997 GRDC CONSERVATION FARMING PROJECT BEGINS
- 1998 BOARD 50TH ANNIVERSARY DINNER AT LOXTON - APRIL 15TH.

Salinity

Salinity in the horticultural region of the Murray Mallee due to poor irrigation practices is a huge land degradation problem. But because the salinity problem of this area is being addressed by other groups, it is not a priority of the Murray Mallee District Soil Conservation Board. The board will, however, address the issue in the long term.

Horticultural projects

The Murray Mallee has a large horticultural industry: citrus, vegetables and almonds are the main horticultural crops that represent a large soil erosion risk. In many cases, cut and fill embankments have been undertaken before the crops are established. In a number of cases the cut and fill work has resulted in poor or little establishment of cover crops before planting and enormous soil conservation problems ensue.

The Murray Mallee District Soil Conservation Board will develop appropriate guidelines for such projects to prevent such problems from occurring in the future.

MURRAY MALLEE

PREVENTING SOIL EROSION

ACTION IN THE 1990's



Wind tunnel experiment at Parana simulates
50km/hr dust storm.



SA Department of Agriculture

National Soil Conservation Program

The National Soil Conservation Program is a Federal Government initiative, administered through the Department of Primary Industries and Energy. The Community Landcare Program, under the National Soil Conservation Program, has provided funds to enable the production of this booklet.

The overall objectives are:

- to develop and implement national policies for the rehabilitation and sustainable utilisation of the nation's soil and land resources;
- to encourage community interest or concern in land management;
- to develop a coordinated and cooperative effort towards soil conservation and sustainable agriculture.

THE MURRAY MALLEE DISTRICT SOIL CONSERVATION BOARD

THE NEED FOR SOIL CONSERVATION IN THE MURRAY MALLEE

Soil conservation involves conserving the soil, water and energy resources while ensuring continued farm productivity and economic viability.

Soil conservation is a vital component of preserving a valuable natural resource - the soil.

Production can be improved through conservation farming techniques while maintaining soil fertility and soil structure.

Good farmers conserve their soil.

District Soil Conservation Plan

The Murray Mallee District Soil Conservation Board, in association with the SA Department of Agriculture, is developing a district soil conservation plan. The purpose of this plan is to:

- compile information on the district (soils, landform, vegetation, geology and climate),
- improve the planning and implementation of a soil conservation program;
- provide a framework for more detailed soil conservation planning on individual farms;
- determine appropriate land use and management guidelines for Mallee farmers.

The District Soil Conservation Plan will identify and address the following land management challenges.

Rabbits

Rabbit populations generally are too high. Rabbits reduce soil cover and eat vegetation, hence making the soil susceptible to wind erosion.

A coordinated approach to rabbit control is imperative in the Mallee to reduce the rabbit population, and ultimately to eradicate rabbits in all areas.



Land degradation caused by rabbits

Conservation farming

Wind erosion from broadacre farming land, reduction in soil fertility and the presence of cereal root diseases are land management problems faced in this region. The ultimate objective is to consistently grow better crops and pastures to maximise soil cover and prevent wind erosion, yet maintain farm profitability.

Conservation farming practices that maintain soil cover and control cereal root diseases must be implemented on all farms to ensure long-term viability of dryland agriculture in this region of South Australia.

Drought

The Murray Mallee often has droughts, and because droughts generally lead to severe soil conservation problems the soil board will provide advice on and assistance for drought preparation and management.

It is essential to develop sound recommendations for drought management in the District Soil Conservation Plan. This will involve stressing the use of land within its capability, sound farm business planning and the adoption of conservation farming technology.



Draa affected farmlands near Loxton in October 1976.

Milestone for soil board

A major milestone was reached by the Murray Mallee District Soil Conservation Board last Wednesday when its 150th meeting was held at Loxton.

To mark the occasion, former members and board secretaries were invited to a dinner at the Loxton Hotel that night.

Prior to its meeting, the board met with Loxton vegetable grower Robert Haby on his property to discuss land man-

agement issues associated with irrigated crops.

Representatives of the River Murray Water Resources Committee were also involved in the talks with Mr Haby.

Soil board chairman John Berger said some interesting and useful information was gained during those talks.

Leon Stasinowsky, chairman of the Loxton Waikerie Animal and Plant Control Board, and Des Schliebs, the board secretary, attended part of the soil board meeting.

Weeds and vermin issues were discussed along with soil conservation management on land adjoining roads.

Mr Berger said strong winds late in May created many drift problems along roadsides in the soil board district.

"Landowners need to be reminded of their obligations to prevent soil erosion and also to repair damage on adjoining land at their cost," said Mr Berger.

"This is part of the Soil Conservation and Landcare Act."

The board resolved to keep councils and animal and plant control boards informed where landowners are required to remedy soil conservation problems.

The soil board's CARE program, jointly managed with the Murray Plains and the Coorong district soil boards, was discussed and activities reported on.

Later this year the Murray Mallee board is hosting a tour of that region by the Eastern Eyre, Central Eyre and West Broughton soil boards.

First meeting in 1948

The first meeting of the Murray Mallee Soil Conservation Board was held on April 15, 1948.

Herb Petras and Geoff Blacket, who were at the public meeting in Karoonda in 1947 when the board was proclaimed, attended the dinner to mark the 150th meeting of the board.

Both expressed a fear that the pressures on farmers to increase production were endangering long term soil conservation.

Mr Blacket said he could not see that the current landcare thrust was any different than the previous activities of the board.

Mr Petras recalled the embarrassment of members when landowners failed to honour their commitments previously agreed to, and the board was unable to take action because the old soil conservation act lacked teeth.

Other former members at the dinner included Merv Droegemuller, Vic Altmann, Vic Henschke, Dick Jacka, Ken Jaeschke and Jack Schubert.



At the dinner to mark the 150th Murray Mallee Soil Board meeting were (from left) Mike Kluge, of Claypans, Herb Petras, of Karoonda, Jenny Roberts, of Karoonda, current chairman John Berger and Geoff Blacket, of Karoonda. Both Mr Kluge and Mr Petras are former chairmen of the soil board.

Mr Henschke mentioned that he had used a bulldozer to level a very large sandhill on his property in 1959, much to the concern of the local council, soil board and other local farmers.

Apologies were received from a number of former members because of other commitments, while both Jack Meissner a former chairman and the longest serving board member, and Doug Fulton, another past chairman, could not attend because of illness.

Roger Wickes, sustainable resources manager with the Department of Primary Indus-

tries, spoke at the dinner on the board's history.

Mr Wickes commented on some of the more notable members, their service and achievements.

He outlined some of the difficulties encountered by the board and the positive activities to overcome land degradation.

Bill Davies, Warwick Hack, Richard Wood, Andy McCord and Geoff Thomas, all former board secretaries, also attended the dinner.

Tributes were paid about the contributions many of those involved had made, with land

management practices pioneered in many instances.

Mr Thomas expressed the opinion that South Australia has the best soil conservation system and that the Mallee board was the best of the best.

Mr Berger said involvement with the board carries a lot of responsibility, but members gain from the experience.

He said the boards had provided community leadership and described those who had been involved as the statesmen of soil conservation.

Support for dust comments

Support has been expressed for comments made by Murray Mallee Soil Conservation Board chairman John Berger about farming practices which lead to dust problems.

Brown's Well Council chairman Ken Griffiths agrees with the views expressed by Mr Berger.

A farmer at Alawoona, Mr Griffiths said over cultivation creates the problem.

Mr Griffiths said some farmers can prepare their land without creating a situation that can lead to soil movement.

He said that in addition to dust, there is also the problem of sand drift onto roads.

"There is an inconsiderate attitude by some farmers towards road reserves and their neighbours' fences," he added.

Mr Griffiths was also critical of Primary Industries SA, saying that the department should have been showing the way many years ago in sustainable farming practices for Mallee farmers.

"Instead, they closed the Wanbi agricultural centre and sold it.

"That centre should have been used as a demonstration model for farming practices in the Northern Mallee.

"However, a lot of local farmers did not share my views at the time and probably still don't," he added.

Regional agronomist Richard Wood said efforts are being made to overcome the situation which prompted Mr Berger's comments.

Mr Wood said that while some farmers will not change, others are adopting new techniques

"Many farmers are interested in changing and the Mallee sustainable farming project momentum has been maintained," said Mr Wood.

"Bare fallowing techniques are generally looked at as being unsustainable.

"Only a reasonable wind is needed to move top soil, which means nutrients are lost from paddocks."

Mr Wood said people have accepted that loss for years.

"However, over the last decade it has been realised that losses have been more serious in wind erosion

situations, with important nutrients lost from the top soil."

He said changes need to be economically sustainable to be effective.

"The costs of farming have to be kept in view, in regard to any proposed changes.

"Improvements in techniques mean that farmers can operate profitably without bare fallow."

Mr Wood said communities today are generally less tolerant to dust storms than once was the case.

He said the Northern Mallee climate is a factor that farmers must take into account.

"This is a marginal area where farmers have shown a great deal of management skill in view of the rainfall vagaries they have to contend with."

Mr Wood said the Mallee sustainable farming project, under way in three states, is aimed at increasing the adoption of more profitable, productive and sustainable farming systems in low rainfall cropping areas.

Departments of agriculture in SA, NSW and Victoria are involved along with the Grains Research and Development Corporation and CSIRO.

The Loxton News, Wednesday, April 23, 1997