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Agriculture in South Australia—The Lower South-East

DEPARTMENT OF AGRICULTURE, SOUTH AUSTRALIA

LEAFLET No. 3788B

AGRICULTURE IN SOUTH AUSTRALIA

The Lower South-East

By **R. C. HAGERSTROM,** District Agricultural Adviser

Typical South-East gum country.

The South-East corner of South Australia has been divided into three counties that encompass about 3,746,000 acres. These counties, Grey, Robe and Macdonnell each abut on to the Victorian border in the east and are bounded by the South Australian coastline in the west.

Within the counties, seven main ranges of low hills run in a N.N.W. to S.S.E. direction and these are interspersed with flats. An organized drainage scheme has helped increase agricultural production on these flats, where previously, the areas were constantly inundated during the winter. Towards the coast the country is undulating, but the remainder of the district is mainly flat.

Reprint from the Journal of Agriculture, S.A. (February 1965) **68:** 200-14.

Natural vegetation was somewhat variable; the plains in the south were treeless but were well covered with white tussock and wallaby grass. Further northwards, this flattish country becomes open tree plains with red gums, blue gums and swamp gums together with native grasses.

In addition in the central parts, the vegetation was yacca and honeysuckle, but on the deep sands of the ranges stringy bark eucalypts predominated, with some manna and pink gums together with bracken fern.

South Australia generally experiences a mediterranean climate, with the main rainfall occurring in the winter followed by summer drought. This is typical of the South-East except that the rainfall is higher than in most of the State, varying between 20in. and to more than 30in. a year.

Seven main soil types are found; of these the black flats, terra rossas, volcanic soils and the coastal sands are alkaline in reaction—the remainder are acidic.

Exceptionally big flows of water come from underground sources in most parts of the district and these are usually of good quality. Because of this, dams are not used.

Livestock enterprises include sheep for wool (Corriedales and Merinos), prime lambs from crossbred ewes, dairying, beef cattle (Herefords, Aberdeen-Angus and Shorthorns), pigs and poultry.

Stock diseases are more prevalent than in other districts of South Australia, and need careful management to control.

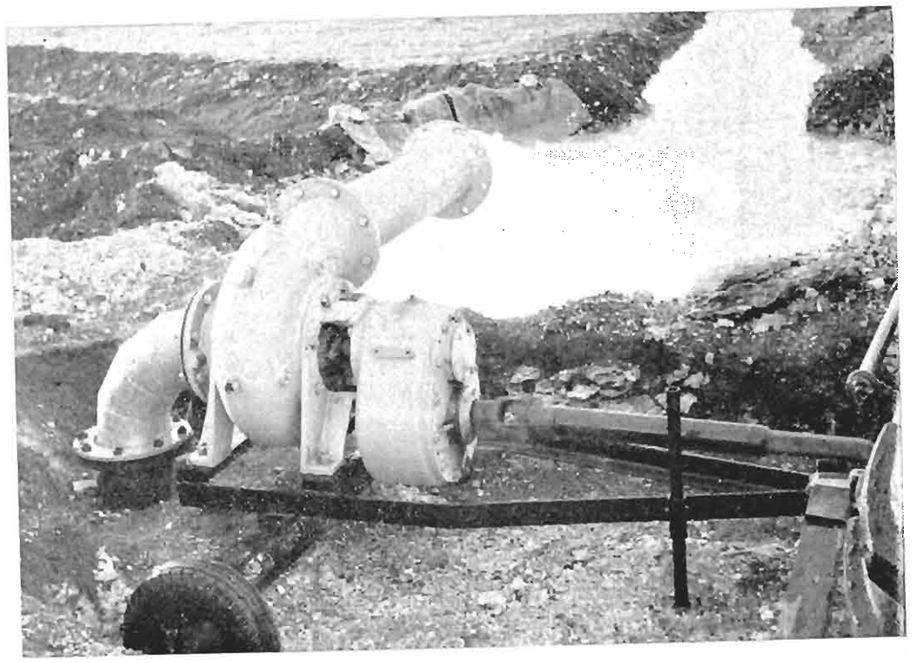
To support this livestock industry, the typical annual and perennial pasture species sown over most of southern Australia are used. Reference to the zone tables gives more precise indication of the distribution of these species.

Insect pests are mainly confined to pastures, and weed infestations are common throughout the area.

In addition to livestock, crops such as cereals, potatoes, pasture for seed, and

Typical natural vegetation in the Bangham scrub.

Deep sands at Glencoe, north-west of Mount Gambier. This paddock has been prepared for sowing to Lucerne/Phalaris tuberosa pasture.



Large underground supplies of good quality water are available in many parts of the district. Irrigation with this water has increased pasture production, helped special crops and has been the basis of a growing pasture seed industry.

vines are grown in specific parts of the district. Pine trees also play a very important part in local production.

NUMBER AND SIZE OF FARMS IN THE PERIOD 1953-1962.

Although the number of holdings in *County Grey* has decreased by 71, the number of acres brought into production has increased by 122,000 and at the same time the average farm size has also increased by 82 acres.

This is mainly due to the need for larger, more economical units, and the situation is being met by farmers buying parts of other properties. The pressure for land has increased to the extent where many farmers sell small properties to buy larger farms elsewhere.

Individual holdings in this county vary considerably in size. The smallest are a few acres where the owners run cows, pigs, or poultry, and have a full-time occupation in a nearby town; the largest farms are located near the western coast—they range up to 5,000 acres and are used for sheep/beef cattle production. The average farm is about 620 acres and owners run sheep, beef dairy cattle, and some pigs; they also crop some cereals.

In *County Macdonnell* the number of holdings has increased by 201 and the area developed by 191,000 acres; but the average farm size has decreased, this time by 720 acres—more land has been developed and larger properties have been split up for closer settlement. Farmers here run mainly sheep (wool production), beef cattle and dairy cattle. It is also the most important cereal growing area in the Lower South-East.

In *County Robe* holding numbers have increased by 149 and a further 90,000 acres have been developed. The average farm size has decreased by 94 acres. Once again this is due to a combination of new development and breaking up of large properties.

When the figures from the three counties are combined, we find that in this 10-year period the number of holdings has increased by 279, the area developed by 402,500 acres and the average farm size has decreased by 39 acres.

TOTAL PRODUCTION AND AVERAGE YIELDS IN THE 10-YEAR PERIOD.

Pastures.

The area under pasture is increasing rapidly each year—this is readily seen when referring to Table 2, which shows the area of pastures topdressed annually. In County Robe, topdressing has increased at the rate of 21,100 acres a year, in County Macdonnell 18,600 acres and in County Grey 13,700—a total annual increase of 53,400 acres in the 10-year period. This area now represents 42 per cent of the State's topdressed pastures (1 per cent higher than in 1952-53).

These big increases have followed farmers' recognition of the need to promote better pasture growth by topdressing with superphosphate and trace

Strawberry clover is particularly well suited to many parts of the South-East

Woolled sheep and prime lambs have both played an important part in the build-up of the district's sheep population.

elements; there has also been a recognition of the need for better management in the use of the additional stock feed produced. More intensive farming and land development have also been contributing factors.

Following the increase in area top-dressed, fertilizers used on pastures rose from 51,000 tons in 1952-53 to 84,000 tons in 1961-62.

Average fertilizer dressing per acre at the beginning of the period was 119 lb. but by 1961-62 it had risen to 126 lb.

Sheep.

(*a*) *Numbers*

More than 20 per cent of the State's total sheep population is now found in the Lower South-East, but in 1952-53 it was only 16 per cent. The greatest increase in numbers occurred in Counties Robe and Grey; on the other hand, the greatest percentage increase took place in County Macdonnell; here numbers have more than doubled.

These increases have been possible through increased development, better pastures, fertilizer practices and management, as well as higher wool prices.

Prime lamb production has also played an important part in the build-up of the sheep population, especially in County Grey.

(*b*) *Wool Clip.*

Of the State's total wool clip, 15 per cent was produced in the district in 1952-53—by 1961-62 it had risen to 19.6 per cent. However, because prime lambs and short-wool breeds have formed a high proportion of the increase in numbers, the wool weight per sheep has decreased slightly.

With the increase in numbers, there has been an annual gain of 16 million lb. of wool, with the largest increase in County Grey (6.3 million lb.) followed by County Robe (6.2 million lb.) and County Macdonnell (3.5 million lb.).

Cattle.

(*a*) *Beef*

The three Counties now support more than 39 per cent of the State's beef cattle population; this is in marked contrast to the 23 per cent in 1952-53. To reach this level, cattle numbers have almost trebled from 53,000 to 153,000. Good markets, new land development and ability to grow good quality beef as an adjunct to sheep production have been big factors in this expansion.

The biggest increases in the beef cattle population have occurred in Counties Grey and Robe, but as with sheep, the biggest percentage increase has been in County Macdonnell; here the increase has been almost four-fold during the period in question.

(*b*) *Dairy*

Of the State's total dairy cattle numbers, 22.6 per cent are located in this district compared with 20.7 per cent in 1952-53. Numbers have increased somewhat in Counties Robe and Grey, but there has been a bigger lift in County Macdonnell.

The present numbers of dairy cattle have merely kept pace with the demand created by human population expansion. Production in excess of local whole milk requirements is used by dairy products industries to supply Australian and overseas markets.

Pigs.

Pig numbers have more than trebled in the 10-year period, and we find that the greatest increases have occurred in Counties Grey and Robe. On the other hand there has been a twenty-fold increase in County Macdonnell.

These animals are usually raised in conjunction with dairying because of the ready availability of whey and other feed.

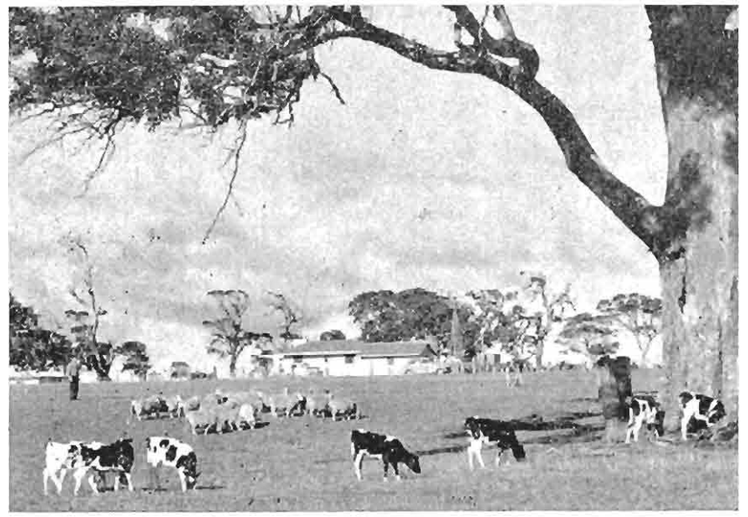
Potatoes.

Although potatoes still remain an important industry, the area sown decreased from 3,530 acres in 1952-53 to 867 acres in 1961-62—these are 38 per cent and 16 per cent respectively of the total area sown in South Australia. However, due to irrigation, correct fertilizing, better seed and pest control yields per acre have increased from 4.6 tons to 8.6 tons.

County Grey is the largest producer of this crop but a limited amount comes from County Robe as well.

Cereals.

Cereals are of minor importance compared with the State's production even though they are an essential part of agricultural practices within the district.



A mixed dairy and sheep farm.

(*a*) *Wheat*

Wheat represents less than 1 per cent of the State's total production.

Overall, the acreage has almost doubled and yields have been influenced mainly by seasonal conditions rather than varietal differences. County Macdonnell continues to be the biggest wheat producer followed by Counties Robe and Grey.

Harvesting oats—cereals from this area form only a small part of the State's total production, but oats particularly are an essential part of agricultural practices in the district.

(*b*) *Oats*

County Robe produces more oats than County Macdonnell, and County Grey trails behind. Once again, yields per acre have made little change but overall production has increased by about 50 per cent.

(*c*) *Barley*

Acreages of barley have decreased slightly—generally in favour of oats. On a State basis, the districts proportion has dropped from 0.9 per cent to 0.7 per cent.

The main drop has occurred in County Grey; County Macdonnell has also decreased, but a slight increase has occurred in County Robe.

Poultry.

No statistics of poultry production are available, but numbers have increased markedly in all three Counties during the period under consideration.

Pasture Seed.

Pasture seed production has become important in the district. After World War II, subterranean clover seed production largely shifted from the Adelaide Hills to the South-East; strawberry clover, Phalaris tuberosa and lucerne were harvested in considerable quantities as well.

While prices remained high during the 1940's and early 1950's, pasture seed was produced as a sideline to livestock. But later, prices and unfavourable seasons depressed the industry.

However, more recently, the industry has been revived by specialization which has been assisted by irrigation. The range of seed crops has now been extended; they include eight varieties of subterranean clover, barrel medic 173, harbinger medic, two varieties of strawberry clover, Ladino white clover, three varieties of lucerne, two of Phalaris tuberosa, Currie cocksfoot and Demeter fescue.

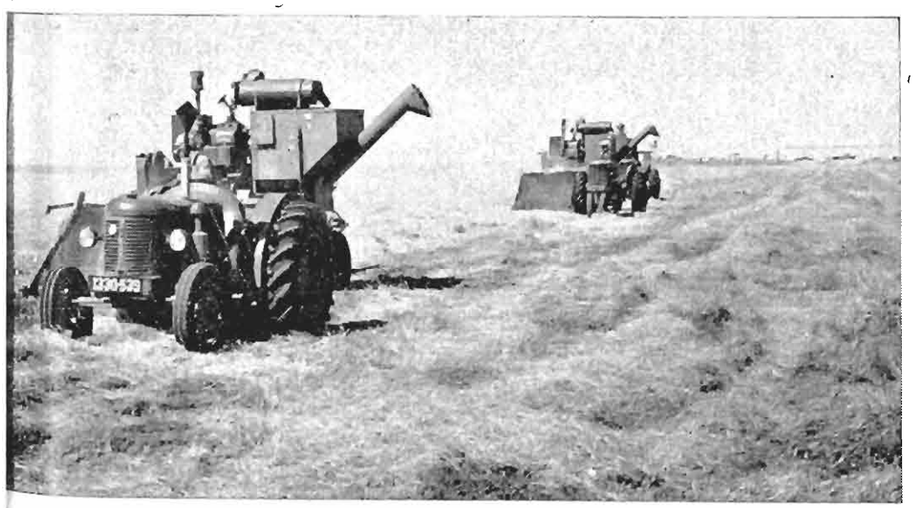
Grapes and other Minor Crops.

The area of vines decreased by more than 25 per cent in the 10-year period. However, flax production, which was commenced during World War II, has now been abandoned. Other crops of minor importance grown in the district include chicory, chou moellier, linseed and mustard.

Pine and Fish Production.

Because of an increasing demand for soft wood throughout Australia, and because pine cultivation is suited to this area, more than 120,000 acres of these trees have been planted in Counties Grey and Robe. Pine production makes a major contribution to the economy of the district.

The same applies to an active local fishing industry.

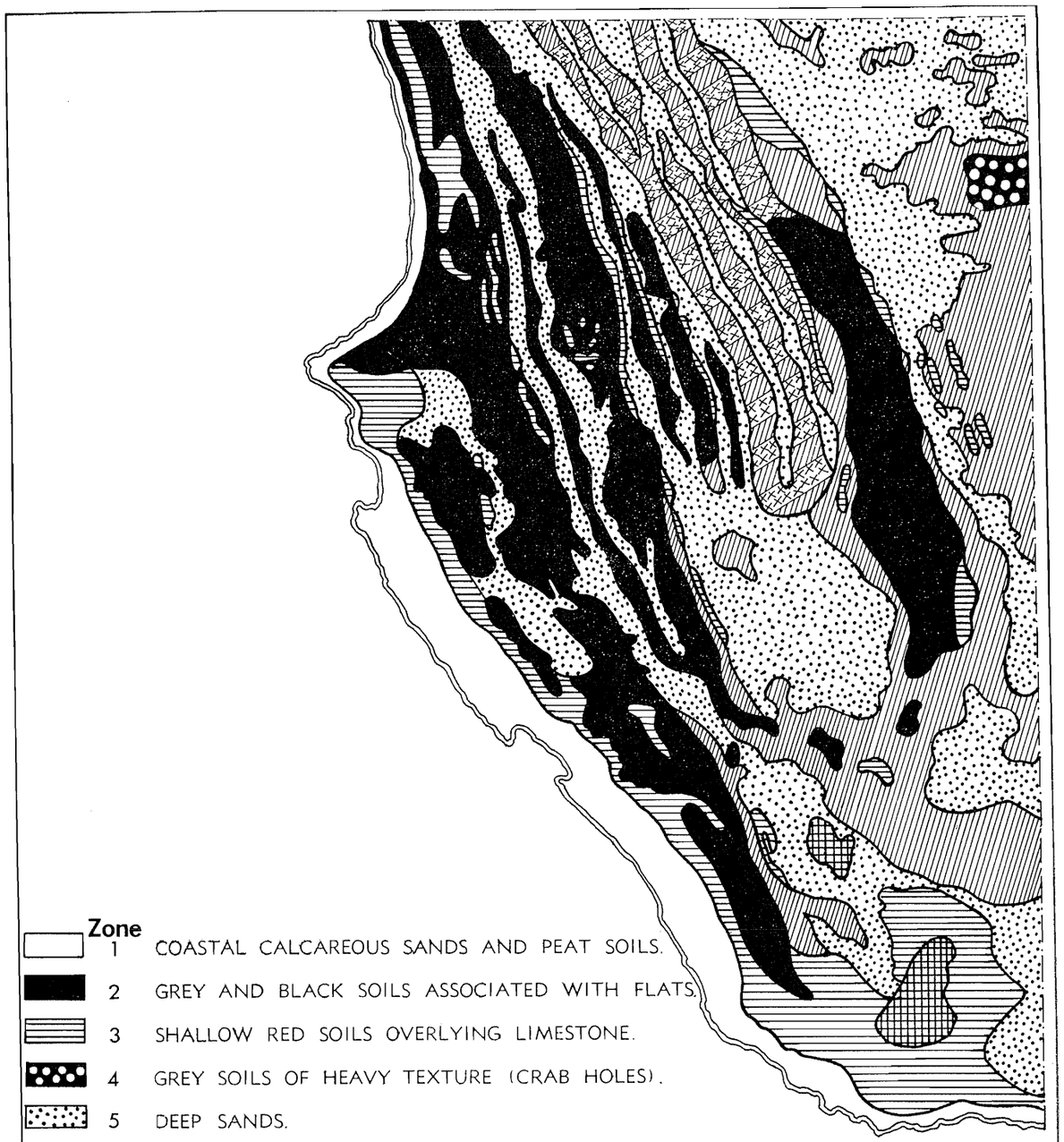


Harvesting strawberry clover seed—production of pasture seed is a rapidly growing industry. Growers are attempting to meet demands for annual medics and subterranean clovers, lucerne, Phalaris tuberosa and Currie cocksfoot.

Vines at Coonawarra.

Pine production is an important industry in the Lower South-East

Map 1. LAND USE — LOWER SOUTH-EAST



Zone

1 COASTAL CALCAREOUS SANDS AND PEAT SOILS.

2 GREY AND BLACK SOILS ASSOCIATED WITH FLATS.

3 SHALLOW RED SOILS OVERLYING LIMESTONE.

4 GREY SOILS OF HEAVY TEXTURE (CRAB HOLES).

5 DEEP SANDS.

6 GREY AND BROWN SANDY LOAMS ASSOCIATED WITH GUM COUNTRY.

7 SANDY SOILS ASSOCIATED WITH FLATS.

8 VOLCANIC SOILS.

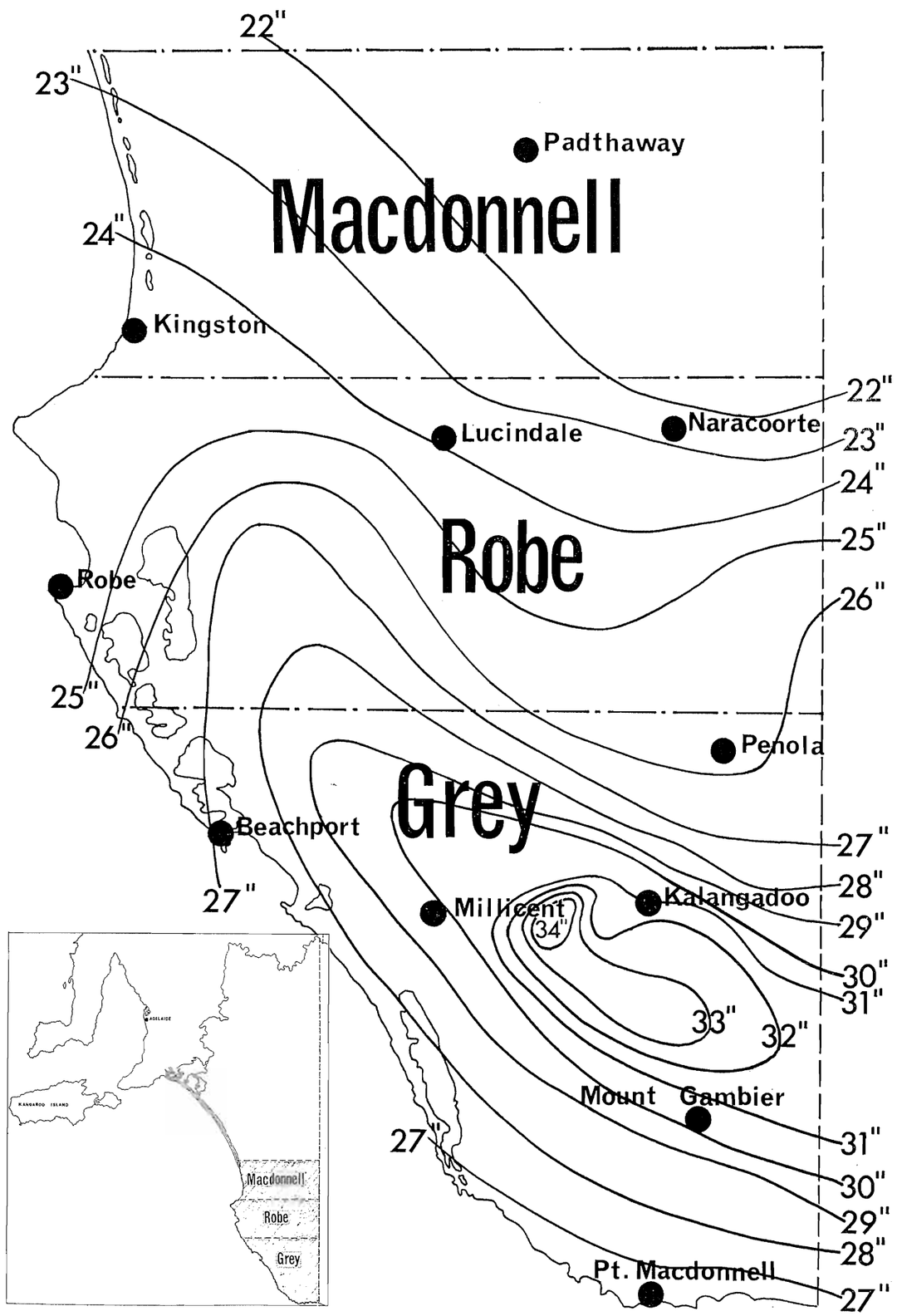


Table 1—HOLDINGS

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
COUNTY GREY										
Number of holdings	1,997	2,007	2.174	2,004	1,966	1,950	1,958	1,945	1,922	1,926
Total area (acres)	1,070,800	1,062,108	1,189,662	1,130,498	1,125,053	1,134,472	1,148,099	1,166,833	1,180,828	1,192,392
Average size (acres)	537	530	547	565	568	582	587	599	619	619
COUNTY MACDONNELL										
Number of holdings	338	349	474	461	465	496	514	524	538	539
Total area (acres)	982,373	948,129	1,176,656	1,094,297	1,093,146	1,114,231	1,116,633	1,113,544	1,154,611	1,173,535
Average size (acres)	2,900	2,717	2,482	2,375	2,345	2,245	2,168	2,125	2,145	2,180
COUNTY ROBE										
Number of holdings	846	870	956	891	890	906	935	962	980	995
Total area (acres)	1,046,166	1,021,734	1,102,648	1,041,187	1,061,776	1,077,076	1,092,648	1,116,632	1,134,932	1,135,971
Average size (acres)	1,236	1,175	1,152	1,168	1,194	1,175	1,168	1,161	1,158	1,142
TOTAL 3 COUNTIES										
Number of holdings	3,181	3,226	3,604	3,356	3,321	3,352	3,407	3,431	3,440	3,460
Total area (acres)	3,099,339	3,031 971	3,468,966	3,265,982	3,279,975	3,325,779	3,357,380	3,397,009	3,470,371	3,501,898
Average size (acres)	974	940	962	973	987	992	985	991	1,018	1,013

Table 1a—GENERAL See Tables 1 and 10

Zone	Rainfall	Soils	Water Supplies	Size of Farms	Value of Farms
1	28in. in South to 23in. in North	Coastal calcareous sands and peat soils	Generally reliable. Supplied from bores 10ft. to 100ft.	80 to 4,000 acres average. 80 acres of peat soils used for dairying, 4,000 acres of coastal sands used for grazing	£120 per acre for peats, £12 per acre for coastal sands.
2	27in. in South to 22in. in North	Grey and black soils associated with flats	Excellent, and of good quality. Bore depths from surface to 30ft.	Average 600 acres for sheep-cattle-cereal farms	£90 per acre for well maintained properties carrying sheep, beef or dairy cattle, small seeds production and cropping.
3	27in. in South to 22in. in North	Shallow red soils overlying limestone	Good quality, and excellent supplies. Bores from surface to 30ft. in depth	700 acres average for sheep and cereals, 50 acres on vineyards, 500 acres in Keppoch area	£45 to £55 per acre for grazing and cropping, with some higher in Padthaway-Keppoch area where lucerne seed production is a major enterprise. Values higher still at Coonawarra on vineyard areas.
4	20in.	Soils of heavy texture (crabholes)	Excellent quality. Bores to 40ft. deep	800 acres average	£35 to £45 per acre for grazing and cropping. A limited area only.
5	28in in South to 20in. in North	Deep sands	Good quality and quantities available from bores ranging between 30ft. to over 50ft. deep	1,500 acres average	£25 to £35 per acre for fully developed sheep, beef cattle farms.
6	31in. in South to 20in. in North	Grey and brown sandy loams associated with gum country	Bores range in depth from surface to 50ft. Excellent quality and quantities available	1,000 acres average	£40 to £60 per acre for sheep, beef or dairy cattle and potato growing farms. Lower values where swamps predominate.
7	25in. in South to 20in. in North	Sandy soils associated with flats	Bores supply variable quality water at depths of 20ft. to over 50ft.	1,200 acres average	£35 to £60 per acre depending on soil type and pastures. Some areas liable to salt damage realise lower price.
8	29in. to 34in.	Volcanic soils	As for Zone 5	20 acres to 200 acres—average 100 acres	Up to £120 per acre for fully developed dairy farms with £90 per acre as a fair average price.

Table 1b—TYPE OF PRODUCTION

Zone	Crops	Fertilizers	Pastures	Special Crops	Livestock
1	Wheat, oats, barley and potatoes	Superphosphate, up to 2 bags per acre initially, cutting down to 1½ cwt. on coast sand after a few years. Trace elements needed, also potash	Lucerne, phalaris, perennial ryegrass, barrel medic, cocksfoot, some sub-clover (Mount Barker) Strawberry clover, white clover	Small area planted to chicory, potatoes, summer fodder crops each year, especially on peats. Some pine trees on coastal sands	Dairying, sheep, beef cattle, pigs and poultry.
2	Wheat, oats and barley	Superphosphate up to 2 bags initially, then 1 bag per acre. Trace elements with crops and on pastures	Strawberry clover, perennial ryegrass, phalaris, some cocksfoot	Strawberry clover, phalaris and perennial ryegrass for irrigated and dryland seed production. Summer fodder crops	Sheep, beef cattle, dairying, few pigs and poultry.
3	Wheat, oats and barley	Superphosphate 1 bag per acre, also trace elements and potash under heavy production	Lucerne, phalaris, Mount Barker sub-clover, perennial ryegrass, wimmera ryegrass, some cocksfoot	Summer fodder crops, lucerne for seed production in Keppoch-Padthaway district	Sheep, beef cattle dairying, few pigs and poultry.
4	Wheat, oats and barley	Superphosphate 1 bag per acre, plus trace elements	Mount Barker sub-clover, phalaris and wimmera ryegrass	Summer fodder crops	Sheep, beef cattle.
	Oats	2 bags of superphosphate per acre initially, then down to ¾, plus trace elements and potash *	Lucerne, phalaris, Mount Barker sub-clover, some cocksfoot	Pine trees in Counties Grey and Robe	Sheep, beef cattle, some pigs.
6	Oats, barley and potatoes	1 bag of superphosphate per acre plus trace elements	Mount Barker and Yarloop sub-clover, perennial ryegrass, phalaris, some lucerne	Potatoes in County Grey, irrigated seed crops and summer fodder crops	Sheep, dairying, beef cattle, pigs and poultry.
7	As for Zone 2 on similar soils	1 bag of superphosphate per acre initially, then ¾ bag maintenance dressing	Yarloop sub-clover, strawberry clover, wimmera ryegrass	Summer fodder crops	Sheep, beef cattle.
8	Wheat, oats and barley	1 bag of superphosphate as maintenance, trace elements and potash	Mount Barker sub-clover perennial ryegrass, lucerne, phalaris	Summer fodder crops, some potatoes, onions, pine trees	Dairy cattle, sheep, pigs, and poultry, few beef cattle.

* Lime is essential for legume establishment.

Table 1c—PROBLEMS

Zone	Weeds	Insects (Crops and Pastures)	Insects (Seed Crops)	Trace Elements
1	Horehound, geranium capeweed, onionweed, cape tulip, buchan weed, thistles, false caper, dock, with swamp nettle on peats	Red legged earth mite, lucerne flea, pasture cockchafer, pink cutworm, snails, barley grubs	As for pastures	14 lb. of copper and zinc, 4 oz. of cobalt initially on pastures. 28 lb. of manganese on crops. 28 lb. of iron sulphate on pastures and crops in areas of known or suspected iron deficiency.
2	Onion weed, barley grass, buchan weed, thistles, salvation jane, dock, geranium	Red legged earth mite, lucerne flea, pasture cockchafer, oncopera, pink cutworm, barley grub, snails, crickets (in some years)	As for pastures, plus heliothis, and coleophora	7 lb. copper, 7 lb. zinc, initially, on pastures. 1 cwt. iron sulphate on both crops and pastures in areas of known or suspected deficiency. Manganese sulphate at 14 lb. per acre will lift crop yields.
3	Horehound, onion weed, capeweed, cape tulip, barley grass, buchan weed, thistles, salvation jane, soursob, geranium	Red legged earth mite, lucerne flea, pasture cockchafer, curl grubs, philobota, pink cutworm, barley grub	As for pastures, plus heliothis and etiella	As for Zone 2, excluding iron sulphate.
4	Capeweed, barley grass, geranium, thistles, salvation jane, soursob, dock	Red legged earth mite, lucerne flea, barley grub	As for pastures, plus heliothis, and etiella	7 lb. zinc with cereal crops.
5	Capeweed, barley grass, geranium, thistles	Red legged earth mite, lucerne flea, cockchafer, curl grubs, oncopera, pink cutworm, barley grub	As for pastures, plus heliothis, etiella, and coleophora	7 lb. copper, 7 lb. zinc, 4 oz. cobalt, 2 oz. molybdenum, initially on new legume-based pastures.
6	Capeweed, geranium, barley grass, cape tulip, thistles, dock	Red legged earth mite, lucerne flea, pasture cockchafer, curl grubs, oncopera, barley grubs	As for pastures, plus heliothis, etiella and coleophora	Nil east of Naracoorte Range. 7 lb. copper, 7 lb. zinc may be necessary in Mingbool-Kalangadoo region.
7	Barley grass, capeweed, geranium, buchan weed, thistles, salvation jane, dock	Red legged earth mite, lucerne flea, pasture cockchafer, curl grubs, pink cutworm, barley grub	—	As for Zone 2.
8	Horehound, onionweed, capeweed, cape tulip, barley grass, geranium, thistles, salvation jane, buchan weed, soursob, dock	Red legged earth mite, lucerne flea, pasture cockchafer, curl grubs, philobota, pink cutworm, barley grub	As for pastures, plus heliothis	As for Zone 3.

Table 1d—POTENTIAL FOR INCREASED PRODUCTION

Zone	Increased Production	Alternate Land Use
1	Perennial pastures, based on lucerne and phalaris offer the best chance of raising carrying capacity on the coastal sands. Seeding to this mixture is expensive, so a small area only should be tackled each year, with special emphasis on correct fertilizing, seeding and insect pest control. Standing oats also has a place. On the peaty soils, renovation with a rotary hoe, periodic cropping and better fertilizing will lift production.	There is no scope for alternate land use on the coastal sands However, on the peats, market gardening could become more important as the demand created by an expanding population increases.
2	Better use of trace elements, and weedicides, greater sowings of newer perennial pastures, or periodic cropping to cash in on the built up fertility could all become valuable aids to existing farming practices.	Intensified small seed production or market gardening could be suitable, especially under irrigation. Registered cereal seed production to meet local demand.
3	Trace elements, insect pest control, and weedicides, plus the greater use of potash and perennial pastures would lift soil fertility and hence production, and help to even out the seasonal production troughs. Greater use could also be made of silage as a fodder conservation method. Standing oats useage also has a place.	Small seed production, under irrigation, would be possible over a large percentage of the area. Another alternative would be in the production of registered cereal seed for local distribution.
4	Use of better annual legume species would lift fertility. Insect pest control to allow better seed setting would also raise fertility.	There seems to be no suitable alternate land use available in this area.
5	The majority of the area is gradually being taken over for pine tree production, and fertilizers would materially help growth rates. For farming, perennial pastures based on lucerne and a perennial grass offer the best methods of increasing production, providing attention is given to the techniques and practices as outlined for Zone 3. Some sub-division on bigger properties would allow better stock and pasture management.	Pine tree production and a limited amount of irrigated small seed production offer the best alternate systems of land use.
6	Use of nitrogenous fertilizer on pure grass seed crops, potash on pastures and the use of more insecticides and weedicides would lift production of the Zone. Trace elements useage seems to have been neglected on many farms, and seedbed preparation is not adequate.	Irrigated small seed production and some areas of registered cereal seed for local sale would offer suitable alternatives.
7	Increased drainage, more salt tolerant species, and use of dry stock rather than wet would increase production. Sub-division of large paddocks would also be an added aid to stock and pasture management.	There is a small scope for dryland small seed production of the salt tolerant species for local and export markets. If dairying was to become more profitable, a small increase could be expected, but only on the better type soils and pastures.
8	Better use of superphosphate, trace elements, potash, insect pest and weed control, plus the sowing of more perennial pastures based on lucerne could give a big lift to production in this Zone. The co-operative use of machinery would overcome the risks of over-capitalisation on many small properties. Standing oats and the use of silage could help materially.	Market gardening and a small amount of specialized small seed cropping are suitable alternate land uses available.

Table 2—TOPDRESSED PASTURES

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
					COUNTY GREY					
Area (acres)	425,029	456,327	524,039	508,552	523,436	547,362	564,036	510,759	576,547	562,192
Fertilizers (tons)	22,461	23,479	27,922	28,351	29,840	32,685	34,251	29,765	34,140	32,634
					COUNTY MACDONNELL					
Area (acres)	181,358	179,231	263,233	299,263	300,532	324,601	339,058	316,165	310,392	367,969
Fertilizers (tons)	9,418	9,761	15,065	17,693	17,796	19,008	19,673	17,864	17,540	19,766
					COUNTY ROBE					
Area (acres)	356,500	398,739	467,847	476,713	473,269	522,124	523,823	528,645	557,863	567,231
Fertilizers (tons)	19,122	21,805	25,666	28,431	29,618	32,119	31,374	30,499	33,169	31,717
					TOTAL 3 COUNTIES					
Area (acres)	962,887	1,034,297	1,255,119	1,284,528	1,297,237	1,394,087	1,426,917	1,355,569	1,444,802	1,497,392
Fertilizers (tons)	51,001	55,045	68,653	74,475	77,254	83,812	85,298	78,128	84,849	84,117

Table 3—SHEEP AND WOOL

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
					COUNTY GREY					
Sheep Numbers	853,922	919,607	1,058,025	1,034,892	1,157,598	1,431,323	1,288,928	1,222,110	1,273,609	1,365,012
Sheep and Lambs shorn	925,950	986,731	1,123,097	1,133,883	1,217,785	1,436,655	1,472,050	1,421,162	1,391,907	1,505,553
Woo lclip (lb.)	9,448,728	8,489,899	10,543,348	10,961,576	12,540,952	13,635,685	13,329,306	14,370,011	14,504,727	15,753,540
Wool clip/head (lb.)	10·2	8·6	9·4	9·7	10·3	9·5	9·1	10·1	10·4	10·5
Percentage lambs marked	79·31	84·00	83·93	83·83	87·50	81·23	84·68	84·92	86·56	86·94
					COUNTY MACDONNELL					
Sheep Numbers	352,814	374,547	481,380	491,339	549,322	625,155	660,841	554,442	622,456	690,838
Sheep and Lambs shorn	396,104	426,811	513,407	526,187	590,699	654,126	687,800	682,201	639,542	734,743
Wool clip (lb.)	4,139,801	3,856,641	5,120,720	5,251,320	6,143,833	6,320,386	6,364,141	6,677,716	6,436,662	7,620,059
Wool clip/head (lb.)	10·5	9·0	10·0	10·0	10·4	9·7	9·3	9·8	10·1	10·4
Percentage lambs marked	80·73	82·28	82·75	83·59	84·57	80·15	82·30	77·32	83·64	79·29
					COUNTY ROBE					
Sheep Numbers	692,619	743,612	851,100	842,157	931,803	1,118,438	1,089,045	1,038,470	1,157,039	1,260,643
Sheep and Lambs shorn	741,490	781,736	883,815	864,432	949,730	1,104,591	1,171,383	1,190,016	1,170,268	1,334,054
Wool clip (lb.)	8,030,245	7,092,548	8,596,374	8,859,647	10,434,053	10,966,213	11,241,212	12,456,597	12,418,614	14,297,815
Wool clip/head (lb.)	10·8	9·1	9·7	10·3	11·0	9·9	9·6	10·5	10·6	10·7
Percentage ambs marked	77·38	82·46	81·22	82·62	84·64	78·62	82·34	81·65	84·98	83·20

Table 3—SHEEP NUMBERS, WOOL CLIP (TOTAL PER HEAD), LAMBING PERCENTAGE—*continued*

	1952–53	1953–54	1954–55	1955–56	1956–57	1957–58	1958–59	1959–60	1960–61	1961–62
					TOTAL 3 COUNTIES					
Sheep Numbers	1,899,355	2,037,766	2,390,505	2,368,388	2,638,723	3,174,916	3,038,814	2,815,022	3,053,104	3,316,493
Sheep and Lambs shorn	2,063,544	2,195,278	2,520,319	2,524,502	2,758,214	3,195,372	3,331,233	3,293,379	3,201,717	3,574,350
Wool clip (lb.)	21,618,774	19,439,088	24,260,442	25,072,543	29,118,838	30,922,284	30,934,659	33,504,324	33,360,003	37 671,414
Wool clip/head (lb.)	10·6	8·9	9·6	9·9	10·5	9·7	9·3	10·2	10·4	10·5

Table 4—BEEF AND DAIRY CATTLE

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
					COUNTY GREY					
Beef	34,731	38,740	46,208	44,872	52,445	60,983	55,885	43,824	63,341	85,965
Dairy	41,660	43,091	47,103	42,463	42,975	43,309	40,730	39,561	41,431	45,350
Total	76,391	81,831	93,311	87,335	95,420	104,292	96,615	83,385	104,772	131,315
					COUNTY MACDONNELL					
Beef	4,761	5,720	8,899	11,955	14,456	13,290	13,155	8,580	13,775	20,404
Dairy	2,697	3,031	3,712	3,222	3,372	3,563	3,790	3,529	4,060	5,074
Total	7,458	8,751	12,611	15,177	17,828	16,853	16,945	12,109	17,835	25.478
					COUNTY ROBE					
Beef	14,099	15,820	18,744	23,598	28,277	30,966	29,012	20,323	35,064	46,743
Dairy	7,733	8,769	10,359	9,872	10,174	9,643	9,221	9,276	9,519	11,500
Total	21,832	24,589	29,103	33,470	38,451	40,609	38,233	29,599	44,583	58,243
					TOTAL 3 COUNTIES					
Beef	53,591	60,280	73,851	80,425	95,178	105,239	98,052	72,727	112,180	153,112
Dairy	52,090	54,891	61,174	55,557	56,521	56,515	53,741	52,366	55,010	61,924
Total	105 681	115,171	135,025	135,982	151,699	161,754	151,793	125,093	167,190	215,036

Table 5—PIGS

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
					COUNTY GREY					
Number	2,024	2,705	4,757	3,092	3,476	4,652	3,269	4,003	5,850	6,919
					COUNTY MACDONNELL					
Number	54	98	569	296	503	649	731	629	1,117	1,301
					COUNTY ROBE					
Number	583	571	1,288	990	1,247	1,503	1,136	1,202	2,079	2,862
					TOTAL 3 COUNTIES					
Number	2,661	3,374	6,614	4,378	5,226	6,804	5,136	5,834	9,046	11,082

Table 6—POTATOES

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
					COUNTY GREY					
Acreage	3,460	2,517	1,942	1,533	1,453	1,652	1,658	1,358	945	861
Total yield (tons)	16,127	12,302	9,463	8,070	10,664	12,669	11,484	10,258	6,337	7,394
Average yield (tons per acre)	4·7	4·9	4·9	5·4	7·3	7·7	6·9	7·6	6·4	8·6
					COUNTY MACDONNELL					
Acreage	10	1	1	14	—	—	3	—	11	1
Total yield (tons)	2	3	—	50	—	—	10	—	100	4
Average yield (tons per acre)	0·2	3·0	—	3·6	—	—	3·3	—	9·1	4·0
					COUNTY ROBE					
Acreage	60	64	41	21	9	11	9	29	8	5
Total yield (tons)	200	413	259	89	26	34	20	196	27	23
Average yield (tons per acre)	3·3	6·5	6·3	4·2	2·9	3·1	2·2	6·7	3·4	4·6
					TOTAL 3 COUNTIES					
Acreage	3,530	2,582	1,984	1,568	1,462	1,663	1,670	1,387	964	867
Total yield (tons)	16,329	12,718	9,722	8,209	10,690	12,703	11,514	10,454	6,464	7,421
Average yield (tons per acre)	4·6	4·9	4·9	5·2	7·3	7·6	6·9	7·5	6·7	8·6

Table 7—WHEAT

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
					COUNTY GREY					
Acres	584	770	676	461	499	584	583	705	1,417	3,119
Total yield (bushels)	16,692	26,388	19,465	10,674	14,197	18,753	15,699	14,706	41,073	50,010
Yield (bushels/acre)	28·58	34·27	28·79	23·15	28·45	32·11	26·93	20·86	28·99	16·03
					COUNTY MACDONNELL					
Acres	6,131	7,265	6,790	3,787	2,788	2,029	2,943	3,899	6,076	10,606
Total yield (bushels)	122,144	165,263	161,830	90,230	25,514	43,775	76,878	53,514	110,775	208,782
Yield (bushels/acre)	19·92	21·67	23·83	23·83	9·15	21·57	26·12	13·73	18·23	19·69
					COUNTY ROBE					
Acres	3,080	2,840	2,743	1,938	726	816	1,039	1,888	3,105	4,545
Total yield (bushels)	59,391	58,194	55,938	32,664	12,336	19,679	20,583	22,989	68,322	81,729
Yield (bushels/acre)	19·28	20·49	20·39	16·85	16·99	24·12	19·81	12·18	22·00	17·98
					TOTAL 3 COUNTIES					
Acres	9,795	10,875	10,209	6,186	4,013	3,429	4,565	6,492	10,598	18,270
Total yield (bushels)	198,227	249,845	237,233	133,568	52,047	82,207	113,160	91,209	220,170	340,521
Yield (bushels/acee)	20·25	23·0	23·24	21·58	12·73	23·90	24·81	12·46	20·90	18·65

Table 8—OATS

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
					COUNTY GREY					
Acres	1,166	633	1,170	1,244	634	973	1,011	906	1,325	1,406
Total yield (bushels)	32,900	17,103	17,417	29,856	18,028	25,228	30,163	9,260	38,620	23,523
Yield (bushels/acre)	28·22	27·02	14·89	24·00	28·44	25·93	29·83	10·22	29·15	16·73
					COUNTY MACDONNELL					
Acres	4,185	3,102	4,655	6,412	4,504	5,556	7,384	5,950	7,009	5,100
Total yield (bushels)	84,521	63,528	109,059	138,756	62,578	160,581	220,485	88,893	136,807	105,917
Yield (bushels/acre)	20·20	20·48	23·43	21·64	15·44	28·90	29·86	14·94	19·52	20·77
					COUNTY ROBE					
Acres	3,568	2,334	3,562	5,195	3,146	4,698	5,681	5,672	6,412	5,516
Total yield (bushels)	54,530	42,759	94,768	111,663	62,153	135,953	171,620	100,527	152,782	134,226
Yield (bushels/acre)	15·28	18·32	26·61	21·49	19·76	28·94	30·21	17·72	23·83	24·33
					TOTAL 3 COUNTIES					
Acres	8,919	6,069	9,387	12,851	7,834	11,227	14,076	12,528	14,746	12,022
Total yield (bushels)	171,951	123,390	221,244	280,275	142,759	321,762	422,268	198,680	328,209	263,666
Yield (bushels/acre)	19·28	20·33	23·57	21·82	18·22	28·61	30·06	15·86	22·28	21·87

Table 9—2 ROW AND 6 ROW BARLEY

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
					COUNTY GREY					
Acres	3,327	4,275	1,975	1,214	1,434	1,691	1,845	2,298	2,944	1,968
Total yield (bushels)	88,981	158,162	51,381	33,295	53,292	62,290	61,230	55,420	81,918	47,036
Yield (bushels/acre)	26·75	36·99	26·02	27·43	37·16	36·84	33·19	24·12	27·83	23·90
					COUNTY MACDONNELL					
Acres	5,028	5,127	4,091	2,654	1,918	1,718	2,253	4,039	5,791	3,779
Total yield (bushels)	118,300	94,734	98,672	66,774	24,977	50,078	51,514	47,008	99,303	76,346
Yield (bushels/acre)	23·53	18·48	24·12	25·16	13·02	29·15	22·86	11·64	17·15	22·20
					COUNTY ROBE					
Acres	1,694	2,452	3,905	1,211	1,291	1,450	931	2,602	2,534	3,704
Total yield (bushels)	37,645	37,532	33,103	22,963	19,079	35,047	18,792	30,062	40,547	57,114
Yield (bushels/acre)	22·22	15·31	15·81	18·96	14·78	24·17	20·18	11·55	16·00	15·42
					TOTAL 3 COUNTIES					
Acres	10,049	11,854	9,971	5,079	4,643	4,859	5,029	8,939	11,269	9,451
Total yield (bushels)	244,926	290,428	183,156	123,032	97,348	147,415	131,536	132,490	221,768	180,496
Yield (bushels/acre)	24·38	24·57	18·38	24·58	20·97	30·32	26·25	14·66	19·66	19·12

Table 10—RAINFALL (inches)

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
					COUNTY GREY					
April-November	28·18	26·66	22·49	33·12	31·20	19·85	28·92	12·38	27·42	18·16
Year	33·93	29·62	26·28	35·99	35·06	24·00	30·94	19·16	35·25	20·45
					COUNTY MACDONNELL					
April-November	21·55	22·00	14·43	21·88	24·54	13·23	21·90	8·06	21·17	13·58
Year	26·91	24·25	18·10	24·70	28·06	16·23	23·01	14·08	26·73	16·83
					COUNTY ROBE					
April-November	24·85	24·44	16·31	24·93	25·77	14·66	24·56	9·80	22·88	14·66
Year	30·11	26·86	20·09	27·66	29·87	18·37	25·86	17·61	28·79	18·11

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