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AGRICULTURE IN SOUTH AUSTRALIA

Lower and Eastern Eyre Peninsula



DEPARTMENT OF AGRICULTURE, SOUTH AUSTRALIA

AGRICULTURE IN SOUTH AUSTRALIA Lower and Eastern Eyre Peninsula

By K. G. Bicknell, District Agricultural Adviser.

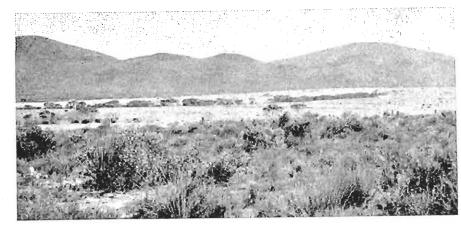
THIS district takes in the Counties of Flinders in the south, Buxton in the north, with Jervois and Musgrave stretching from Spencer Gulf to the West Coast.

There are several ranges of hills in the district—the Koppio hills extending from Port Lincoln to Ungarra; Marble Range in the western part of County Flinders; and the Cleve-Cowell-Mangalo Hills as well as Darke Peak in County Jervois. Numerous peaks are scattered through the district and are designated "Mounts." They range in height from 500ft. to 1,625ft.

Large areas are taken up by salt lakes in the Counties of Musgrave and Flinders.

In the Koppio Hills the natural timber is woodland sugar gum with bottle brush, heath and acacia. Throughout the limestone areas (Table 1A, Soils) isolated red gums are growing, but it was originally wooded with sheoaks and is now denuded of most vegetation. On the remainder of the district, natural vegetation consists of mallee eucalypts, broom bush with shrubs and grasses.

The eastern slopes of hills near Edillilie (County Flinders) carrying malleeheath vegetation.





Sugar gums (Eucalyptus cladocalyx) and yaccas (Xanthorrhea tateana) are the most conspicuous features of the natural scrub in the Wanilla district (County Flinders).



White mallee (E. brachycalyx) and porcupine gross (Triodia sp.) occur on the sandier soils in 12-16in, rainfall of eastern Eyre Peninsula.

Main Towns

In County Flinders, the three main towns are Port Lincoln, the largest on the Peninsula, Tumby Bay and Cummins.

Kimba, in County Buxton, serves a large farming community in the northern part of the district.

County Jervois has Cleve as its main centre, and in addition, the three coastal towns of Cowell, Arno Bay and Port Neill.

Lock, an inland town, and Elliston, a west coast port, are the centres that serve County Musgrave.

Transport

Four modes of transport—road, rail, sea and air—serve Eyre Peninsula; each plays a vital part in carrying farm produce and other commodities.

This dam near Kimba (County Buxton) typifies the mode of water storage in the more northern areas.

The railway is unique; it serves the being rainfall. This varies from 11 Peninsula only, and is not connected to the main State network. The termin. als are at Port Lincoln in the south and Ceduna in the far west.

Port Lincoln is also the main ship. ping port and has facilities for bulk loading grain. In the near future bulk grain storage will be increased to 2.800.000 bushels, making it the largest in South Australia. The port also has modern equipment to handle "roll onroll off" cargoes.

on the east and west coasts, while When the soil is replenished in this way regular air services to many of the towns give a means of fast transport to and from Adelaide.

Water

In the early days of development, the only source of reticulated water was from the Tod reservoir; this relied on catchment areas. Later, supplies were augmented from the Uley-Wanilla a trend towards larger holdings; the under-ground water basin, and in the past two years, Lincoln Basin in the south and Polda basin west of Lock have been utilized.

catchments on farms.

Government catchments and storage tanks supplement farm supplies in time of need.

Production

Cereal growing, wheat, barley an oats, and sheep for both wool and prime lambs are the main agricultural enterprises. Small numbers of dairy and bee cattle together with a larger number of pigs are used as sidelines.

Production is limited by several factors, by far the most important the 126,000 acres increase.

inches to 24 inches, but most of the district averages between 12 and 14 inches.

Periodic droughts and drier seasons more or less determine the number of stock that can be carried, especially where reticulated water is not available.

Phosphate and nitrogen deficiencies are next in importance as factors limiting production. During the past ten years, increased use of superphosphate and larger acreages of medics and Small coastal vessels serve the towns | clovers have helped increase soil fertility. and provided rain is not a limiting factor, much higher cereal yields are obtained.

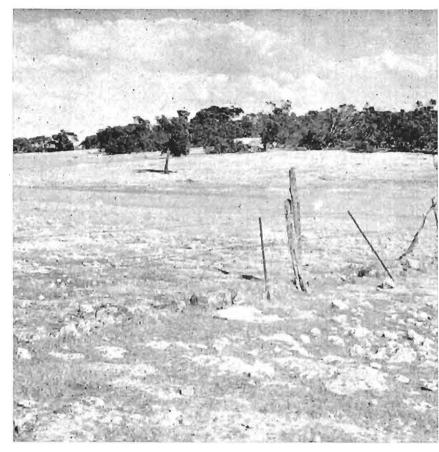
Number and Size of Farms in the Period 1952-53 to 1961-62 (Table I)

In 1952-53, there were 1.909 holdings occupying about 5,000,000 acres. Then the subsequent decade produced number decreased by 261, but the area rose to almost 5,500,000 acres.

During this period, the number of holdings in County Flinders remained All three sources supply water to large | almost static. However, the increase in segments of lower Eyre Peninsula | size of holdings was about 132 acres, and However, the northern areas have no they now vary from 100 acres to 2,000 reticulated water, and rely on surface acres. Cereal sheep farms, which are usually 1,000 to 2,000 acres, account for the majority of holdings.

> County Musgrave had a decrease in the number of holdings—a drop of 51 and the average size increased by 1.350 acres. Property size varies considerably in this County: it contains most of the rough limestone country which does not lend itself to improvement, consequently the area is taken up by sheep grazing properties ranging from 10,000 to 80,000 acres.

> Large areas cleared and brought into production in the southern part of County Musgrave account for most of



Rough limestone country in County Musarave: this class of land is best used for sheep grazing on large holdings.

Land in County Jervois is used mainly for cereal growing and sheep grazing. Here, the holdings decreased by 114 and acreage increased by about 115,600 acres. Average holding size has thus become 623 acres larger.

County Buxton also had a big percentage reduction in number of holdings, there being 96 fewer properties and in all, the producing acreage increased by about 100,000, and the average holding size has risen by almost 2,200 acres.

Size of farms is variable; cereal/sheep farms are 2,000 to 5,000 acres, and the larger properties crop from 1,000 to 1,500 acres annually. There are also some very large grazing properties in this County. Its main production is from cereals and sheep.



More land is cleared in County Jervois to expand the cropping area available on an existing property.

Total Production and Average Yields in the Period 1952-53 to 1961-62.

Cereal growing and sheep for wool give this district the bulk of its production. These are augmented by prime lambs and to a less extent dairy, beef cattle and pigs.

Wheat (Table 2)

The area sown to wheat increased by 63 per cent, most of which has taken place since 1959-60. Even though this rise in acreage gave an overall lift in production, certain unfavourable seasons caused violent depressions in yields.

With the advent of good clover and medic pastures—and hence higher soil fertility—throughout these cereal lands, not only will the troughs in production

tend to be ironed out, but the average will also increase.

The largest increase has taken place in County Jervois.

Barley (Table 3)

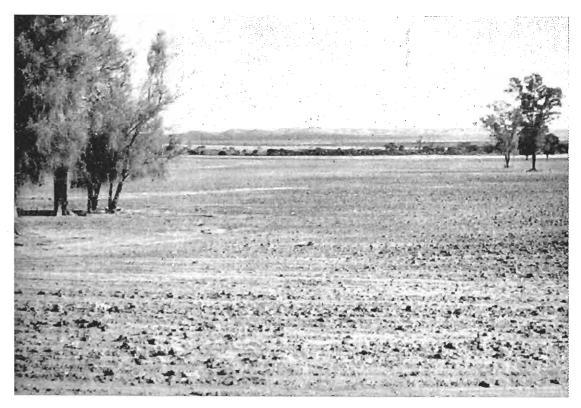
Before 1960-61 barley was the most important crop in Counties Flinders and Musgrave. Following a build-up in soil fertility, wheat is gradually replacing barley in these two Counties. In Counties Jervois and Buxton, barley acreages are well below that of wheat

Oats (Table 4)

Oats are used as a dual purpose crop. Generally, this crop is sown dry on stubble ground for early green feed, then after several grazings it is allowed



Farmers discuss a wheat crop at Buckleboo, County Buxton.



Fertile red land at Cortlinye in County Buxton. The black oak trees on the left are common to the area.

to mature for grain. Consequently yields are generally low.

On the other hand, in years of high rainfall when paddock feed is plentiful, the oat crops are not grazed. As a result, a large surplus of grain over and above the farm requirements is harvested. However, because oats are sown mainly for grazing, the area harvested for grain varies greatly from year to year.

The growing practice of applying higher superphosphate dressings and the use of better varieties are creating an upward trend in yields.

Sheep and Wool (Table 5)

Sheep numbers and wool production have shown a steady increase in the

ten year period. Sheep have increased by more than 30 per cent, and wool production by more than 40 per cent. A significant feature is the steady rise in wool weight per head.

Production and numbers will increase further as more reticulated water becomes available, and more land is sown to clovers.

Cattle (Table 6)

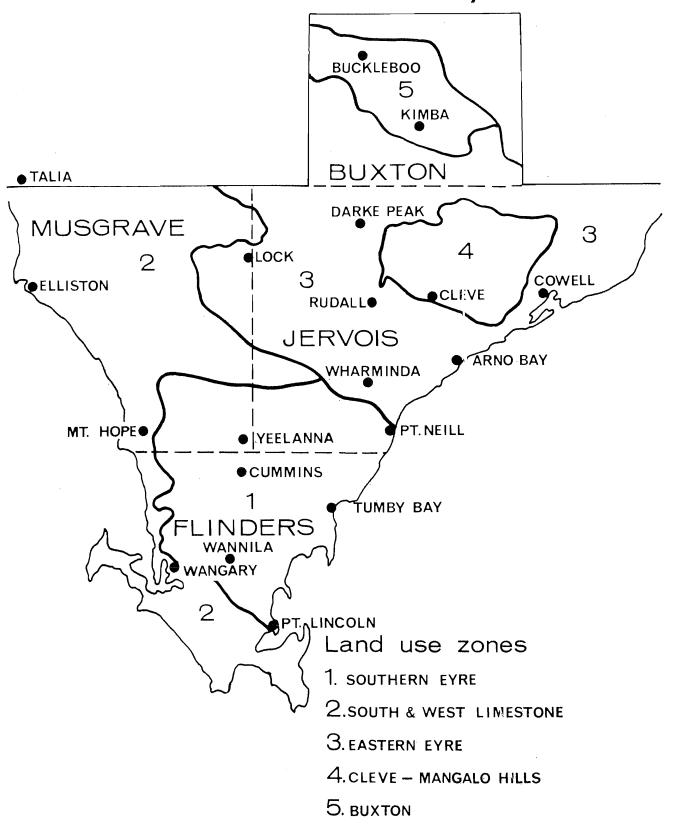
The increase in beef cattle figures is spectacular in all four Counties; the greatest lift took place in the last two years of the period under review.

Dairy cattle figures have fluctuated slightly, but there has been a very slight increase.



Ewes and lambs grazing medic pastures in County Jervois.

Map I. Lower and Eastern Eyre Peninsula



Map 2. Lower and Eastern Eyre Peninsula

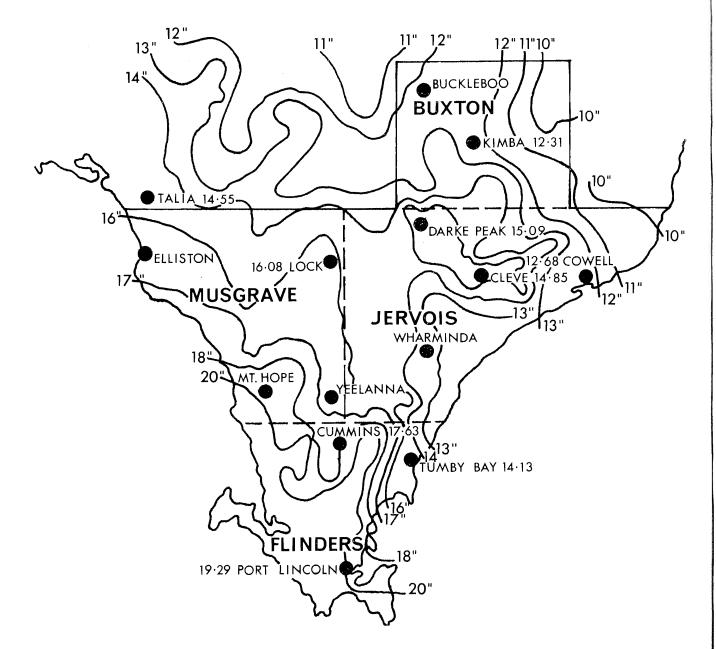


TABLE 1-HOLDINGS

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-6 0	1960-61	1961-62
	·			COUNT	Y FLINDERS					•
Number Acres Average, Acres	1,003,190 1,769	577 1 038,208 1,799	1,091,578 1810	553 1,059,733 1,916	1,048,433 1,927	552 1,072,050 1,942	552 1,073,170 1,944		560 1,073,759 1,917	567 1,078,296 1,901
	,		'	COUNTY	MUSGRAVE	'	,		•	
Number Acres Average, Acres	1,362,882 4,382	313 1,375,228 4,393	270 1,528,334 5,660	276 1,454,329 5,269	264 1,450,245 5,493	263 1,501,346 5,708	256 1,495,304 5,841		260 1,504,515 5,786	260 1,489,668 5,729
		'	'	COUNT	r jervois		'		'	
Number Acres Average, Acres	760 1,909,834 2,512	772 1,935,713 2,507	670 1,897,162 2,831	648 1,901.448 2,934	642 1,910,467 2,975	635 1,961,570 3,089	1,984,983 3,072		2,014,414 3,123	2,025,505 3,135
	, ,	'	'	COUNTY	BUXTON	'	'		1	l
Number Acres Average, Acres	797,160 2,941	248 863,038 3,479	207 920,121 4,445	199 952,954 4 ,788	176 892,341 5,070	171 847,969 4,958	165 898,216 5, 44 3	=	909,559 5,138	175 898,089 5,131

Table 1a—GENERAL

Zone	Rainfall	Soils	Water Supplies	Size of Farms	Value of Farms
1	12 in. east Coast to 24 in. Hills A dinly lateritic podsols, solodized solonetz and red-brown earths. Large areas with ironstone gravel in topsoil. Northern part of zone includes some mallee soils and leached sands.		Reticulated water from Tod Reservoir and Uley basin. Part of south- western and western area relies on under- ground water and dams.	500 to 2,000 acres for cereal sheep farms.	£15 to £45 an acre for cereal sheep farms.
2	14in. in north to 20in. in south.	Mostly rough limestone country with pockets of grey calcareous sands. Small area of light brown mallee soil in north-west corner. Extensive sand dunes along coast.	Reliable underground water supplied from bores and wells. 30 to 40 grains a gallon.	1500 to 3,000 acres for cereal sheep farms. Up to 80,000 acres for sheep grazing properties.	Cereal/sheep farms: £6 to £15 an acre. Grazing properties: 10s, to 20s. an acre.
3	below 14in. clay subsoil, but are generally shallow— mostly solodized solonetz, red-brown earths and mallee soils. Loose surface limestone		Reticulated water in southern part of zone. Remainder unreliable ground catchments. Farmer supplies augmented by Government dams and storages.	2,000 to 5,000 acres for cereal/sheep farms.	Cereal/sheep farms: £10 to £25 an acre.
4	14in. to 16in.	A hilly area with shallow stony red-brown earths, solodized solonetz and some alluvial gullies. Large areas of skeletal stony soils are uncleared.	Generally reliable. Supplied from creeks and dams.	1,500 to 3.000 acres for cereal/sheep farms.	Cereal/sheep farms: £9 to £15 an acre.
5	11in. to 12½in.	Sandy to loamy mallee soils red-brown earths and solodized solonetz.	Farm dams supplemented by Government dams and storages. Supply unreliable.	2,000 to 5,000 acres for cereal sheep farms. Larger holdings for grazing.	Below £10 an acre for grazing properties. Up to £25 an acre for well developed cereal/sheep farms.

Table 1b—TYPE OF PRODUCTION

Zone	Crops	Rotation	Fertilizers	Pastures	Livestock
1	Wheat, barley and oats. Before 1961-62 barley acreage was larger than wheat.	Before 1961-62 barley rotation. Non-arable : 112 to 187 lb. super- acreage was larger annual pastures. Small phosphate an acre a		Dwalganup, Yarloop and Geraldton subterranean clovers with Wimmera rye grass main annual pastures. Small acreage of phalaris and lucerne as perennial pastures. Barrel, barrel 173 and harbinger medics for low rainfall alkaline soils.	Sheep mainly with small numbers of beef cattle, dairy cattle, pigs and poultry.
2	Barley, wheat and oats. Barley and wheat about equal acreage.	Small area of arable land 3 to 4 years rotation.	Cereal areas: 30 lb. to 60 lb. superphosphate an acre a year. Manganese necessary for cereals. Grazing properties not fertilized.	Barrel and barrel 173 medics with Wimmera rye grass main annual pastures on cereal sheep farms. Native pastures on grazing properties.	Mainly sheep with some beef and dairy cattle, pigs and poultry on cereal/sheep farms.
3	Wheat, barley and oats. Wheat acreage three times that o barley.	3 to 4 years cropping rotation. As clover builds fertility a 2 year rotation is applied. Large area of stubble sown dry with oats for feed. Grain harvested in lush seasons.	90 lb. to 187 lb. super- phosphate an acre with cereals, giving a yearly average of 30 lb. to 60 lb. Yearly average is being increased by using superphosphate with oats on stubbles. Nitrogen is of benefit on deep sands.	Small areas suitable to Geraldton. Mainly Barrel, barrel 173 and harbinger medics with Wimmera rye grass. Small areas of lucerne, evening primrose and perennial veldt grass.	Mainly sheep with some beef and dairy cattle, pigs and poultry.
4	Wheat, barley and oats.	3 to 4 year cropping rotation. Stubble sown dry to oats for feed.	90 lb. to 150 lb. super- phosphate an acre with crops. Yearly average 30 lb. to 50 lb. Yearly average being increased with oats on stubbles.	Some areas suitable to Geraldton. Mainly the medics, barrel and barrel 173, with Wimmera rye grass. Big increase in clover sowings in last 3 years.	Similar to zone 3.
5	Wheat, barley and oats. Wheat is the main crop, being more than double that of barley and oats combined.	3 to 4 year cropping rotation; 5 and 6 years on largest properties. Stubbles sown dry to oats for feed. 75 per cent of cropping land is fallowed.	60 lb. to 150 lb. super- phosphate an acre with crops. Yearly average 25 lb. to 70 lb. This is being increased by use of superphosphate on stubble sown oats.	Barrel, barrel 173 and harbinger medics with Wimmera rye grass. Large areas of farming land not sown to clovers. Large increase in clover sowings in the past two years.	Similar to zones 3 and 4.

Table 1c—PROBLEMS

Zone	Weeds	Cereal Diseases	Erosion	Trace Elements	Insects
1	African daisy, salvation jane, soursob and Lincoln weed are widespread. Cape tulip, hoary cress, three corner jack more scattered in some areas. Isolated patches of St. John's wort and onion weed.	Generally a minor problem, but hay-die, rhizoctonia, mildew. Eelworm building to a major problem in certain areas. Small incidence of septoria, leaf bloth and barley yellow dwarf. Jome stem rust of wheat.	Water erosion in the hills and undulating country a major problem. Wind erosion a problem in northern part of zone. Saline areas are increasing each year.	Copper is the most important trace element as is molybdenum for ironstone soils. Manganese required for crops on limestone and ironstone. Cobalt and copper necessary for stock.	Pastures: red-legged earth mite, lucerne flea and cockchafer grubs. Crops: barley grub and cutworm species. Talis grub a problem in some years.
2	African daisy and Lincoln weed are the most important. Boxthorn, onion weed and wild turnip minor problems.	Hay-die, rhizoctonia a problem of the light calcareous soils.	Wind erosion can be a mild problem.	Manganese is the most important trace element for cereals. Copper and zinc necessary on a limited area. Copper and cobalt for stock.	Similar to Zone 1.
3	Wild turnip, saffron thistle and three corner jack can be a problem in crops and sheepweed is spreading rapidly. False caper, Ward's weed, onion weed, soursob and horehound are of some importance.	Hay-die is the main cereal disease; eelworm is increasing on the light sandy soils; rhizoctonia; stem rust of wheat a seasonal problem along the east coast.	Wind erosion always a problem on light soils. These need special care and stock management to keep soil cover. Early sowing of drift areas together with 1cwt. of 3:1 superphosphate/ammonia recommended. Early sowing of all cereals necessary.	No problem at present.	Pastures: red-legged earth mite, lucerne flea, cockchafer in western areas. Crops: talis grub damages wheat crops some years.

Table 1c-PROBLEMS-continued

Zone	Weeds	Cereal Diseases	Erosion	Trace Elements	Insects
4	Saffron thistle, sheep weed, three corner jack, wild turnip.	A minor problem. Some hay-die and rhizoctonia.	Water erosion a major problem. Contour banks necessary to stabilize farm lands. Wind erosion a minor problem.	Similar to Zone 3.	Red-legged earth mite and lucerne flea.
5	Main weeds are saffron thistle, Ward's weed, onion weed and wild turnip. Isolated areas of three corner jack, caltrop and salvation iane.	Hay-die the main disease but not a major problem. Some rhizoctonia and stem rust of wheat.	Wind erosion a major problem on light soils. Water erosion a problem in hilly area.	Similar to Zone 3.	Pastures: red-legged earth mite becoming a major problem. Talis grub damaging wheat crops some years.

Table 1d—POTENTIAL FOR INCREASED PRODUCTION

Zone	Increased Production	Alternate Land Use.
1	The biggest increases in production will come from increased soil fertility over the whole district. Better use of annual legumes—Dwalganup and Yarloop subterranean clovers, barrel and barrel 173 medics—will give big lift in output. In higher rainfall areas, perennial grasses phalaris and Currie cocksfoot can be used to greater benefit. Aerial topdressing pasturing to legumes and use of standing oats will increase production on rough hill country.	Much of the higher rainfall area now being cropped is better suited to perennial pastures with a change-over to prime lamb raising.
2	Except in the rough limestone country that occupies most of this zone, large increases in soil fertility are possible using the recommended annual legumes, in particular barrel medic and barrel medic 173. Increased superphosphate dressing will greatly increase soil fertility. Higher crop yields possible with manganese.	In the light of present knowledge, cropping and sheep grazing are the most suitable enterprises.
3	There is a big potential for increased soil fertility in this zone by using the recommended medics barrel, barrel 173 and harbinger. Top dressing of pastures in between crops will give better legume growth. As fertility increases cropping rotation can be shortened to 2 or 3 years.	Similar to Zone 2.
4	As for Zone 3 using barrel medic and barrel medic 173. Low phosphate level must be corrected to increase legume growth and fertility build-up. A reliable and adequate water supply would increase production in many districts of this zone.	Similar to Zone 2.
5	Annual medics, better phosphate levels and more reliable stock water would increase cereal production and sheep numbers.	Similar to Zone 2.

Table 2—WHEAT

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
				COUNTY	FLINDERS					
Acres Yield, Bushels Yield, Bushels/Acre	41,54 1,021,43 24.59		52,290 1,093,373 20.91	51,213 1,066,299 20.82	34,321 724,978 21.12	34,096 387,817 11.37	43,823 1,216,680 27.76	49,307 346,887 7 .04	58,596 1,535,640 26.21	73,541 1,331,736 18.11
				COUNTY	MUSGRAV	E				
Acres Yield, Bushels Y.eld, Bushels/Acre	38,09 734,88 19.29		39,828 792,574 18.32	38,672 709,347 18.34	31,693 450,984 14.23	28,269 372,750 13.19	32,571 775,578 23.81	41,567 352,305 8.48	46,225 1,045,896 22.63	54,530 775,452 14.22
				COUNT	TY JERVOIS					
Acre s Yield, Bushels Yield, Bushels/Acre	157,66 2,801,68 17.77		183,339 2,762,708 15.07	179,753 2,989,706 16.63	169,149 2,63 0 ,747 15.55	150,396 1,203,735 8.0	169,282 3,848,175 22.73	193,692 1,223,463 6.32	220,170 4,598,394 2 0. 89	252,211 2,934,909 11.64
				COUNTY	BUXTON					
Acres Yield, Bushels Yield, Bushel: Acre	50,79 881,15 17.35		59,790 718,299 12.01	61,017 1,174,257 19.24	62,789 1,255,922 20.00	61,836 328,350 5.31	62,820 1 568,115 24.96	74,595 483,321 6.48	81,691 1,828,944 22.39	88,898 1,214,238 13.66
				WHOLE	DISTRICT					
Acres Yield, Bushels Yield, Bushels/Acre	288,11 5,439,16 18,87		335,247 5,366,954 16.01	330,655 5,939,609 17.96	297,952 5,062,631 16.99	274,597 2,292,652 8,35	308,496 7,408,548 24.02	359,151 2,405,976 6.72	406,692 9,008,874 22.15	469,180 6,256, 3 35 13.34

Table 3—2 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	FLINDERS	'	,	'		
Acres Yield, Bushels Yield, Bushels/Acre	52,023 1,560,014 29.99	59,690 1,694,805 28.39	59,595 1,231,501 20.66	57,357 1,454,793 25.36	53,451 1,084,380 20.29	53,978 812,751 15.06	69,617 2,080,888 29.89	68,953 864,463 12.54	82,226 2,310,183 28.10	72,465 1,415,014 19.53
				COUNTY	MUSGRAVE					
Acres Yield, Bushels Yield, Bushels/Acre	31,003 790,626 25.50	36,588 1,037,477 28.35	36,650 619,349 16.90	36,394 865,488 23.78	38,952 731,888 18.79	40,524 751,358 18.54	42,858 1,203,397 28.08	41,560 454,726 10.94	52,196 1,526,993 29.25	48,074 872,964 18.16
				COUNT	Y JERVOIS					
Acres Yield, Bushels Yield, Bushels/Acre	47,393 1,048,011 22.11	63,144 1,545,698 24.48	51,517 706,917 13.72	55,081 1,199,002 21.77	72,080 1,300,024 18.04	77,851 780,181 10.02	86,885 2,323,104 26.74	77,566 638,279 8.23	97,677 2,389,034 24.46	70,364 1,041,651 14.80
				COUN	TY BUXTON	1				
Acres Yield, Bushels Yield, Bushels/Acre	8,639 162,516 18.81	12,768 227,177 17.79	10,102 62,322 6.17	12,150 261,834 21.55	13,211 261,296 19.78	14,823 64,112 4.33	16,703 471,917 28.25	14,895 104,514 7.02	21,438 522,681 24.38	12,428 159,006 12.79
				WHOLE	DISTRICT					
Acres Yield, Bushels Yield, Bushels/Acre	139,058 3,561,167 25.61	172,190 4,505,257 26.16	157,864 2,620,089 16.59	160,982 3,781,117 23.49	177,694 3,377,588 19.01	187,176 2,408,402 12.87	216,063 6,079,306 28.14	202,974 2,061,982 10.16	253,537 6,747,891 26.62	203,331 3,488,635 17.16

Table 4—OATS (FOR GRAIN)

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
				COUNT	flinders		1			
Acres Yield, Bushels Yield, Bushels/Acre	21,798 504,683 24.53	19,716 437,868 22.21	20,770 374,028 18.01	22,399 447,864 19,99	17,353 276,762 15.95	22,211 206,583 9.30	27,370 761,822 27.83	23,613 219,693 9.30	23,637 540,143 22.85	14,898 286,288 19,22
				COUNTY	MUSGRAVE					
Acres Yield, Bushels Yield, Bushels/Acre	11,838 217,519 18.37	8,790 146,115 16.62	8,672 101,129 11.66	11,361 197,910 17.42	11,326 154,568 13.65	12,405 92,989 7.50	12,157 278,617 22.92	14,778 72,430 4.90	12,048 263,297 21.85	7,604 100,428 13.21
				COUNT	/ JERVOIS					
Acres Yield, Bushels Yield, Bushels/Acre	44,036 661,032 15.01	34,845 531,039 15.24	37,882 347,456 9.17	41,055 585,653 14.27	47,376 698,220 14.74	47,389 166,034 3.50	45,202 999,067 22.10	47,693 168,416 3.53	40,648 855,221 21.04	25,00 274,36 10.97
				COUNTY	BUXTON					
Acres Yield, Bushels Yield, Bushels/Acre	11 716 169,018 14.43	8,625 104,232 12.08	12,112 72,546 5.99	20,379 348,447 17.10	20,676 346,180 16.74	22,767 24,503 1.08	14,598 326,894 22.39	21,219 36,101 1.70	17,345 352,978 20.35	8,01 93,54 11.68
				WHOLE	DISTRICT					
Acres Yield, Bushels Yield, Bushels/Acre	89,388 1,552,252 17.36	71,976 1,219,254 16.94	81,436 898,159 11.03	95,194 1,579,874 16.59	96,731 1,475,730 15,26	104,772 490,109 4.68	99,327 2,366,400 23.82	106,601 496,640 4.66	93,678 2,011,639 21.47	55,52 754,61 13.59

Table 5—SHEEP AND WOOL

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
				COUNTY	FLINDERS		'			
Sheep Number Sheep and Lambs Shorn Wool (Ib.) Wool/Head (Ib.)	393,528 435,665 4,562,614 10.47	397,417 456,065 4,533,991 9.94	451,545 491,852 5,116,477 10.40	472,291 525,673 5,746,123 10.93	491,468 542,055 5,942,082 10.96	481,617 555,353 5,109,792 9.20	491,012 533,185 5,414,363 10.15	450,731 544,384 5,591,017 10.27	486,050 510,997 5,719 310 11.19	542,303 586,916 6,671,858 11.37
				COUNTY	MUSGRAVE	<u> </u>				
Sheep Number Sheep and Lambs Shorn Wool (ib.) Wool/Head (lb.)	252,793 271,590 2,738,712 10.08	256,343 270,727 2,532,378 9.35	253,882 293,896 2,849,534 9,70	255,740 274,988 2,751,507 10.01	286,246 298,901 3,139,824 10.50	295,101 322,477 2,980,704 9.24	293,755 324,339 3,117,333 9.61	261,076 317,030 3,164,363 9,98	267,255 272,843 2,716,971 9,96	296,876 323,907 3,470,732 10.72

Table 5—SHEEP AND WOOL—continued

	1952–53	1953-54	1954–55	1955–56	1956–57	1957–58	1958–59	1959–60	1960–61	1961–62
				COUNT	Y JERVOIS	'	•	,		
Sheep Number Sheep and Lambs Shorn Wool (lb.) Wool/Head (lb.)	390,087 433,997 4,563,195 10.51	390,142 443,978 4,389,243 9.89	409,570 461,528 4,650,925 10.08	419,704 484,047 5,295,112 10.94	450,801 508,000 5,481,618 10.79	444,288 531,326 5,178,068 9.75	489,155 519,986 5,504,428 10.59	436,624 566,906 6,074,128 10.71	467,868 487,281 5,168,036 10.61	511,238 567,100 6,234,960 11.00
				COUNTY	BUXTON					
Sheep Number Sheep and Lambs Shorn Wool (Ib.) Wool/Head (Ib.)	125,606 127,863 1,370,660 10.72	117,794 125,721 1,284,192 10.21	124,815 129,960 1,308,821 10.07	133,429 138,109 1,485,161 10.75	150,197 148,191 1,702,475 11.49	135,234 164,895 1,701,268 10.32	156,156 151,972 1,618,332 10.65	151,277 172,394 1,937,034 11.24	150,052 157,113 1,703,035 10.84	166,734 178,569 1,989,633 11.14

INCREASED PRODUCTION

	Sheep No.	Wool (lb.)
Flinders	148,775 38%	2,109,244 46%
Musgrave	43,894 17%	938,354 37%
Jervois	121,151 31%	1,845,717 42%
Buxton	46,940 39%	705,441 55%

Table 6—CATTLE

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62	
				COUNTY	FLINDER\$	'	•				
Beef Dairy	374 2,935	430 2,990	775 3,571	789 3,593	1,070 3,605	1,150 3,554	1,348 3,339	1,268 3,140	1,943 3,156	3,827 3,527	
Total	3,309	3,420	4,346	4,382	4,675	4,704	4,687	4,408	5,099	7,354	
COUNTY MUSGRAVE											
Beef Dairy	1,070	1 144	45 1,176	68 1,094	122 1,191	245 1,107	291 1,051	424 912	683 914	1,160 986	
Total	1,147	1,188	1,221	1,162	1,313	1,352	1,342	1,336	1,597	2,146	
COUNTY JERVOIS											
Beef Dairy	143 3,351	133 -3,501	248 3,649	201 3,433	222 3,565	169 3,310	334 3,160	225 2,858	600 2,907	1,331 3,166	
Total	3,494	3,634	3,897	3,634	3,787	3,479	3,494	3,083	3,507	4,497	
				COUNTY	BUXTON						
Beef Dairy	14 840	15 840	86 878	83 728	136 714	78 683	84 727	92 754	135 689	317 802	
Total	854	855	964	811	850	761	811	846	824	1,119	

DISTRICT INCREASES

Beef	6,027	992%
Dair y	285	3%

Table 7—RAINFALL (INCHES)

		1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
					COUNTY	FLINDERS				-	
April-November Year		18.15 19.77	14.62 17.45	12.99 15. 4 5	18.08 20.90	23.06 25.63	9.68 10.90	15.86 17.65	7.95 10.31	16.06 20.00	13.38 13.88
					COUNTY	MUSGRAVE					
April-November Year		17.17 18.22	14.09 17.27	10.54 12.49	16.81 18,87	23.80 25.53	9.53 10.59	14.77 17.19	6.74 8.63	15.90 19.46	12.80 13.63
					COUNTY	JERVOIS					
April-November Year	1	15.11 16.76	11.41 14.71	10.19 12.47	13.76 16.72	15.92 18.13	6.25 6.67	12.69 15.18	5.32 8.64	13.20 16.60	10,26 11,00
					COUNTY	BUXTON					
April-November Year		14.90 16.49	10.18 13.59	9.29 11.04	13.51 17.37	18,57 21.37	5.46 7.02	12,22 16.11	4.50 8.31	13.38 17.02	10.59 11.05

Table 8-TOPDRESSED PASTURES

	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61	1961-62
				COUNTY	FLINDERS	[
Acres Tons Lb./Acre	151,115 9,004 133	166,745 9,607 129	184.312 10,587 128	184,654 10,682 125	207,533 11,484 123	215,120 12,089 125	167,255 9,374 125	_	128,127 6,358 111	163,460 8,320 114
				COUNTY	MUSGRAVE					*.
Acres Tons Lb./Acre	27,377 1,429 116	32,106 1,634 114	36,905 1,998 121	33,566 1,717 114	41,080 2,110 115	58,444 2,609 99	39,401 2,002 113	_	31,031 1,310 94	33,790 1,446 95
				COUNTY	JERVOIS					
Acres Tons Lb./Acre	24,566 1,115 101	29,838 1,726 129	45,145 1,982 98	50,315 2,345 104	60,845 2,538 93	67,917 3,210 105	56,158 2,430 96	=	32,572 1,394 95	48,796 1,961 89
COUNTY BUXTON										
Acres Tons Lb./Acre	810 21 58	765 30 87	3,699 92 55	4,765 158 74	8,730 241 61	6,725 229 76	3,785 131 77	=	3,555 119 74	8,760 307 78

Crops Manured 1960-61—

County Flinders
County Musgrave
County Jervois
County Buxton
94% of cropped area manured at the rate of 143 lb. per acre.
95% of cropped area manured at the rate of 133 lb. per acre.
95% of cropped area manured at the rate of 115 lb. per acre.
90% of cropped area manured at the rate of 94 lb. per acre.