# CHAPTER XIX. PASTORAL PRODUCTION.

Note.—Values of Australian oversea trade shown throughout this Chapter are expressed as f.o.b. Australian currency, except where otherwise indicated.

### § 1. Initiation and Growth of Pastoral Industry.

- 1. General.—A detailed account of the various enumerations of live stock in Australia made prior to 1860 is given in previous issues of the Year Book. The numbers recorded between 1800 and 1860 are regarded as somewhat defective. Doubtless the growth of population, the expansion in the area settled and the increase in private ownership made it difficult in those early times to secure accurate returns. Since 1860, however, the annual enumerations have been based, with few exceptions, on actual collections made through the agency of the State Police and reliably record the movement in live stock numbers from year to year.
- 2. Live Stock Numbers since 1860.—Particulars concerning the numbers of each of the principal kinds of live stock in Australia at decennial intervals from 1860 to 1930, and from 1939 onwards in single years are given in the following table, and are shown continuously on the graph on page 872.

During the ninety-one years from 1860 to 1951 the live stock of Australia increased considerably, viz.:—Horses, 132 per cent.; cattle, 284 per cent.; sheep, 474 per cent.; and pigs, 223 per cent. The average annual increases which these aggregates represent are as follows:—Horses, 1.03 per cent.; cattle, 1.49 per cent.; sheep, 1.94 per cent.; and pigs, 1.30 per cent.

LIVE STOCK: AUSTRALIA.

					( 000.)			
		Year	r.	i i	Horses.	Cattle.	Sheep.	Pigs.
1860					432	3,958	20,135	351
1870				1	717	4,276	41,594	543
1880				;	1,069	7,527	62,184	816
1890	•	•	• •	•• !	1,522	10,300	97,881	891
1900				•• •	1,610	8,640	70,603	950
1910					2,166	11,745	98,066	1,026
1920				!	2,416	13,500	81,796	764
1930			• •	}	1,793	11,721	110,568	1,072
1939					1,724	12,862	111,058	1,156
1940					1,699	13,080	119,305	1,455
1941				1	1,666	13,256	122,694	1,797
1942		•	• •	• • •	1,611	13,561	125,189	1,415
1943 (	31st I	March	)		1,518	14,005	124,615	1,563
1944	**	**		••	1,449	14,184	123,174	1,747
1945	**	,,		•• '	1,359	14,133	105,371	1,631
1946	**	,,	• •	. !	1,265	13,878	. 96,396	1,426
1947	,,	,,		!	1,195	13,427	95,723	1,273
1948	,,	,,			1,165	13,785	102,559	1,255
1949	,,	,,		• •	1,115	14,124	108,735	1,196
1950	,,	,,			1,057	14,640	112,891	1,123
1951	,,	,,		;	999	15,229	115,596	1,134
				ı		ļ	1	

<sup>3.</sup> Fluctuations.—The increases referred to, however, have not been continuous, marked fluctuations having taken place during the period, mainly on account of droughts which have from time to time left their impress on the pastoral history of Australia. These occurred in 1868, 1877, 1883-4, 1892, 1893, 1895, 1901-2, 1912, 1914, 1918, 1919, 1922-23, 1925-26, 1927-28, 1929-30, 1940-41 and 1944-45 to 1946-47.

The years in which the numbers of live stock attained their maxima are as follows:—Horses, 1918 (2,527,000); cattle, 1951 (15,229,000); sheep, 1942 (125,189,000); and pigs, 1941 (1,797,000).

On pages 905-8 there are graphs which show the distribution throughout Australia of beef cattle, dairy cattle, sheep and pigs as at 31st March, 1948.

- 4. Minor Classes of Live Stock.—Excluding Victoria, where the details are not available, the numbers of minor classes of live stock returned for 1941 were as follows:—Goats, 80,366; camels, 2,267; and mules and donkeys, 10,881. Of these, goats were most numerous in Queensland, and camels, mules and donkeys in Western Australia. In the raising of goats, some attention has been devoted to the angora goat and its product (mohair), and upwards of 5,000 angora goats are included in the number shown above. Of these, 1,640 were in New South Wales, 1,000 in Queensland, 1,531 in South Australia, and 284 in Tasmania. Details for later years were not collected.
- 5. Net Exports of Principal Pastoral Products.—The quantities by which the exports of the principal pastoral products of Australia exceeded the imports for the years 1938-39 and 1946-47 to 1949-50 were as follows:—

Product.	Unit of Quantity.	1938-39.	1946–47.	1947-48.	1948-49.	1949-50.
Animals (living)—	i					
Cattle	No.	405				
Horses		2,294				
Sheep	, ,,,	66,739	79,576	78,836	83,975	
Bones	Cwt.	21,497	14,954	31,433	45,032	27,908
Glue-pieces and Sinews	!,,,	- 11,145	- 1,549	- 5,647		
Glycerine	lb.	78,727	2,411,368	- 14,757		312,401
Hair		-1,003,366				
Hoofs	Cwt.	(a)	7,659		14,643	
Horns	,,	(a)	5,684	9,991	7,412	7,862
Meats—	j	1				
Frozen Beef and Vea		271,948,548	180,338,464			
" Mutton and I		186,487,551				
Rabbits and I		(a)	5,385,354			
,, Other	l lb.	19,588,368				
Potted and Concentr		(a)	1,038,573	1,364,328		
Preserved in Tins, etc		14,778,896	111,547,472	91,410,094	128,820,550	95,580,754
	acon	1	!			
and Ham)		308,448				
Sausage Casings	Cwt.	8,673	8,644	7,308	2,524	17,875
Skins	1				_	
Cattle	No.	(a)	42.067	30,815		
Calf	"	(a)	- 187,325	- 43,756		
Horse	! ,,	(a)	31,577	31,065		47,923
Sheep and Lamb		(a)	20,447,119			
Rabbit	Cwt.	(c) 37,544	118,050	105,333	(c) 87,441	(c) 93,769
Other (including	Un-	·		1	l	ļ
dressed Furs)	No.	(a)		-1,022,321	- 777,932	
Tallow	Cwt.	560,241	(d) 73,744	(d) 87,689	(d) 173,225	(d) 407,723
Wool	l	1 !			_	_
Greasy	lb.	779.781,662	1,014,823,258	764,835,319	976,032,759	1,052,755,607
Scoured, Tops, N	lofis,	70,299,595	190,308,568	162,362,412	155,688,040	161,977,028

NET EXPORTS OF PASTORAL PRODUCTS: AUSTRALIA.

Note.--Minus sign (-) signifies net imports.

The values of the net exports for the same five years are furnished in the next table. For the four years ended 1949-50 they amounted to £959,999,865, or an average of £239,999,966 per annum, of which wool represented 85.0 per cent. Meat, skins and tallow comprise the remaining principal pastoral products exported. Net exports in 1938-39 were valued at £56,290,910 of which wool represented 74.56 per cent.

<sup>(</sup>a) Quantity not available. edible and inedible tallow.

<sup>(</sup>b) Includes chilled beef.

<sup>(</sup>c) Includes hare skins. (c

<sup>(</sup>d) Includes

### VALUE OF NET EXPORTS OF PASTORAL PRODUCTS: AUSTRALIA.

(£.)

			!		!	1	
Product.	_		1938-39.	1946-47.	1947-48.	1948–49.	1949-50.
Animals (living)—						1	
Cattle	• •	• •	989	- 27,970	44,207	- 27,845	- 48,67
Horses Sheep	••	• • •	43,443	-153,076 99,874	- 66,763 127,806	195,742	235,15
oncep	••	••	43,443	99,074	127,000	193,742	1 233,-34
Bones	••		10,909	25,560	42,731	58,260	33,00
Glue-pieces and Sinews		••	- 7,087	_ 2,971	- 11,748	- 10,820	- 40,161
Glycerine			- 1,307	223,162	- 839	- 14,733	17,059
Hair			7,280	-431,424	-420,741	-480,928	-511,089
Hoofs			8,027	12,044	18,700	22,892	10,589
Horns			18,633	14,210	19,867	19,774	20,999
Meats			İ	1		1	
Frozen Beef (a)		• •	4,323,275	4,581,873	6,192,615		6,704,651
" Mutton and La " Rabbits and H		••	4,807,423	4,543,474 660,500	1,865,473	4,222,173	7,452,668
., Other		• • • • • • • • • • • • • • • • • • • •	419,269	591,494	935,421	1,055,289	1,308,003
Potted and Concentrat			- 28,025	313,499	347,102	545,467	369,168
Preserved in Tins, etc. Other (excluding Bacon			493,489	6,826,234 87,420	5,567,429	8,110,397	7,542,565
Sausage Casings		• • • • • • • • • • • • • • • • • • • •	209,280		137,085	342,943 213,396	970,689
Skins-						}	}
Cattle	• •	• •	662,203	-168,110	163,796	1,104,468	1,282,936
Horse	• • •	• • •	7,202	75,681	- 55,970 70,013	123,280	17,353
Sheep and Lamb	••		2,339,703	7,391,639	7,423,025	7,401,022	11,685,123
Rabbit Other (including Undre	essed Fu	rs)	(b) 396,830 -226,376	6,066,800 592,344	3,954,654 -582,045	$(b)_{2,992,027}$ - 49,203	(b) 1,628,203 - 18,314
Fallow			180 711	(c) 355,328	(6) 572 818	(c)1,141,738	(n) 1 868 and
tanow	••	••	460,744	(0) 333,320	(6) 3/2,010	(6)1,141,/30	(0) 1,000,237
Wool— Greasy			36,688,235	96,464,590	117 880 062	194,747,606	264,245,994
Scoured, Tops, etc.	•••	::	5,281,729	29,223,353	29,970,640	35,825,848	47,868,193
Total Values			56,290,910	157,245,963	178,545,644	267,287,274	356,920,984

<sup>(</sup>a) Includes chilled beef.

NOTE.—The minus sign (-) signifies net imports.

6. Value of Pastoral Production.—(i) Gross, Local and Net Values, 1948-49 and 1949-50. Values of pastoral production for each State are shown for 1948-49 and 1949-50 in the following table. Fuller details of the source of the information and an explanation of the terms used in this compilation will be found in Chapter XXIX.—Miscellaneous. Maintenance costs have not been computed in all States and depreciation has not been deducted; consequently the net values are inflated to the extent of these costs.

<sup>(</sup>b) Includes hare skins.

<sup>(</sup>c) Includes edible and inedible tallow.

GROSS, LOCAL AND NET VALUES OF PASTORAL PRODUCTION, 1948-49 AND 1949-50. (£'000.)

			( 20 000.)			
				Farn	n Costs.	
State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Seed used, and Fodder for Farm Stock.	Value of other materials used in process of Production.	Net Value of Production.
		1	948-49.			
New South	!		1			1
Wales	107,706	6,171	101,535	1,273	(b) 516	99,746
Victoria	58,522	4,462		604	1,532	51,924
Queensland	49,308	4,600	44,708	1,800	720	42,188
South Australia	22,819	1,344	21,475	435	472	20,568
Western Aust.	23,127	1,229	21,898	226	870	20,802
Tasmania	6,130	360	5,770	143	'(b) 109	5,518
Total	267,612	18,166	249,446	4,481	4,219	240,746
		T	949-50.			
			949 301			
New South	,					
Wales	155,745	7,668	148,077	1,571	(b) 587	145,919
Victoria	83,453	5,388	78,065	771	2,047	75,247
Queensland South Australia	65,408	6,530	58,878	2,560	1,020	55,298
Western Aust.	29,530	1,643	27,887	544	579	26,764
Tasmania	29,344 8,145	1,497	(c) 27,847 7,688	309 216	(b) 1,095	26,443
j		457			119	7,353
Total	371,625	23,183	348,442	5,971	5,447	337,024

<sup>(</sup>a) No deduction has been made for depreciation and maintenance. (b) No allowances made for costs of power, power kerosene, petrol and other oils. (c) Excludes £23,552,000 comprising an interim distribution of profits under the Wool Disposal Plan.

(ii) Net Values, 1934-35 to 1949-50. The net value of pastoral production by States and the net value per head of population for the years 1945-46 to 1949-50 compared with the average for the years 1934-35 to 1938-39 are shown below.

### NET VALUE OF PASTORAL PRODUCTION.

Year.		N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
			Net	Value.	2)	<u>'                                     </u>		<u></u>
				(£'000.)		<del> </del>		
Average, 1934-	35 to					! !		!
1938–39	• •	30,592	16,784	13,384	4,583	4,307	1,429	71,079
1945-46		34,043	18,098	18,944	6,198	6,804	2,226	86,313
1946-47	٠.	52,666	28,639	26,089	9,585	9,648	3,580	130,20
1947-48	٠.	76,622	41,314	37,614	16,335	16,815	4,348	193,048
1948-49		99,746	51,924	42,188	20,568	20,802	5,518	240,740
1949-50		145,919	75,247	55,298	26,764	26,443	7,353	337,02

<sup>(</sup>a) No deduction has been made for depreciation and maintenance.

Year.

Average, 1934–35 to 1938–

39 ...

1945-46

1946-47

1047-48

1949-50

1948-49 |

11 8

25 9

46

United States of America

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17 15

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O I

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2

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9 | 19 19

7 17 9 6 9 16 5 13 17

4

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N.S.W.	Vic. Qld.		S.A.	W.A.	Тав.	Total.
-	NET VALU		AD OF POI	PULATION.(a)	·	

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NET VALUE OF PASTORAL PRODUCTION—continued.

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33 16

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7. Consumption of Meats.—Particulars of the quantity of meat per head per annum available for civilian consumption in Australia, Canada, the United Kingdom and the United States are given in the following table. Canned and cured meat has been included at its carcass weight equivalent.

The sources of the figures for Canada, the United Kingdom, and the United States of America are Food Balance Sheets published by the Food and Agricultural Organization of the United Nations (April, 1949) for the years 1947-48 to 1949-50 and Food Consumption Levels in the United States of America, Canada and the United Kingdom—Third Report (1946) of a Special Joint Committee set up by the Combined Food Board for the pre-war periods.

The demand for meat during the war years was such as to necessitate the introduction of rationing in order to divert supplies from civilian consumption to the armed services. The rationing of meat (other than bacon and ham, canned meat, sausages and offal) was in operation in Australia from 17th January, 1944 to 21st June, 1948. Details of the ration rates in force over this period are shown in Official Year Book No. 37, p. 858.

QUANTITY OF MEAT (INCLUDING CURED AND CANNED) AND EDIBLE OFFAL AVAILABLE FOR CIVILIAN CONSUMPTION PER HEAD PER ANNUM.

(Ib.—in terms of Carcass Weight.)

Average, Country. 1947-48. 1948-49. 1949-50. Australia... 216.8 228.I (a) 253.0 233.0 Canada (b) 118.4 142.9 . . 134.3 134.5 United Kingdom 102.5 (d)(c) 131.7 86.4

(b)

(a) Average for years 1936-37 to 1938-39. (b) Average for years 1935 to 1939. (c) Average for years 1934 to 1938. (d) Not yet available.

134.1

160.1

154.3

8. Marketing of Meat.—(i) General. The Meat Export Control Act 1935-1946 was introduced following a decision of a conference of Commonwealth and State Ministers with members of the Commonwealth Meat Advisory Committee, held in October, 1935, to set up a Meat Board with defined statutory powers. The Australian Meat Board, which was appointed under the Act in January, 1936, consisted of eighteen members, representative of producers, processors, exporters and the Commonwealth Government. Provision was made for the appointment from within the Board of an Executive Committee and a Beef Committee. The Act provided for the control of the export of meat by licence. The Board was empowered to regulate shipments of meat and to arrange contracts in respect of freights and insurances; to promote oversea sales by advertising and to foster research into meat problems; and to supervise the issue of export licences. The Board also has power to appoint a London representative.

<sup>(</sup>a) No deduction has been made for depreciation and maintenance.

During the 1939-45 War the control of meat exports was under National Security Regulations which ceased to operate with the expiry of the National Security Act on 31st December, 1946. Control then reverted to the Board, which was reconstituted in August, 1946 by legislation amending the Meat Export Control Act. Membership of the reconstituted Board is on an industry basis in lieu of a State basis and the number of members has been reduced from eighteen to twelve. The powers and functions of the Board were inter alia extended to enable it to purchase and sell any meat, meat products or edible offsi on behalf of the Commonwealth Government and subject to any direction of the Minister for Commerce and Agriculture.

The Meat Export Charges Act 1935-1946 provides for the imposition of a levy on all meats exported from Australia, the funds from which are used for the purpose of defraying expenses and charges incurred by the Australian Meat Board in the course of its business. The customary provision is made for exemption from the levy when recommended by the Board.

- (ii) War-time Marketing. Details of arrangements for the marketing of meat during the 1939-45 War are given on page 1107 of Official Year Book No. 36.
- (iii) United Kingdom Long-term Purchase Agreements. (a) Up to 30th June, 1952. Details of the long-term meat contracts with the United Kingdom Government from the outbreak of the 1939-45 War up to 30th September, 1950, were given on page 903 of Official Year Book No. 38, and page 1107 of Official Year Book No. 36.

Since the termination of the long-term contract on 30th September, 1950, annual arrangements have been entered into for the sale of Australia's exportable surplus of meat to the United Kingdom up to 30th June, 1952.

The following table sets out the prices of representative descriptions of Australian beef and lamb which have been sold to the United Kingdom on a Government-to-Government basis since the beginning of the 1939-45 War.

CONTRACT PRICES: BEEF AND LAMB SOLD TO UNITED KINGDOM.

		Beef.	1		Lamb.					
Contract a		First Quali	ty Ox Sides.	Contract	Contract approved			Quality. 42 lb.)		
from		Per lb. Sterling.	Per lb. Australian.	'	om		Per lb. Sterling.	Per lb. Australian.		
October, December, January, October, April, October, ""	1939 · . 1941 · . 1943 · . 1946 · . 1948 · . 1948 · . 1949 · .	d. 3.406 3.781 3.969 4.344 4.844 5.344 6.063 7.063 7.906	d. 4.266 4.736 4.971 5.441 6.067 6.693 7.594 8.846 9.902	October,	1939 1941 1944 1946 1948 1949		d. 5.438 5.813 6.250 7.790 8.667 9.688 10.438	d. 6.811 7.281 7.828 9.757 10.855 12.134 13.074		

(b) The Fifteen-year Meat Agreement. Representatives of the United Kingdom and Australian Governments signed a fifteen-year meat agreement in London in October, 1951, which covers the period from 1st July, 1952 to 30th September, 1967.

The classes of meat included in the Agreement are chilled and frozen beef, frozen veal, frozen mutton and lamb, frozen cattle and sheep sundries and edible offals.

The principal objectives of the Agreement are to promote the production of meat in Australia, enabling increased exports to be made to the United Kingdom and providing for a satisfactory market for Australian meat in the United Kingdom for the period of the Agreement.

The first detailed Agreement for beef and veal covers the period of six years ending 30th September, 1958, and for mutton and lamb for three years ending 30th June, 1955. In both cases, 1950-51 prices will be the basic level.

The prices which have been agreed for the meat year 1951-52 represent substantial increases on those previously ruling. From July, 1951, lamb schedule prices have been increased by 17½ per cent., first quality mutton by 15 per cent. and other grades of mutton by 10 per cent. Beef prices have been increased by 3d. sterling per lb. for first quality ox and heifer, 2½d. sterling per lb. for second quality ox and heifer and first and second quality cow, and 1½d. sterling per lb. for veal and other grades of beef.

Provision has also been made for reservation of quantities of meat for sale to other markets. This will be 3 per cent. of the quantity shipped to the United Kingdom, or such other amount as may be agreed annually between the two Governments.

Pig meats are not included in the Agreement, and negotiations are continuing in respect of this class of meat.

### § 2. Horses.

- 1. Suitability of Australia for Horse-breeding.—From the earliest times the suitability of the climate and pastures of Australia for the production of serviceable breeds of horses has been fully recognized. By the importation of high-class sires, and the careful selection of breeding mares, these natural advantages have been utilized to the fullest extent in breeding all classes of horses. As a consequence of this combination of advantages, the Australian horse, whether of the heavy draught, medium weight or light saddle variety, compares very favourably with the product of other lands.
- 2. Distribution throughout Australia.—The States of New South Wales, Queensland and Victoria together depasture about 80 per cent. of the total number of horses in Australia. In the following table figures are shown for each State and Territory for the years 1947 to 1951 in comparison with the average for the years 1935 to 1939:—

HORSES: NUMBER. ('000.)

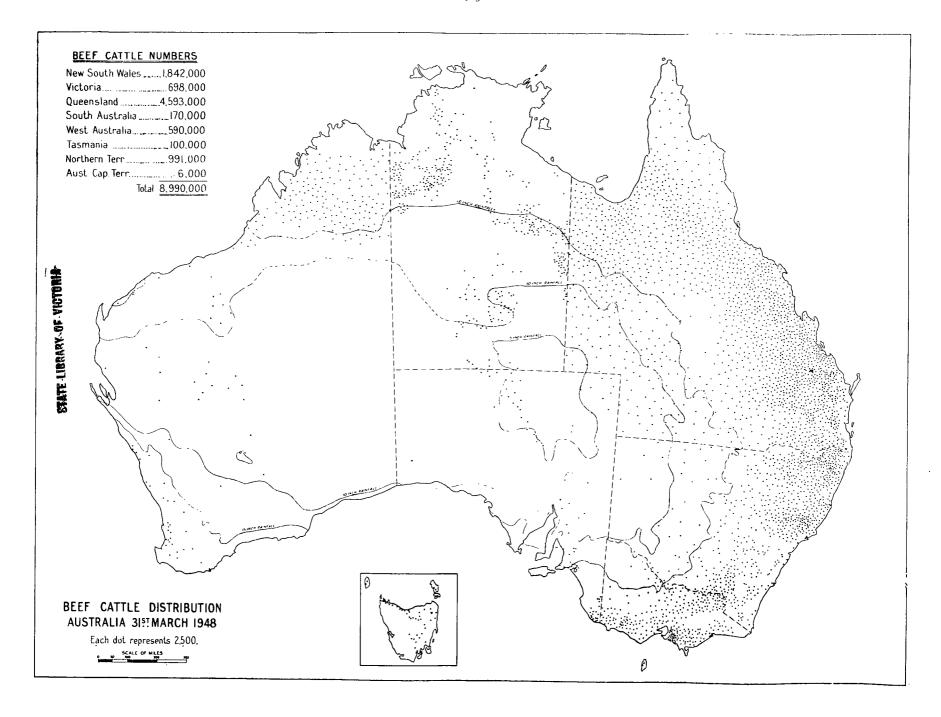
Yea	r.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T.	A.C.T.	Total.
Avera	ge, to									
1939		537	355	444	198	154	31	33	I	1,753
1947		38o	227	343	109	81	24	30	' I	1,195
1948		376	22I	336	101	75	23	32	1	1,165
1949	٠.	358	213	325	94	69	22	33	1	1,115
1950		343	200	317	83	59	21	33	I	1,057
1951		329	187	307	71	55	20	29	I	999

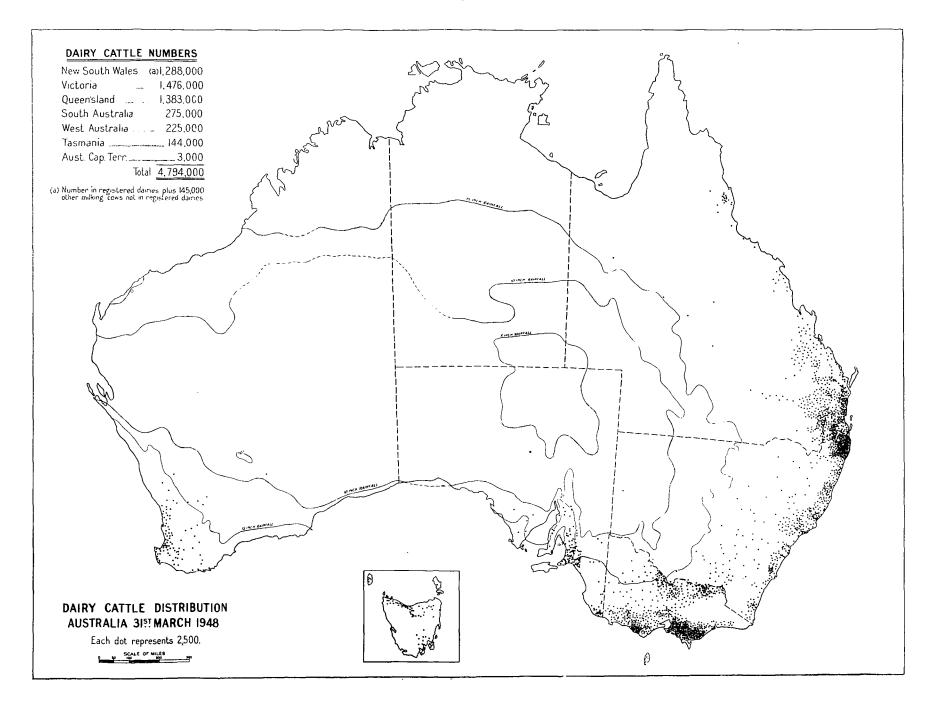
The number of horses attained its maximum in Australia during 1918, when a total of 2,527,149 was recorded. The United States of America made its highest recording in the same year and Canada in 1921. The number in Australia has declined considerably since 1918 owing to the mechanization of transport and farming. During the period 1918 to 1949 the decrease in numbers averaged 45,500 per annum, the rate of decline being 40,000 per annum during the five years ended 1951.

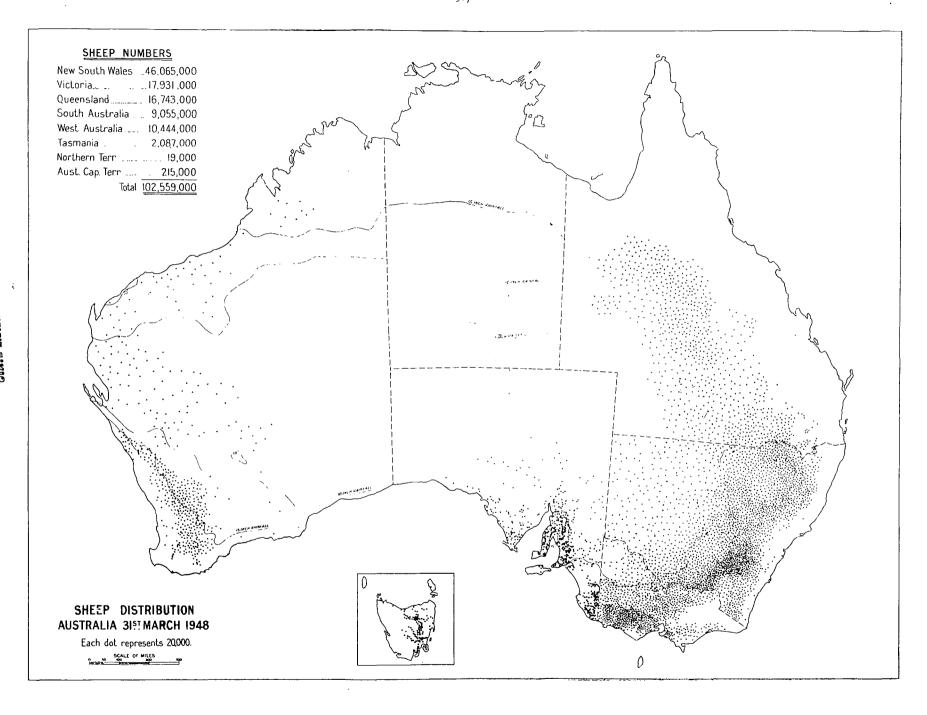
The number of horses in Australia from 1860 onwards may be obtained from the graph on page 872.

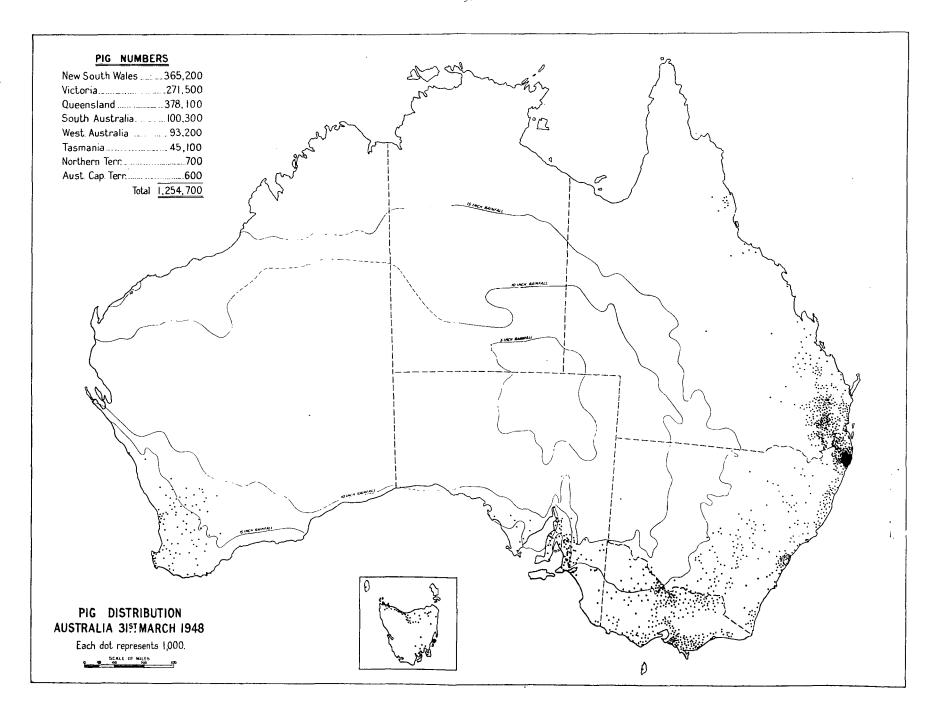
The percentages of the number of horses in the several States and Territories of the total for Australia for 1951 were:—New South Wales, 32.88; Victoria, 18.66; Queensland, 30.75; South Australia, 7.13; Western Australia, 5.54; Tasmania, 2.01; Northern Territory, 2.94; and Australian Capital Territory, 0.09 per cent.

3. Oversea Trade in Horses.—(i) Exports. The export of horses from Australia during the early years of this century was fairly considerable, averaging about 15,000 head per annum between 1901 and 1920, exclusive of those used for war purposes during the 1914-18 War. Since then, exports have gradually declined and averaged only about 4,000 for the five years ended 1938-39 and 845 for the five years ended 1949-50.









CATTLE. QOQ

(ii) Imports. The few horses imported into Australia consist mainly of valuable stud animals from the United Kingdom and racehorses from New Zealand. The average value per head of the horses imported during the five years 1945-46 to 1949-50 was £898. The average number imported per annum was 343 and the average annual value, £308,004.

Details of the quantity and value of imports, exports and net exports of horses are shown in the following table for the years 1945-46 to 1949-50 compared with the average for the five years ended 1938-39.

#### HORSES: IMPORTS AND EXPORTS, AUSTRALIA.

Impo	rts.	Expo	rts.	Net Exports.		
No.	Value.	No.	Value.	No.	Value.	
i	£		£		£	
321	135,459	4,005	139,012	3,684	3,553	
165	184,880	133	63,931	-32	-120,949	
317	338,241	934	185,165	617	-153,076	
341	303,240	920	236,477	579	- 66,763	
424	361,061	1,018	141,815	594 <sup>i</sup>	-219,246	
469	352,600	1,219	173,296	750	-179,304	
	No.  321 165 317 341 424	\$321 135,459 165 184,880 317 338,241 341 303,240 424 361,061	No. Value. No.  2 321 135,459 4,005 165 184,880 133 317 338,241 934 341 303,740 920 424 361,061 1,018	No.         Value.         No.         Value.           \$\frac{\pmathcal{t}}{2}\$         \$\frac{\pmathcal{t}}{2}\$         \$\frac{\pmathcal{t}}{2}\$           321         135,459         4,005         139,012           165         184,880         133         63,931           317         338,241         934         185,165           341         303,240         920         236,477           424         361,061         1,018         141,815	No.         Value.         No.         Value.         No.           321         135,459         4,005         139,012         3,684           165         184,880         133         63,931         -32           317         338,241         934         185,165         617           341         303,740         920         236,477         579           424         361,061         1,018         141,815         594	

NOTE.—The minus sign (-) signifies net imports.

### § 3. Cattle.

- 1. Purposes for which Raised.—Cattle-raising is carried out in all the States, the main object in certain districts being the production of stock suitable for slaughtering purposes, and in others the raising of profitable dairy herds. The great impetus which the development of the export trade in Australian butter gave to the dairying industry led to a considerable increase in numbers and an improvement in quality of the dairy herds in Victoria, New South Wales, and southern Queensland in particular, the portion of Australia in the temperate zone being the best adapted to this industry. On the other hand, beef-producing cattle are mainly raised in the tropical districts, i.e., in the northern parts of Queensland, in the Northern Territory, and in the Kimberley district in the north of Western Australia.
- 2. Distribution throughout Australia.—Until 1880, New South Wales was the principal cattle-raising State, but in that year Queensland occupied the leading position, which it has since maintained. There was a very rapid increase in the number of cattle in Australia up to the year 1894, when 12,311,617 head were depastured. From 1895 onwards, however, the effects of droughts and the ravages of tick fever reduced the number to 7,062,742 in 1902. Following the disastrous drought which terminated in the latter year the herds were gradually built up, and, despite recurring droughts, they continued to increase until the maximum number of 14,441,309 cattle was attained in 1921. After that year the number dropped continuously till 1929, largely owing to the decline in the oversea demand for frozen beef. With the expansion of dairying it recovered to 14,048,671 in 1934, but from that year declined continuously to 1939 when it stood at 12,861,781. The upward movement which commenced in 1940 was continued until 1944, the total number of cattle (14,183,679) in the latter year being at its highest level since 1923. Drought conditions and other factors during 1944-45 and 1945-46 caused a decline in numbers to 14,133,167 in 1945, to 13,878,006 in 1946 and to 13,426,646 in 1947. There has since, however, been a continuous upward movement in numbers to 15,229,000 in 1951, which is the highest number yet recorded. A graph showing the number of cattle in Australia from 1860 appears on page 872.

The numbers of cattle (beef and dairy) in the several States and Territories in each year 1947 to 1951 compared with the average for the years 1935 to 1939 are shown below.

CATTLE: NUMBER.

Year.		N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Total.
Average, 19 1939 1947 1948 1949 1950	35 to	3,198 2,983 3,130 3,253 3,440 3,703	1,952 2,060 2,174 2,225 2,231 2,216	6,018 5,946 5,976 5,992 6,305 6,734	331 424 445 461 464 433	819 812 816 864 865 841	262 220 244 266 275 272	889 973 991 1,053 1,049	• 9 9 10 11 11	13,478 13,427 13,785 14,124 14,640 15,229

Although the proportion is not as high as it has been in the past, Queensland was carrying 44.21 per cent. of the cattle in Australia in 1951. The percentage in each State and Territory during that year was:—New South Wales, 24.31; Victoria, 14.55; Queensland, 44.21; South Australia, 2.84; Western Australia, 5.53; Tasmania, 1.79; Northern Territory, 6.69; Australian Capital Territory, 0.08.

Graphs indicating the distribution of beef and dairy cattle separately in Australia during 1947-48 are shown on pages 905-6 of this Year Book. A graph showing the distribution in 1924-25 of the total cattle in Australia appeared on page 660 of Official Year Book No. 22, while in Official Year Book No. 34 similar graphs respecting the distribution of total cattle and of dairy cows may be found on pp. 453-4.

3. Classification of Cattle According to Purpose.—Of the total number of cattle in Australia in 1951, 10,426,000 or 68.46 per cent. were classified as beef cattle. The numbers classified as beef cattle in the several States and Territories during the years 1943 and 1947 to 1951 were as follows:—

BEEF CATTLE: NUMBER. ('000.)

Year		N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	, Tas.	Nor. Terr.	Aust. Cap. Terr.	Total.
1943		1,676	577	4,893	171	605	102	978	5	9,007
1947		1,756 1,890	648 698	4,613 4,593	162	588 590	88	973 991	6	8,834 9,038
1949		1,994 2,167	711 706	4,569 4,872	182	634 638	111	1,053	7 8	9,261 9,750
1951	• • •	2,457	727	5,293	189	618	115	1,019	8	10,426

A classification of numbers on this basis is not available prior to 1943.

Particulars relating to dairy cattle numbers will be found in Chapter XXI.—Farmyard, Dairy and Bee Products.

- 4. Size Classifications of Cattle Herds.—A special series of tabulations relating to rural holdings in Australia was compiled for 1949-50 and published in *Primary Industries Bulletin* No. 44. The tables relating to beef and dairy cattle show classifications according to size of herd and area of the holdings.
- 5. Comparison with other Countries.—The following table shows the number of cattle in Australia and in some of the principal cattle-raising countries of the world for the years 1936-40 and at the latest available date. The figures, which have been compiled by the Food and Agriculture Organization of the United Nations, relate generally to areas embraced by post-war boundaries, but do not cover identical areas for the two periods in all cases.

CATTLE: NUMBER IN VARIOUS COUNTRIES.

('000.)

Cou	ntry.			Average, 036–40.(a)	Year and Month.	N	lumber.
India			(b)	137,974	1945		136,780
United States of A	merica		1	66,684	1949 (January)	ļ	78,298
Brazil				40,807	1949 (January)		50,178
U.S.S.R. (Russia)				48,500	1946	(c)	41,500
Argentina				33,762	1947 (June)	` ′	41,268
Pakistan			(b)	24,444	1947–48		24,296
China, Proper			(d)	23,081	1948 (April)		18,200
France			``	15,504	1948 (October)		15,43
Australia				13,285	1950 (March)		14,64
Colombia			1	8,010	1947 (December)		13,902
Germany				19,881	1948 (December)		13,52
Mexico				11,722	1948 (December)		13,21
Union of South Afr				11,636	1947 (August)		12,470
Turkey				7,177	1948 (December)	}	10,279
United Kingdom				8,798	1948 (December)		9,52
Canada			1	8,246	1948 (December)	1	8,25
Italy				7,571	1948 (January)		7,92
Uruguay			1	8,297	1946 (May)		6,82
Tanganyika			(b)	5,209	1947		6,42
Madagascar		• • •	(b)	5,266	1947 (December)		5,30

<sup>(</sup>a) Average for two to four years in some cases.

(d) 1937.

6. Imports and Exports of Cattle.—The products of the cattle-raising industry figure largely in the export trade of Australia, although the export of live cattle has never been large. The number of cattle imported is also small, consisting, as in the case of horses, mainly of valuable animals for stud purposes. Details for the years 1945-46 to 1949-50 compared with the average for the years 1934-35 to 1938-39 are as follows:—

CATTLE: IMPORTS AND EXPORTS, AUSTRALIA.

		Impo	rts.	Expo	rts.	Net Exports.		
Year.		No.	Value.	No.	Value.	No.	Value.	
Average, 193	4-		£		£		£	
35 to 1938-		295	22,304	308	5,977	13	16,327	
1945-46		56	32,919	340	10,110	284	-22,809	
1946-47		111	56,585	781	28,615	670	27,970	
1947-48	;	103	29,934	4,359	74,141	4,256	44,207	
1948-49	:	147	75,553	1,087	47,708	940	-27,845	
1949–50	;	160	88,831	485	40,156	325	-48,675	

NOTE.—The minus sign (-) signifies net imports.

The average value per head of the cattle imported during the last five years was £491 178. 10d. while the average value per head of the cattle exported during the same period was £28 9s. 3d.

<sup>(</sup>b) 1939.

<sup>(</sup>c) Unofficial estimate.

7. Cattle Slaughtered.—The numbers of cattle slaughtered during each of the years ended June, 1946 to 1950 compared with the average for the years 1934-35 to 1938-39 are shown in the following table:—

CATTLE (INCLUDING CALVES) SLAUGHTERED. ('000.)

	!	Slaughterings passed for Human Consumption.								
Year ended June	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Total.	tering including Boile Down
1939 1946 1947 1948	a 1,112 1,002 1,070 1,076 1,136	812 574 678 748 850 893	1,046 798 1,081 1,188 1,089 1,102	(b) 156 137 145 165 195 213	(b) 124 119 133 145 159 166	45 43 42 38 45 58	(b) 4 25 12 15 15 14	2 2 3 3 5 6	3,301 2,700 3,164 3,378 3,494 3,608	3,33 2,74 3,19 3,41 3,52 3,64

- (a) Year ended March.
- (b) Year ended previous December.
- 8. Production of Beef and Veal.—Details of the production of beef and veal in each State and Territory are shown in the following table for the years indicated:—

PRODUCTION OF BEEF AND VEAL (BONE-IN WEIGHT): AUSTRALIA. ('000 tons.)

Year ended June—	N.	8.W.	Victoria.	Q'land.	s	Aust.	w.	Aust.	Tas.	N. T	err.	A.C.T.	Total.
Aver-													
age,			j .					1		!		1	
1935 to					1								
1939	(a)	173	115	181	<b>(b)</b>	25	(b)	27	9 <b>8</b>	(b)	r		531
1946		134	76	137	1	2.I	1	24		,	6	I	407
1947		140	96	190		24		26	8	i	3	1	488
1948		162	105	226	1	27		30	8	i	3	1 !	562
1949	Ì	180	118	202		30		33	10		3	1	577
1950		186	125	212		33		35	12	ļ	3	I	607

- (a) Year ended March.
- (b) Year ended previous December.
- 9. Consumption of Beef and Veal.—For the three pre-war years 1936-37 to 1938-39 the average annual production of beef and veal in Australia was 569,000 tons of which 127,000 tons were exported, leaving a balance of 442,000 tons (or the carcass equivalent of 144 lb. per head per annum) available for consumption as fresh and canned meat.

In order to cope with the increasing demands by Australian and Allied Services based upon Australia and to supply as much beef as possible to meet the import requirements of the United Kingdom, it was necessary to introduce from January, 1944 a system of rationing limiting civilian consumption which has always been very high. As a result, the quantity of beef and veal entering civilian consumption per head decreased from the pre-war average of 144 lb. to 124 lb. in 1943, 92 lb. in 1944 and 87 lb. in 1945. Consumption subsequently increased to 93 lb. per head in 1946, 97 lb. in 1946–47 and 1991 in 1947–48. Following the termination of meat rationing from 21st June, 1948, the upward movement in beef and veal consumption has been more pronounced and reached 132.5 lb. per head in 1950–51. Increases in consumption in recent years have been associated with declining consumption of mutton and lamb.

In the following table details of the production and disposal of beef and veal are shown for the periods stated.

## PRODUCTION AND DISPOSAL OF BEEF AND VEAL (BONE-IN WEIGHT): AUSTRALIA.

('000 tons.)

	-			For	Consumption in Australia as Human Food.		
Year.	Changes in Stock.	Production.	Exports.	Canning.	Total.	Per Head per Annum.	
Average, 1936-37 to 1938-39 1948-49 1949-50 1950-51(b)	 - 4 - 9 + 10	569 577 607 652	127 98 94 81	(a) 60 75 . 69	442 423 447 492	lb. 144.1 121.3 124.3 132.5	

(a) Included with exports.

(b) Subject to revision.

10. Exports of Frozen Beef and Veal.—The export of frozen meat from Australia dates from about 1881, and since that year the trade has grown considerably. The quantity of frozen beef and veal exported in 1938-39 amounted to 271,963,829 lb., valued at £4,323,680, but there was a decline during the war years owing to reduced production and the diversion of supplies to meet the requirements of the Australian and Allied Services based on Australia. The quantity exported in 1949-50, although considerably above the war-time levels, was approximately 32.95 per cent. less than in 1938-39. In 1950-51 it was 158,309,727 lb. or 41.79 per cent. less than in 1938-39. The quantities and values of frozen beef and veal exported during the five pre-war years ended 1938-39 and in each year 1945-46 to 1950-51 are shown in the following table:—

EXPORTS OF FROZEN BEEF AND VEAL: AUSTRALIA.

	Year.		Exports of Froz		Exports of Frozen Veal.		
			Quantity.	Value.	Quantity.	Value.	
			'ooo lb.	£	'ooo lb.	£	
Average, 193	4-35 to	1938-39	231,355	3,188,491	10,353	165,205	
1945-46			106,060	2,711,077	4,732	122,906	
1946-47			178,298	4,521,746	2,040	60,127	
1947–48			234,593	6,110,568	2,557	82,047	
1948–49			189,007	5,715,934	2,646	99,532	
1949-50			178,128	6,522,476	4,233	182,175	
1950-51			154,832	6,440,395	3,478	207,459	

Prior to the war the largest purchaser of Australian beef and veal was the United Kingdom, which during 1938-39 took £3,901,691, or about 90.2 per cent., of the total shipments. Other countries importing Australian beef were, in order of importance, Egypt, Malaya (British), Malta, Philippine Islands and Hong Kong; these countries, together with the United Kingdom, accounted for 98.0 per cent. of the total value of exports. However, at the request of the United Kingdom Government there was a considerable diversion from that country to nearer British possessions during the war years. In 1950-51 shipments to the United Kingdom were valued at £4,310,178 or 64.8 per cent. of the total value of beef and veal exports, while exports to other British countries amounted to £1,783,915, equivalent to 26.8 per cent. of the total.

In view of the preference overseas for chilled beef, the Australian beef industry was at a serious disadvantage until investigations proved that beef could be successfully transported from Australia to United Kingdom in a chilled condition. Trial shipments of 254,000 lb. in 1932-33 and 1,515,000 lb. in 1933-34 were made, and the exports in subsequent years increased as follows:—1934-35, 21,570,928 lb., £322,239; 1936-37,

41,869,695 lb., £608,175; and 1938-39, 58,963,009 lb., £988,148. However, the advent of war seriously affected the export trade in chilled beef, which decreased from 12,786,859 lb. in 1939-40 to nil or negligible amounts in subsequent years.

### § 4. Sheep.

- 1. Initiation of the Pastoral Industry.—Fortunately for Australia, the suitability of its climate and general conditions for the production of a high class of wool were, at an early date in the history of its settlement, surmised and tested by Captain Macarthur, one of the pioneer sheep-breeders of New South Wales. To the energy of this enterprising pastoralist is due in large measure the rapid and extremely satisfactory development of Australia as a producer of fine wool, and while it would appear that the introduction of the merino sheep into Australia was not due to Macarthur, a great deal of the credit for having successfully established the pastoral industry in Australia must certainly be his.
- 2. Movement in Sheep Numbers in Australia.—Fluctuations in the number of sheep recorded for each year in Australia from 1860 onwards may be seen from the graph on page 872. Up to 1945 there were five marked periods of decline, but the losses were made up rapidly. In each of the years 1925 to 1945 the sheep flocks exceeded 100 million, reaching 125,189,129 in 1942, the greatest number recorded in Australia. At no previous period have such large numbers been depastured continuously, and the development has taken place despite an increase in the annual slaughter for the meat trade over this period, from about 10 million to 25 million.

However, a sharp decline to 105 million occurred in 1945, followed by a further reduction to 96.4 million in 1946 and to 95.7 million in 1947. This represented a loss from all causes other than slaughtering of about 37 million sheep (30 per cent.) since 1944 and was largely attributable to the severe drought conditions experienced during 1944, 1945 and 1946. The passing of the drought and consequent re-stocking resulted in a rise in sheep numbers to 108.7 million in 1949, 112.9 million in 1950 and 115.6 million in 1951.

The following table shows the approximate movement in sheep numbers in Australia in each season 1938-39 to 1950-51:—

SHEEP AND LAMBS: ANALYSIS OF MOVEMENT IN NUMBERS, AUSTRALIA. ('000,)

Season.		Lambs marked.	Excess of Exports	Sheep and Lambs Slaughtered.	Estimated number of deaths from disease, drought, etc. (a)	Number at 31st March.	Annual Net Increase (+) or Decrease (-)
193839		25,469	67	18,900	8,817	(b) 111,058	- 2,315
1939-40		33,300	72	19,006	5,975	(b) 119,305	+ 8,247
1940-41		32,238	86	21,822		(b) 122,694	+ 3,389
1941-42		32,246	65	22,258		(6,125,189	+ 2,495
1942-43		32,268	5	25,573	7,264	124,615	- 574
1943-44		33,366	7	26,585	8,215	123,174	- 1,441
1944-45		25,635	3	25,632	17,803	105,371	- 17,803
1945-46		20,683	22	17,682	11,954	96,396	- 8,975
1946–47		25,186	80	18,362	7,417	95,723	- 673
194748		30,149	79	17,059	6,175	102,559	+ 6,836
1948–49		30,642	84	17,477	6,905	108,735	+ 6,176
1949-50		30,382	96	20,929	5,201	112,891	+ 4,156
1950-51		29,816	84	16,223	10,804	115,596	+ 2,705

(a) Balance figure.

(b) As at commencement of last year shown.

3. Distribution throughout Australia.—With the exception of a short period in the early sixties, when the flocks of Victoria outnumbered those of New South Wales, the latter State has occupied the premier position in sheep-raising, depasturing about one half of the sheep of Australia.

A graph indicating the distribution of sheep in Australia during 1947-48 is shown on page 907 of this Year Book. Similar graphs for the years 1938-39 and 1924-25 were published in Official Year Books No. 34, page 452 and No. 22, page 659, respectively.

The numbers of sheep in the several States and Territories for each year 1947 to 1951 compared with the average for the years 1935 to 1939 are shown in the following table:—

SHEEP: NUMBER. ('000.)

Year.		N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Total.
Average, 193 1939 1947	5 <b>t</b> o	51,774 43,105 46,065 50,404 53,298 54,111	17,555 16,599 17,931 19,170 19,161 20,012	21,061 16,084 16,743 16,499 17,582 17,478	8,515 7,959 9,055 9,366 9,477 10,166	9,839 9,787 10,444 10,872 10,923	2,312 1,933 2,087 2,160 2,170 2,181	23 28 19 26 26 29	240 228 215 238 254 257	111,319 95,723 102,559 108,735 112,891 115,596

Except when affected by drought, the relative number of sheep depastured in the different States has remained fairly constant.

The percentage distribution in 1951 was:—New South Wales, 46.81; Victoria, 17.31; Queensland, 15.12; South Australia, 8.79; Western Australia, 9.83; Tasmania, 1.89; Northern Territory, 0.03; Australian Capital Territory, 0.22 per cent.

4. Classification of Sheep According to Age, Sex and Breed.—In the following table numbers of sheep in Australia are classified according to age and sex at 31st March of the years 1943 and 1948 to 1951. Data in this form are not available prior to 1943.

SHEEP: AGE AND SEX, AUSTRALIA.

		000.)							
	31st March-								
Description	1943.	1948.	1949.	1950.	1951.				
Rams, r year and over Breeding ewes (including	1,651	1,384	1,443	1,497	1,473				
ewes intended for mating)	56,674	49,771	50,855	52,122	52,794				
Other ewes, I year and over	9,636	5,432	6,796	6,982	6,760				
Wethers, I year and over	31,986	22,932	26,199	29,251	31,516				
Lambs and hoggets, under 1	;	i	i						
year	24,667	23,040	23,442	23,039	23,053				
Total, Sheep and lambs	124,614	102,559	108,735	112,891	115,596				

Particulars relating to the principal breeds of sheep were collected uniformly for all States and the Australian Capital Territory at 31st March, 1950 and are shown in the following table. Later details are not available for all States:—

SHEEP: PRINCIPAL BREEDS, 31st MARCH, 1950.

				00.)					
Breed.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.Aust.	Tas.	N.T. (a)	A.C.T.	Australia.
Merino Other recognized	40,017.8	6,870.4	17,326.5	7,717.9	9,666.6	284.6	25.4	224.9	82,134.1
breeds Merino comebacke(b) Orossbrede(c)	3,376.6 3,441.7 6,461.9	4,451.7 2,080.3 5,758.6	71.4 54.6 129.6	692.7 167.4 899.0	496.6 139.9 620.1		0.I 0.I 0.2	7.5 8.6	9,977.5 6,218.3 14,561.0
Total	53,298.0	19,161.0	17,582.1	9,477.0	10,923.2	2,170.3	25.8	253.5	112,890.9

<sup>(</sup>a) As at 31st December, 1949. Distribution between categories has been estimated. (b) Merino Comeback is the progeny of a crossbred merino ewe and a merino ram, i.e., finer than half-bred. (c) Half-bred and coarser.

- 5. Numbers of Sheep on Rural Holdings.—A special series of tabulations relating to rural holdings in Australia was compiled for 1949-50 and published in *Primary Industries Bulletin* No. 44. The tables relating to sheep farming show classifications according to areas of the holdings on which the sheep were carried.
- 6. Comparison with other Countries.—As regards the size of its flocks and the quantity and quality of wool produced, Australia has long occupied a leading position amongst the sheep-raising countries of the world. As with a number of other important sheep-raising countries, it has, however, suffered a considerable reduction in sheep numbers since 1939, but still holds the leading position with 113 million sheep, followed by the U.S.S.R. (Russia) with about 80 million, Argentina with 47 million and India with 38 million.

The following table shows the number of sheep in Australia in relation to the numbers in some of the principal sheep-raising countries of the world for the last available pre-war year and at the latest date of enumeration for which figures are published. The figures have been compiled by the Commonwealth Economic Committee and the International Wool Textile Organization, who have estimated the world sheep numbers in 1949–50 at 717 million.

SHEEP: NUMBER IN VARIOUS COUNTRIES. ('000,000.)

			Pre-	war.	Pos	st-war.
Country.	· · · · · · ·		Year.	Number.	1948–49 Number.	1949–50 Number.(c)
Australia			1938-39	111.1	108.7	112.9
U.S.S.R. (Russia)			1938-39	(a) 80.0	(d) 67.0	(d) 80.0
Argentina			1938-39	45.9	(d) 46.0	(d) 47.0
India and Pakistan			1938-39	44.0	(d) 38.0	(d) 38.0
New Zealand			1938–39	31.9	32.8	33.9
Union of South Africa			1938-39	39.0	32.6	31.9
United States of America			1938-39	51.3	31.7	30.7
Turkey		]	1938-39	23.1	25.8	25.0
Uruguay		1	1936-37	17.9	(d) 22.6	23.0
Spain		1	<b>(b)</b>	(b)	19.0	(d)  20.0
United Kingdom			1938–39	26.8	18.2	19.5
China and Dependencies			1939-40	26.0	(d) 19.0	(d) 19.0
Brazil			1938–39	14.1	13.4	(d) 14.0
Peru			<b>(b)</b>	(b)	(d) 14.0	13.8
Yugoslavia		1	1938-39	10.1	(d) II.o	11.7
Iran		!	1938–39	14.9	11.0	11.5
Bulgaria			1938–39	8.7	(d) 10.0	(d) 10.0
Italy			1938–39	9.5	9.4	9.5
Morocco (French)			1938–39	10.2	8.5	9.5
Rumania	• •		1938-39	12.9	(d) 8.0	(d) 8.5
Iraq			1938–39	5.5	(d) 7.5	(d) 7.5
France			1938–39	9.9	7.5	7.5
Greece			1938–39	1.8	6.6	(d) 6.3
Chile			1935–36	5.7	(d) 6.0	(d)  6.0

<sup>(</sup>a) Estimated. estimate.

7. Oversea Imports and Exports of Sheep.—As in the case of cattle, the oversea exports of live sheep from Australia are of comparatively little importance. During the last five years the principal consignments of ordinary sheep have been made to Malaya (British) from Western Australia. On 27th November, 1929, the export of stud sheep was prohibited, except with the approval of the Minister for Trade and Custome.

Sheep for breeding purposes, however, were being exported in increasing numbers up to the outbreak of war in the Pacific, and shipments in 1939-40 amounted to 23,329 sheep, valued at £79,955, compared with 1,351, valued at £24,038, in 1949-50. The chief

<sup>(</sup>b) No recent pre-war figures available.

<sup>(</sup>c) Provisional.

<sup>(</sup>d) Unofficial

countries to which sheep for breeding purposes were consigned in 1939-40 were New Zealand, South Africa, Japan and Korea and, in 1949-50, to New Zealand and Japan. The ordinary flock sheep exported from Australia were, for the most part, consigned to Malaya and the Pacific Islands. The following table shows the imports and exports of breeding and flock sheep for the years 1945-46 to 1949-50 compared with the average for the years 1934-35 to 1938-39.

SHEEP: IMPORTS AND EXPORTS, AUSTRALIA.

Vent	[	Impo	rts.	Expo	rts.	Net Exports.		
Year.		No.	Value.	No.	Value.	No.	Value.	
Average, 1934-		i	£		£		£	
35 to 193		3,795	30,435	65,188	67,368	61,393	35,933	
1945-46		740	23,230	21,857	35,496	21,117	12,266	
1946-47		804	25,431	80,380	125,305	79,576	99,874	
1947-48		702	17,612	79,538	145,418	78,836	127,806	
1948-49		303	11,600	84,278	207,342	83,975	195,742	
1949-50		260	9,524	96,595	244,676	96,335	235,152	

8. Sheep Slaughtered.—The following table shows the numbers of sheep slaughtered in the several States during each of the years ended June, 1946 to 1950 compared with the average for the years ended June, 1935 to 1939:—

SHEEP (INCLUDING LAMBS) SLAUGHTERED. ('000.)

		Staughterings passed for Human Consumption.									Total Slaugh-
Year.		N.S.W.	Vic.	Qld.	)     S.A.	W.A.	Tas.	N.T.	A.C.T.	Total.	terings includ- ing Boiled Down.
						i					
Average, 193	1-35						_		ł	1	1
to 1938-39		a 6,474	7,797		b 1,703	b 1,178	358	(b)	25	18,636	18,69
1945-46		7,206	5,057	1,465	1,438	1,369	432	2	45	17,014	17,080
1946-47		6,904	6,305	1,167	1,625	1,416	393	2.	49	17,861	17,89.
1947-48		5,743	6,242	1,036	1,755	1,442	376	3	46	16,643	16,67
1948-49		6,456	6,692	994	2,208	1,515	420	3	48	18,336	18,384
1949-50		6,787	8,366	959	2,284	1,347	508	3	59	20,313	20,386

<sup>(</sup>a) Year ended March.

9. Production of Mutton and Lamb.—Details of the production of mutton and lamb in each State and Territory are shown below:—

PRODUCTION OF MUTTON AND LAMB.
(Tons.)

				( ) ( )			. —		
Year.	n.s.w.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N'.T.	A.C.T.	Total.
Average, 1934-35 to 1938- 39	103,706	135,149	20,166	29,710	20,476	6,035		396	315,639
1945-46 1946-47 1947-48	122,278 110,097 102,818	86,615 111,684 108,610	24,913 18.656 18,664	25,989 31,574 33,289	22,170 22,545 24,120	7,909 7,162 6,906	36 51 59	752 817 814	290,662 302,586 295,280
1948-49 1949-50	114,338	114,738	18,440 17,673	39,452 39,913	24,872 <sup>-</sup> 22,446	7,574 8,926	83 57	1,049	320,383 358,133

<sup>(</sup>b) Year ended previous December.

10. Consumption of Mutton and Lamb.—For the three pre-war years 1936-37 to 1938-39 the annual production of mutton and lamb averaged 319,000 tons of which 89,000 tons were exported leaving a balance of 230,000 tons (or the carcass equivalent of 74.9 lb. per head per annum) available for consumption.

During the war the demand for meat by Australian and Allied Services and the desire to maintain, as far as possible, exports to the United Kingdom necessitated the restriction of local consumption by the introduction, in January, 1944, of a system of rationing.

As the service and export demand was principally for beef this class of meat was in shorter supply to civilians than was mutton or lamb. As a result, the coupon rating for beef fixed under the civilian ration scale was more restrictive, and had the effect of increasing the quantity of mutton and lamb entering civilian consumption to a level approximating that of beef. In 1946-47, however, mutton and lamb consumption declined to below the pre-war level as a result of heavy shipments overseas and decreased slaughterings. Consumption per head rose slightly from 67.8 lb. in 1946-47 to 69.8 lb. in 1947-48 and to 73.1 lb. in 1948-49, remained stationary at 73.1 lb. in 1949-50 but dropped to 65.2 lb. in 1950-51.

In the following table details of the production and disposal of mutton and lamb are shown for the periods stated:—

# PRODUCTION AND DISPOSAL OF MUTTON AND LAMB (BONE-IN WEIGHT): AUSTRALIA.

('000 tons.)

				_		For Canning	Consumption in Australia as Human Food,		
Year		Changes in Stock.		Pro- duction.	Exports.	and Dehydra- tion.	Total.	Per Head per annum.	
Average, 1936-37	to		-					lb.	
1938–39		١.		319	89		230	74.9	
1946-47			9	303	73	11	228	67.8	
1947-48		-	5 8	295	55	7	238	69.8	
1948–49		+		321	52	7	254	73.I	
1949-50		j —	5	358	86	14	263	73.1	
1950–51(a)		+	4	277	24	7	242	65.2	

(a) Subject to revision.

II. Exports of Frozen Mutton and Lamb.—The export trade in mutton and lamb preserved by cold process expanded rapidly to 1913 when 205 million lb. were shipped. Progress was interrupted during the 1914-18 War and, owing probably to high wool prices, the exports of mutton and lamb for a number of years after were considerably less than earlier shipments. Exports commenced to rise again in 1929-30 and from that year onwards they continued to expand almost uninterruptedly until 1942-43, in which year 203,681,520 lb. of mutton and lamb, valued at £5,495,886, were exported. In earlier years shipments consisted mainly of frozen mutton, but in 1923-24 lamb supplanted mutton and the exports of lamb were largely responsible for the increase in total shipments during the ten years to 1942-43. Due to reduced production as a result of drought conditions and the diversion of supplies to meet the requirements of the Australian and Allied Services based in Australia, there was subsequently a marked decline in mutton and lamb exports, which fell to 56,574,651 lb., valued at £1,540,419, in 1945-46. Exports rose steeply to 164,302,923 lb. (£4,543,764) in 1946-47, but fell again in 1947-48 to 122,482,889 lb. (£4,248,695). In 1948-49, exports fell further to 114,863,908 lb. (£4,222,173) but rose considerably to 193,091,827 lb. (£7,452,675) in 1949-50.

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The quantities and value of exports of frozen mutton and lamb in each year 1945-46 to 1949-50 compared with the average for the five years ended 1938-39 are shown in the following table:—

EXPORTS OF FROZEN MUTTON AND LAMB: AUSTRALIA.

Year.	Exports of Fr	ozen Mutton.	Exports of F	rozen Lamb.	Exports of Frozen Mutton and Lamb.		
- 1	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	lb.	£	lb.	£	lb.	£	
Average,	1						
1934-35 to	1						
193839	40,583,651	656,194	153,606,462	4,208,318	194,190,113	4,864,512	
1945-46	17,527,848	362,057	39,046,803	1,178,362	56,574,651	1,540,419	
1946-47	52,208,402	912,292	112,094,521	3,631,472	164,302,923	4,543,764	
1947-48	19,394,136	447,278	103,088,753	3,801,417	122,482,889		
1948-49	27,509,096	651,082	87,354,812	3,571,091	114,863,908		
1949-50	69,743,976	1,694,984	123,347,851	5,757,691	193,091,827	7,452,675	

As with beef, the principal customer in this trade is normally the United Kingdom. In 1949-50 exports of mutton and lamb to the United Kingdom amounted to 91.6 per cent. and 93.5 per cent., respectively, of the total quantities exported.

### § 5. Wool.

r. General.—Australia is the leading wool-growing country in the world. With less than one-sixth of the world's sheep Australia produces one-quarter of the world's wool and of the total fine-quality merino wool, Australia produces about one-half. The bulk of the production is exported, but with the greater activity of Australian woollen mills the quantity used locally is increasing; the amount so used represented more than 8 per cent. of the total production in 1949-50 compared with 7 per cent. in 1938-39.

The important position held by Australia among the principal sheep and wool producing countries of the world is shown in the following table. Further particulars of wool production in principal countries and of world production of wool by type are included in paragraph 6, World Wool Production.

SHEEP AND WOOL: PRINCIPAL PRODUCING COUNTRIES, 1949-50.

·	Coun	try.	No. of Sheep ('ooo,ooo).		Wool Production ('ooo,ooo lb. in term of greasy).		
						112.9	1,110
					(a)	47.0	415
						33.9	390
United States of Ame	erica				Ì	30.7	264
U.S.S.R. (Russia)			• •		(a)	80.0	290
Union of South Afric	a					31.9	213

(a) Unofficial estimate.

Source: Commonwealth Economic Committee and International Wool Textile Organization.

2. Greasy and Scoured Wool.—Whether the weight of the wool clip should be stated as "in the grease" or as "scoured and washed" is a matter which seriously affects comparisons between the clips of different seasons and of different countries. The quantity of grease and other extraneous matier in a fleece differs, not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, and with the breed and the condition of the sheep. There is, moreover, no clearly defined standard in regard to the clean content of wool described as scoured and washed.

A committee of experts in a report to the Central Wool Committee estimated in 1940 that the clean scoured wool content of the total production of Australia averaged between 51 and 53 per cent. of its greasy weight.

Wool scoured in Australia by wool-scouring works, however, yields only about 46 per cent. because the grade of greasy wool treated locally for export as scoured includes a large proportion of dirty and low-grade wool.

The quantity of scoured and washed Australian wool exported during the five years ended 1949-50 was approximately 16.9 per cent. of the total wool exports regarded as "greasy".

3. Production.—The bulk of the Australian wool production is shorn from live sheep; approximately 6 per cent. is obtained by fellmongering and about 5 per cent. is on skins exported. Statistics of wool production are compiled from data received from growers, fellmongers, etc. The following table shows the production for the five years 1945-46 to 1949-50 compared with average production for the five years ended 1938-39. Particulars of the gross value of wool produced in Australia are also shown; for the prewar years and for 1946-47 and later years these values are based upon the average price of greasy wool sold by brokers in Australia, while for 1943-44 to 1945-46 they are based upon the average appraised value plus certain adjustments as computed by the State Statisticians.

GREASY WOOL: TOTAL PRODUCTION.

State.	Average, 1934-35 to 1938-39.	1945–46.	1946–47.	1947–48.	1948-49.	1949-50.
New South Wales Victoria	'ooo lb. 480,670 165,586 164,971 85,120 81,543 15,504 35 1,827	152,398 173,249 73,604 86,986 16,338	144,820 93,020 90,255 16,643	143,290 103,676 95,410 15,326 305	195,404 147,767 105,461 99,429 16,846	216,639 153,892 106,707 98,889 16,958
Total—Quantity  Value (c)	995,256 £'000. 51,182	£'000.	£'000.	£'000.	1,030,397 £'000. 201,972	£'000.

(a) For year ended previous December.

(b) Estimated.

(c) Subject to revision.

Production for 1950-51 was 1,093 million lb., valued at £651,396,000 (subject to revision).

4. Care Needed in Comparing Clips.—In comparing successive clips allowance must be made for the circumstance that, owing to climatic or other conditions, the time of shearing may be so far delayed in some areas that one clip may include almost thirteen months' growth of wool, while the succeeding one may include little more than eleven months' growth.

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5. Average Weights of Fleeces Shorn.—The average weights of sheep and lamb fleeces shorn in each of the States of Australia and the Australian Capital Territory are shown in the following table for the five seasons 1934-35 to 1938-39 and each season 1945-46 to 1949-50:—

AVERAGE WEIGHT OF SHEEP AND LAMB FLEECES SHORN.

		(1b.)				
State.	Average, 1934-35 to 1938-39 (a)	1945-46.	1946-47.	1947-48.	1948-49.	1949-50.
		Sheep.			-	
New South Wales Victoria Queersland South Australia Western Australia Tasmania Australian Capital Territory Australia (b)	7.84 7.98 10.06 8.53 7.62 8.32	9.24 7.50 8.62 9.10 8.53 6.75 8.56	9.97 9.97 8.20 11.51 8.70 7.73 9.37	9.88 9.33 8.80 11.26 9.43 8.30 8.74	9.97 8.90 9.02 10.58 9.43 8.03 9.29	9.82 9.31 9.30 10.61 8.97 7.64 9.36
		Lamb.			<u> </u>	•
New South Wales Victoria	2.14 2.89 2.57	2.89 2.19 3.44 2.56 2.53 1.47 1.28	3.03 2.64 3.23 3.03 2.55 1.78 1.49	3.10 2.71 3.55 3.60 2.70 1.98 1.26	3.29 2.74 3.77 3.23 2.68 1.91	3.20 2.59 3.60 3.04 2.62 1.76 1.17
Australia (b)	. 2.57	2.73	2.87	3.04	3.11	2.99

<sup>(</sup>a) Mean of average weights in each season.

6. World Wool Production.—The following table shows particulars of total production of wool in terms of greasy in the principal wool-producing countries of the world, together with estimates of world production of merino, crossbred and carpet type wool for the five seasons 1934-38 and 1946-47 to 1949-50. The data for countries other than Australia have been taken from reports published by the Commonwealth Economic Committee compiled from questionnaires prepared by the Committee and the International Wool Textile Organization.

In 1949-50 Australia produced 29 per cent. of the world total of all types of wool, the share of the British Commonwealth exceeding 50 per cent. The principal wool producers other than Australia are Argentina with 11 per cent. of the world total, New Zealand, 10 per cent., United States of America, 7 per cent., U.S.S.R. (Russia), 8 per cent., and Union of South Africa, 6 per cent. World production of wool (all types) in 1949-50 was about 46 million lb. (1.2 per cent.) greater than the average for 1934-38.

Australia's wool clip is predominantly merino; New Zealand and Argentina produce mainly crossbred wool, while the clip of the U.S.S.R. (Russia) is largely of the carpet type. While world production of merino wool has declined by about 3.8 per cent since pre-war, the production of crossbred types has risen by about 6.6 per cent. Carpet wool production has fallen by about 1.3 per cent.

<sup>(</sup>b) Excludes Northern Territory.

### WORLD PRODUCTION OF WOOL. ('000,000 lb.—in terms of greasy.)

	(	'000,000 Ib	—in terms of	greasy.)		
Country and Type.		Average 1934-38.	1946–47.	1947–48.	1948–49.	1949-50.(a)
Commonwealth—		207		ama	1 000	
Australia	••	995	977	973	1,030	1,110
New Zealand	• •	300	367	362	367	390
South Africa(b)	••	261	221	215	216	213
United Kingdom	••	111	93	75	81	88
India	• •	96 کے	<b>∫</b> 55	55	55	55
Pakistan	• •	ازا	24	24	24	24
Canada	• •	18	17	14	12	10
Other Commonwealth	• •	10	9	8	8	7
Ireland, Republic of	••	17	15	13	12	12
Total	••	1,808	1,778	1,739	1,805	1,909
Foreign—						
Argentina		376	403	460	425	1.55
U.S.S.R. (Russia) (c)	• •	219	493	250	4 <sup>2</sup> 5 280	415
United States of Americ	ca.d	451	362	328	296	290 264
T7		114		150	_	
Oruguay Spain	• •	60	174 80	88	144 104	163
Turkey		52	69	71	76	90
Chile	• •	,	-	, ,	•	71
Brazil	• •	33 39	43 50	44 41	45 40	45
Yugoslavia	• •	33	30	32		39 36
France	• •	53	33	34	34	
Italy	• •	31	29	32	35	35
Roumania	•	45	26	26	28	30
French Morocco	• •	43	20	25	26	20
Germany (e)	• •	39	12	12	12	15
Other Asia	•	199	191	189	200	187
Other Europe	•	113	91	98	109	1115
Other America		44	45	47	49	50
Other Africa		37	22	23	28	25
Total		1,980	2,007	1,950	1,966	1,925
Grand Total		3,788	3,785	3,689	3,771	_3,834
Apparel type— Merino Crossbred		1,475 1,518	1,263 1,750	1,260 1,651	1,303	1,341
Carpet type	• •	795	772	778	806	788
		1	1	1	J	ŧ

<sup>(</sup>a) Provisional. (b) Includes Basutoland and S.W. Africa Territory. (c) Includes Baltic Republics of Estonia, Latvia and Lithuania. (d) Pulled wool converted to a greasy basis. (e) Federal Republic only, from 1946-47. Estimate for Eastern Germany included in "Other Europe".

<sup>7.</sup> War-time Contracts.—(i) Wool. Details of the contract entered into between the Governments of Australia and the United Kingdom for the purchase of the surplus wool clip of Australia for the duration of the war and one full clip thereafter (1939-40 to 1945-46) will be found in Official Year Book No. 36, page 1106.

<sup>(</sup>ii) Sheepskins. Details of the war-time contract arrangements for the period April, 1940 to June, 1946 between the Australian and United Kingdom Governments for the purchase of Australia's exportable surplus of woolled sheepskins will be found in Official Year Book No. 37. page 875.

Wool.

- 8. Australian Wool Realization Commission.—(i) General. The accumulation of Dominion wool in the hands of the United Kingdom Government as an outcome of the war-time arrangements and the disposal of these stocks concurrently with future clips were matters for discussion by a conference of officials and experts from the United Kingdom, the Commonwealth of Australia, the Dominion of New Zealand, and the Union of South Africa, held in London in April-May, 1945. At this conference it was decided that the only sound method of handling the gigantic task of disposing of these stocks was by means of a partnership between the countries concerned, under which the old wool would be marketed and the marketing of the current clip supported throughout the period of disposal of stocks. To ensure that stability of wool prices would be achieved, a reserve price appropriate to type and governed by the general trend of prices, and at which the wool would be bought in if commercial bidding did not attain the appropriate level, was agreed upon.
- (ii) United Kingdom-Dominion Wool Disposals Limited. The formation, by the four Governments, of a Joint Organization under the title of "United Kingdom-Dominion Wool Disposals Limited" (commonly referred to as "J.O.") was, therefore, undertaken for the purposes of buying, holding and selling wool on behalf of the United Kingdom and the Dominion Governments concerned. The Australian Wool Realization Commission is the Australian subsidiary of this organization. An account of the detailed provisions of the plan and of the functions and operations of the Australian Wool Realization Commission was given on pages 921-3 of the previous issue of the Year Book, No. 38. An interim distribution of £23.6 million was made in November, 1949 to Australian wool-growers from profits arising from the Wool Disposals Plan.
- (iii) Stocks. (a) Total held by Joint Organization. The stock of Dominion-grown wool in the ownership of the United Kingdom Government at 31st July, 1945 was transferred to the joint ownership of the United Kingdom Government and the Dominion Government concerned, and all wool subsequently acquired under the scheme was in the joint ownership of the United Kingdom and the Dominion concerned. Total stocks of United Kingdom wool transferred to the Joint Organization at 31st July, 1945 were:—

Australian anown wool				6,796,000
Australian-grown wool	• •	• •	• •	0,790,000
New Zealand-grown wool	• •	• •		1,777,000
South African-grown wool				1,834,000
	Total			10,407,000

By 30th June, 1951 these stocks had been reduced to 17,856 bales, whose origins, locations and types are shown in the following table:—

WOOL STOCKS HELD BY JOINT ORGANIZATION, 30th JUNE, 1951.
(Bales.)

		Daics.					
Origin and Yessation of Stacks	ĺ	•	Type of Wool.				
Origin and Location of Stocks.		Greasy.	Scoured.	Carbonized.	Total.		
Australian-grown wool— Held in Australia		4	2	,	6		
" United Kingdom	•••	4,430	7,4	120	11,850		
Total		4,434	7,4	) <sub>122</sub>	11,856		
New Zealand-grown wool— Held in New Zealand ,, United Kingdom		4,500 330		(a) 1,070	4,500 1,500		
Total		4,830	100	1,070	6,000		

(b) Total held in Australia. In the next table details are shown of the stocks of wool held in Australia by the Central Wool Committee and its successor, the Australian Wool Realization Commission, on the dates specified. The quantities, which distinguish between greasy, scoured and carbonized, refer to the amount of appraised wool actually held in store in Australia. Wool held by brokers prior to appraisement and any held by woollen mills or growers is not included.

STOCKS OF APPRAISED WOOL HELD IN STORE IN AUSTRALIA.
(Source: Australian Wool Realization Commission.)

	318 <b>t</b> Ju	ıly—	1	Greasy.	Scoured.	Carbonized.	
1940		•••	•••	127,134	13,640	2,017	
1941				376,444	82,329	8,781	
1942				397,051	75,896	6,296	
1943				758,288	125,555	12,271	
1944				1,141,777	155,534	13,512	
1945				1,321,387	176,295	13,325	
1946				1,072,771	164,021	8,712	
1947 (a)				675,110	104,710	3,199	
1948 (a)				517,303	73,236	239	
1949 (a)				253,061	42,591	12	
1950 (a)				56,206	11,512	• •	
1951 (a)				1	ī	• •	

(a) 30th June.

- (iv) The Contributory Charge. Associated legislation, viz., the Wool (Contributory Charge) Act 1945 and the Wool (Contributory Charge) Assessment Act 1945 provides for a contributory charge to be imposed on all wool—
  - (a) produced in Australia; and
  - (b) on or after a date to be fixed by proclamation—
    - (i) sold by a broker at auction or otherwise;
    - (ii) purchased by a manufacturer;
    - (iii) subjected by a manufacturer (whether or not he is the producer or owner of the wool) to a process of manufacture; or
    - (iv) exported from Australia:

the rate of the charge to be such percentage as is prescribed from time to time of the sale value of the wool, the percentage being such as is necessary to provide the amounts required to meet the share of the industry in the operating expenses of the Joint Organization, the payment of interest on moneys expended by the Commonwealth in purchases of wool in pursuance of the Disposals Plan and unrecouped, and payment into the Wool Use Promotion Fund as provided under the Wool Use Promotion Act 1945. The plan did not require that the Contributory Charge should operate during the 1945–46 season. For further particulars of the Wool Contributory Charge and the amounts collected see Chapter XVII.—Public Finance, pages 770–1.

(v) Wool classified according to Quality. It has not been possible to undertake any analysis of the wool produced in Australia because the data necessary to make such a tabulation effective were lacking. Under war-time control, however, records were kept which made it possible to classify each lot appraised according to quality, degree of fault and combing or carding type for each of the years 1940-41 to 1945-46.

Since the resumption of auctions in 1946-47 this analysis has been continued by the Australian Wool Realization Commission, but the basis of the data has been changed to the catalogues of auction sales, excluding wool to which Joint Organization's reserves were not applicable, and not upon appraisement as previously. The following table provides a detailed analysis of wool appraised or sold at auction according to quality, for the years 1947-48 to 1950-51 compared with 1940-41, according to the records compiled by the Australian Wool Realization Commission. "Quality" ("64's, 60's, 58's", etc.) is a

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measure of the fineness and texture of wool for spinning purposes. Broadly, it means the maximum number of hanks of yarn, each of 560 yards length, which can be spun from 1 lb. of combed wool. For instance, wool of 64's quality is of a fineness and texture which will produce 64 hanks, each of 560 yards, from 1 lb. of tops (combed wool) of that particular wool.

### CLASSIFICATION OF GREASY WOOL APPRAISED OR SOLD AT AUCTION: AUSTRALIA.

(Bales of approximately 300 lb.).

Pre-	1940-4	1940–41.(a)		1947-48.(b)		).(b)	1949-5	o.(b)	1950-5	ı.(b)
dominating Quality.	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.	Quantity.	Per cent.
70's and finer 64/70's 64'\$ 64/60's 60/64's 60's and 60/58's	200,951 679,377 869,117 236,138 408,534 387,164	20.8 26.7 7.2 12.5	396,968 470,819 254,726 435,228	13.9 16.5 8.9 15.2	498,285 558,785 265,159 422,161	18.4 8.7	518,492 618,226 305,412 524,380	15.4 18.4 9.1 15.6	523,670 625,749 296,029 525,883	15.6 18.6 8.8 15.7
Total 60's and finer	2,781,281	85.3	2,061,796	72.1	2,241,505	73-7	2,515,087	74.8	2,523,881	75.1
58's 56's 50's Below 50's Oddments	270,371 135,232 39,619 21,089 12,955	4.2 1.2 0.6	324,153 278,930 132,247 45,289 20,118	9.7 4.6 1.6	288,717 115,075	9.5 3.8	307,876 114,482 31,413	9.2 3.4	300.375 112,295 27,978	9.0 3.3 0.8
Grand total	3,260,547	100.00	2,862,533	100.00	3,041,063	100.00	3,360,706	100.00	3,358,779	100.00

<sup>(</sup>a) Appraised greasy wool. (b) Greasy wool sold at auction, excluding that to which Joint Organization's reserves were not applicable.

- 9. Post-war Marketing of Wool.—(i) Minimum Reserve Price Plan. A plan designed to continue reserve price operations on the termination of the Wool Disposals Plan, administered by the Joint Organization, was completed by the Governments of Australia. New Zealand, South Africa, and the United Kingdom in May, 1951. The plan was. evolved following prolonged negotiations in which wool-growers' organizations in the three-Dominions participated. It provided for the establishment of an organization to recommend reserve prices to participating Governments, to buy wool at these prices when commercial buyers were not prepared to do so, and to arrange for the later re-offeringof wools so purchased. The scheme was to have operated initially for five years from 1951-52. The necessary funds to operate the plan were to be provided by each participating country whilst the Governments of the three Dominions agreed to provide guarantees if the initial capital should become absorbed in the purchase of wool. In Australia the initial funds were to be provided by the wool-growing industry, and to raise this money the Commonwealth Government imposed a levy of 74 per cent. on sales of wool in the 1950-51 season. From this levy about £45,000,000 was obtained. The completed plan was endorsed by the Commonwealth Government subject to its approval at a referendum of wool-growers. This referendum was held in August, 1951, when the majority of growers voted against the plan. Following rejection of the plan, the moneys collected by levy are being refunded to growers
- (ii) Subsidy on Woollen Goods, 1950-51. In order to reduce the effects of greatly increased wool prices in the 1950-51 season (see para. 14 following), the Commonwealth Government paid a subsidy on weollen goods manufactured for consumption in Australia from wool sold during the 1950-51 season. The subsidy was equivalent to about 45d. per lb. of all greasy wool (1950-51 clip) consumed in Australia, the total amount paid being approximately £17,000,000.

10. Wool Publicity and Research.—(i) Wool Use Promotion. Under the Wool Use Promotion Act 1945, provision was made for improving the production and increasing the use of wool. The Australian Wool Board was reconstituted and its functions (which previously included the administration and supervision of economic and scientific research) were defined as the promotion, by publicity or other means, of the use of wool throughout the world and the performance of other approved functions for the benefit of the industry.

The Board is represented on the International Wool Publicity and Research Secretariat, which was established in 1937 with head-quarters in London, by the Wool Boards of Australia, New Zealand and South Africa. The Wool Boards contribute jointly to the expenses of the Secretariat, whose main functions are to promote the use of wool through a broad programme of publicity, education and research. The Wool Bureau Incorporated, which comprises the same interests in partnership with American wool industry representatives, undertakes similar functions in the United States of America.

The activities of the Australian Wool Board are financed from the Wool Use Promotion Fund. The Wool Tax Act 1945 imposed a tax at the rate of 2s. per bale to provide this fund. This tax is not payable at present but an equivalent sum—approximately £350,000 per annum—is provided from the Wool Contributory Charge.

(ii) Research. In the field of wool research, the Commonwealth Scientific and Industrial Research Organization is responsible for scientific, technical, and biological research into sheep raising and wool production, as well as wool textile research. Economic wool research is the responsibility of the Bureau of Agricultural Economics, a division of the Commonwealth Department of Commerce and Agriculture. The economic research work falls into two main categories, viz., farm production economics dealing with economics of woolgrowing and sheep-station management generally, and commodity research dealing with the economic aspects of the wool industry in Australia and of wool as a commodity in world trade.

Finance for research is provided from a Wool Research Trust Account into which is paid annually from the Commonwealth Consolidated Revenue a sum equal to the amount which is raised by the Wool Tax or its equivalent. In addition, expenditure on items of a capital nature for the research programme may be met from the Wool Industry Fund which was constituted as a Trust Account from various moneys accumulated by the Central Wool Committee in war-time.

Ample opportunity is afforded for co-operation, in these research activities, with State Departments of Agriculture and other organizations.

11. Consumption of Locally Processed Wool.—Reliable estimates of the total consumption of wool in Australia are not available as quantities of manufactured woollen goods are imported whose contents in terms of wool cannot be ascertained. It is possible, however, to secure with reasonable accuracy the quantities of wool used in Australian factories and mills to produce woollen cloth and other woollen goods, such as blankets, rugs and knitted wear. Some difficulties arise in the aggregation of returns from individual mills concerned with only one process in manufacture and whose output constitutes the raw material of other mills, but the risk of duplication has been reduced to a minimum. Reference is made to the woollen mills established in Australia in Chapter XXIV.—Manufacturing Industry.

The factors used to convert scoured wool and woollen yarn processed in Australia into their greasy equivalent are now computed from the data furnished by woollen mills. In 1949-50 these factors were:—1 lb. of worsted yarn was taken to equal 2.10 lb. of greasy while the greasy equivalent of 1 lb. of scoured wool was 1.71 lb.

Wool. 927

In the following table particulars are shown of the quantity of wool processed in Australian woollen mills, cotton mills, hosiery mills and other factories during the years 1938-39 and 1945-46 to 1949-50:—

CONSUMPTION OF LOCALLY PROCESSED WOOL IN AUSTRALIA.

('000 lb.—in terms of greasy.)

,	Year.	Woollen Mills.	Cotton Mills.	Hosiery Mills.	Other Factories.	Total.	
1938-39 1945-46 1946-47 1947-48 1948-49 1949-50		 52,376 62,127 60,672 66,118 66,222 62,232	533 355 343 648 632 515	13,327 15,012 17,302 18,672 21,912 19,664	2,208 9,417 10,345 14,025 13,620 9,254	68,444 86,911 88,662 99,463 102,386 91,665	

12. Exports of Wool.—(i) Greasy—Quantities. Prior to the 1939-45 War, greasy wool exported overseas was sent principally to the United Kingdom and other European countries. In 1938-39, 41.9 per cent. of total shipments were sent to the United Kingdom, other important consignees being France, 20.4 per cent., Belgium, 13.1 per cent., and Japan, 9.1 per cent. During the war, exports to the United Kingdom declined and shipments to the European continent and to Japan virtually ceased, while the quantity shipped to the United States of America showed great expansion. Of the total quantity of greasy wool exported overseas during the five years ended 1949-50, 19.8 per cent. was sent to the United States of America and 31.5 per cent. to the United Kingdom, 13.5 per cent. to France, 11.0 per cent. to the United States of America, and 11.4 per cent. to Belgium. The following table shows the quantities of greasy wool exported, and the principal countries of recorded destination.

EXPORTS OF GREASY WOOL: AUSTRALIA. ('000 lb.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1945-46.	1946–47.	1947–48.	1948-49.	1949–50.
United Kingdom Other British Countries Belgium France Germany Italy Japan Netherlands Poland United States of America Other Foreign Countries	288,436 2,158 107,928 100,476 36,955 21,748 131,302 12,666 12,396 25,739 23,076	237,312. 7,804 68,692 89,580  5,409  288,967	182,493 8,879 169,301 186,387 748 108,684 2,351 6,931 1,537 302,772 49,367	277,401 8,275 106,419 155,548 18,769 38,066 1,834 8,052 5,196 118,869 35,794	355,403 6,848 94,944 195,855 16,801 104,252 22,561 8,974 29,255 70,338 76,805	379,804 7,652 120,913 142,528 53,338 66,632 55,392 9,969 36,812 116,743 67,870
Total	762,880	711,358	1,019,450	774,223	982,036	1,057,653

<sup>(</sup>ii) Scoured and Washed and Carbonized including Tops, Noils and Waste—Quantities. The exports of "scoured and washed" wool, whether carbonized or not, including tops, noils and waste during the periods shown were as follows.

EXPORTS OF WOOL—SCOURED AND WASHED AND CARBONIZED INCLUDING TOPS, NOILS AND WASTE: AUSTRALIA.

('000 lb.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1945–46.	1946-47.	1947–48.	1948–49.	1949–50.
United Kingdom Canada Other British Countries Belgium France Germany Italy Japan Poland United States of America Other Foreign Countries	34,520 4,376 1,201 8,235 9,310 3,013 451 1,128 1,010 921 5,995	22,908 9,602 8,318 6,968 1,599  152  32,086 12,884	64,405 14,650 6,537 20,203 11,189 7 7,693  26,776 39,536	73,904 11,690 7,660 14,715 17,767 762 4,980  107 9,034	58,580 11,964 6,094 9,115 25,399 882 11,566 98 160 8,716 23,587	69,526 11,554 1,929 11,618 11,630 5,471 7,528 1,279 197 17,154 25,154
Total	70,160	94,517	190,996	163,629	156,161	163,040

(iii) Total Value of Exports. The value of wool exported from Australia during the five years ended 1949-50 averaged 42.8 per cent. of the value of the exports of merchandise of Australian origin, and during 1949-50 the proportion was 51.5 per cent. The value during the period under review, together with the principal countries to which wool was exported, is shown in the following table.

VALUE OF WOOL EXPORTS: AUSTRALIA. (£'000.)

Country to which Exported.	Average, 1934-35 to 1938-39.	1945-46.	1946–47.	1947-48. ;	1948-49.	1949-50.
United Kingdom	19,233	21,523	26,377	51,968	80,495	114,983
Other British Countries	703	3,727	4,740	5,720	5,804	6,248
Belgium	5,863	6,121	16,165	15,536	15,808	24,124
France	5,618	7,305	16,919	22,775	40,262	34,851
Germany	2,602		94	3,894 .	3,877	15,504
Italy	1,340	445	11,601	7,478	23,680	17,627
Japan	7,727		203	399	4,808	14,003
Netherlands	777	34	1,348	2,015	2,922	4,497
Poland	793		190	1,123	7,291	12,483
United States of America	2,252	26,949	35,705	24,453	20,722	40,166
Other Foreign Countries	1,859	3,156	12,787	13,386	25,727	28,660
Total	48,767	69,260	126,129	148,747	231,396	313,146

13. Local Sales of Wool.—Under pre-war conditions buyers from the United Kingdom, France, Belgium, Germany and other European countries, and from America, Japan, China and India attended the sales conducted in Sydney, Newcastle, Albury, Melbourne, Geelong, Ballarat, Brisbane, Adelaide, Perth, Hobart and Launceston. In 1946-47, following the cessation of the acquisition scheme which ended with the 1945-46 season, auction sales were resumed at these centres and commenced at Goulburn. Since the resumption of auction sales, there has been a greater quantity of wool disposed of locally, more than 95 per cent. of Australia's production being disposed of in this manner.

14. Value.—Wool is the chief factor in the pastoral wealth of Australia, and the nation's prosperity is largely dependent upon its satisfactory sale. During the three years ended 1950-51 the price of greasy wool sold in the selling centres of Australia averaged 85.2d. per lb. compared with the average United Kingdom contract price of 14.59d. per lb. during the years 1939-40 to 1945-46 and the average selling price of 11.5d. per lb. during the ten years ended 1938-39. The average for the nine years ended 1928-29 was 18d. per lb., and for the seven years ended 1913-14, 9d. per lb. The heavy decline in the price of wool which commenced in 1929-30 continued during the next three years. In 1933-34, prices rose in a remarkable manner, averaging 15.84d. per lb., compared with 8.72d. per lb. for the previous year, an increase of 81.6 per cent. A decline in 1934-35 was succeeded by a period of rising prices in the two years following, but in 1937-38 and in 1938-39 prices again receded.

Wool. 929

As mentioned in paragraph 7 above, the price of wool during the 1939-45 War was determined by the British Government wool contract. The price fixed for the years 1939-40 to 1941-42 was 13.4375d. per lb., and for the years 1942-43 to 1945-46, 15.45d. per lb. With the return to auction sales since 1945-46, the average price of greasy wool sold rose to 24.49d. per lb. in 1946-47, 39.50d. per lb. in 1947-48 and 48.07d. per lb. in 1948-49. In 1949-50 it rose further to 63.35d. per lb. and in 1950-51 reached the unprecedented level of 144.19d. per lb. The average price in 1950-51 was nine times as great as the 1945-46 contract price and almost thirteen times as great as the average for the ten seasons ended 1938-39.

The effect of fluctuating wool values upon the national income is reflected in the following figures. Based upon appraisement in each State plus certain adjustments as recorded by the State Statisticians, the gross value of wool produced in Australia for 1942-43 amounted to £73,017,000 and for 1943-44 to £75,124,000 compared with £42,043,000 realized during 1938-39 under open market conditions. The value in 1944-45 and 1945-46 declined to £64,894,000 and £58,597,000 respectively, as a result of decreased production. In 1924-25 when the record pre-war price was realized, the value was £81,430,000, and in the year 1930-31, £34,804,000. With the remarkable increases in post-war wool prices, the value of production rose to £96,858,000 in 1946-47, to £156,998,000 in 1947-48, to £201,972,000 in 1948-49, to £288,623,000 in 1949-50, and to the all time record figure of £651,000,000 in 1950-51.

The following table shows the average auction-room price of greasy wool in Australia for 1938-39 and 1946-47 to 1950-51 as compiled by the National Council of Woolselling Brokers. This latter price represents the average price realized for all greasy wool of whatever type or quality marketed during the year indicated.

WOOL: AVERAGE MARKET PRICE PER LB.(a)

(0.)									
Description.		1938-39.	1946-47.	1947-48.	1948-49.	1949-50.	1950-51.		
Greasy		10.39	24.49	39.50	48.07	63.35	144.19		

<sup>(</sup>a) Average price realized for all greasy wool of whatever type or quality marketed in Australia during the year.

15. United Kingdom Importation of Wool.—The important position which Australia occupies in the supply of wool to the United Kingdom is indicated in the following statement of the quantities of wool imported into that country from the principal wool-producing countries during 1938 and each year 1946 to 1950.

WOOL (a): IMPORTS INTO UNITED KINGDOM.

Country of Origin.		1938.	1946.	1947.	1948.	1949.	1950.
		'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'ooo lb.
Australia		365,519	229,668	292,947	331,927	472,500	384,155
New Zealand		197,995	185,645	211,381	226,059	209,449	180,351
Union of South Africa		106,601	38,970	58,057	57,434	59,596	60,106
India		46,049	10,798	(b)20,985	23,103	27,194	30,264
Falkland Islands		1,426	2,813	4,946	4,500	4,025	4,456
Ireland, Republic of		8,277	1,638	5,158	5,994	6,655	8,111
Other British Countries		4,566	421	2,344	1,823	2,712	3,390
Argentina		79,303	4,034	8,659	4,448	4,223	2,365
Uruguay		22,073				28,003	30,838
Other Foreign Countries	• •	49,517	281	15,050	J 19,012	20,003	30,030
Total Quantity		881,326	475,257	620,585	674,900	814,357	704,036
Total Value (£'000 sterli	ng)	40,996	37,744	59,882	86,227	126,781	185,746

<sup>(</sup>a) Greasy and scoured.

Australian wool represented 52.0 per cent. of the total quantity imported into the United Kingdom during the five years ended 1950. New Zealand supplied 30.8 per cent. and South Africa 8.3 per cent., while the total quantity received from British countries constituted 95.5 per cent. of all United Kingdom imports.

16. Principal Importing Countries and Sources of Supply.—On page 884 of Official Year Book No. 37 appeared a table which furnished, in respect of the principal importing countries, details of their production and imports of wool for 1938, together with the chief sources of supply. Complete details are not yet available for later years.

### § 6. Trade in Hides and Skins.

- r. Extent of Trade.—In addition to the hides and skins treated locally, considerable quantities are exported: the value of cattle and horse hides, and sheep and other skins, sent overseas during the five years ended 1949-50 amounted to £66,989,920 or an average of £13,397,984 per annum.
- 2. Sheepskins with Wool.—The exports of sheepskins with wool, aggregating £37,090,737 during these five years, constitute the most important item in the values referred to in the preceding paragraph. During 1938-39 France was the largest purchaser of sheepskins with wool, taking 74 per cent. of the total consignments, while the United Kingdom ranked next with 15 per cent., followed by Germany with 7 per cent. In 1949-50, France obtained 53.2 per cent. of total exports, the United Kingdom 23.0 per cent., and the United States of America 14.5 per cent. The exports of sheepskins with wool during each of the years 1945-46 to 1949-50 compared with the average for the years 1934-35 to 1938-39 were as follows:—

EXPORTS OF SHEEPSKINS WITH WOOL: AUSTRALIA.

Par	ticulars.		Average, 1934-35 to 1938-39.	1945-46.	1946–47.	1947-48.	1948-49.	1949–50.
Number Value		£	12,009,135 2,779,523	18,811,654 4,363,835	18,189,641 7,090,560	11 <b>,23</b> 2,934 7,420,682	11,255,426 7,339,103	14,918,878 10,876,557

3. Sheepskins without Wool.—Up to 1943-44 sheepskins without wool were exported chiefly to the United States of America. During the year mentioned this country accounted for 97 per cent. of the total shipments while the remaining 3 per cent. were exported to the United Kingdom, Canada and the U.S.S.R. There has, however, since been a decline in shipments to the United States of America and an increase in the quantities shipped to the United Kingdom and other countries; in 1949-50 the United States of America received 74 per cent. of total shipments; the United Kingdom 22 per cent. and other countries 4 per cent. Quantities and values for the five years 1945-46 to 1949-50 compared with the average for the years 1934-35 to 1938-39 are shown in the table hereunder:—

EXPORTS OF SHEEPSKINS WITHOUT WOOL: AUSTRALIA.

Par	ticulars.		Average, 1934-35 to 1938-39.	1945-46.	1946-47.	1947–48.	1948–49.	1949-50.
Number Value		£	807,690 69,600	2,850,201 243,126			814,315 107,667	3,441,317 826,110

4. Hides.—(i) Exports. The export trade in cattle hides during 1949–50 was distributed as follows:—Poland, £333,913; Turkey, £235,374; Japan, £183,286; Germany, £159,132; United Kingdom, £113,032; and other countries, £315,414.

The exports during each of the five years 1945-46 to 1949-50 compared with the average for the years 1934-35 to 1938-39 are shown in the table below:—

### EXPORTS OF CATTLE HIDES: AUSTRALIA.

Particulars.		Average, 1934-35 to 1938-39.	1945-46.	1946–47.	1947-48.	1948-49.	1949-50.
Number Value	£	956,552 791,730	189,863 229,542			270,514 1,177,040	

Calfskins exported during the five years ended 1949-50 numbered 48,674, valued at £38,483. Exports of horse hides during the same period numbered 182,069, valued at £451,174.

(ii) Imports. The imports of cattle hides and calfskins are fairly large, the chief source of supply being New Zealand and the Pacific Islands. The quantities and values of cattle hides, including calfskins, imported into Australia during the years 1945-46 to 1949-50 compared with the average for the years 1934-35 to 1938-39 were as follows:—

### IMPORTS OF CATTLE HIDES AND CALFSKINS: AUSTRALIA.

Par	ticulars.		Average, 1934-35 to 1938-39.	1945–46.	1946–47.	1947-48.	1948-49.	1949-50.
Quantity Value		cwt.	70,781 278,658		, ,	,00	14,245 81,520	

5. Furred Skins.—The exports of furred skins were valued as follows:—

### EXPORTS OF FURRED SKINS: AUSTRALIA.

(£.)

Des	cription.		Average, 1934-35 to 1938-39.	1945~46.	1946–47.	1947-48.	1948-49.	1949-50.
Rabbit			1,150,463	u6,290,938				a1,640,492
Opossum	• •	• •	124,627	86,903				
Kangaroo	• •		173,128	477,330		366,904	407,866	187,182
Fox			57,803	52,845	15,258	7,369	4,945	6,516
Wallaby			17,584	26,570	41,828	14,380	5,421	6,103
Other	• •	••	11,215	2,191	3,381	1,129		4,035
Tot	al		1,534,820	6,936,777	7,471,127	4,363,131	3,429,738	1,888,431

(a) Includes hare skins.

These skins were shipped principally to the United States of America, the United Kingdom and Canada, the values taken by each in 1949-50 being shown in the following table:—

FURRED SKINS: EXPORTS TO PRINCIPAL COUNTRIES OF DESTINATION, 1949-50.

Country.	Rabbit Skins.(a)	Kangaroo Skins.	Fox Skins.	Other (Opossum, Wallaby, etc.).	Total.
United Kingdom United States of America Canada Other Countries	33,180 1,435,813 47,352 124,147	16,013 170,957  212	6,410   106	11,153 42,330 460 298	66,756 1,649,100 47,812 124,763
Total	1,640,492	187,182	6,516	54,241	1,888,431

- (a) Includes hare skins.
- 6. Marketing of Hides and Skins.—(i) Sheepskins with Wool. Details of the wartime agreement between the United Kingdom and Commonwealth Governments for the purchase by acquisition of the "exportable surplus" of woolled sheepskins in Australia were given in Official Year Book No. 37, page 886. The contract expired on 30th June, 1946, and sheepskins are marketed at open auction.
- (ii) Sheep and Lamb Pelts. Details of the marketing control of sheep and lamb pelts were given in Official Year Book No. 38, page 930. Pelts have revorted to open marketing without export restrictions.
- (iii) Hides and Leather. A hide acquisition and marketing scheme has been in operation since November, 1939. Until 31st December, 1948, the scheme operated under the National Security Regulations. Since 1st January, 1949, it has continued under a Commonwealth Act and six supporting State Acts.

The Australian Hide and Leather Industries Board, which administers the scheme, acquires all cattle hides, yearling and calf skins at prices from 15 per cent. to 20 per cent. above August, 1939 levels, and these are allocated to tanners at these prices. Surplus hides are disposed of by tender or open auction. The Board retains the amounts realized in excess of appraised values, and supplements the price to the producers in cases where the realized amount is less than the appraisement values.

Pre-war, about 40 to 45 per cent. of Australian production was exported, but with the development of the local tanning industry, the proportion is approximately 12½ per cent.

Returns from export sales of hides and deferred payments levied on leather exported based on the difference between world and Australian prices for the hides involved are paid into a fund by the Board. From this fund, premiums are paid to producers as a proportion of appraised values. These premiums compensate hide producers to some extent for the margin between local and oversea prices. Further details of the war-time operations of the scheme will be found in Official Year Book No. 37, page 887 and Official Year Book No. 38, pages 930-1.

(iv) Rabbit Skins. A marketing control scheme for rabbit skins was introduced under the National Security (Rabbit Skins) Regulations on 10th June, 1940 and terminated in April, 1949. Details of the scheme will be found in Official Year Book No. 38, page 931.

### § 7. Tallow.

1. Production.—Australia's production of tallow is in excess of local requirements and considerable quantities are normally available for export. The recorded production in factories is incomplete as production in establishments which do not come within the definition of a factory is excluded. More complete details, but on a calendar year basis, are, however, available. These relate to production in all slaughtering establishments and are shown in the following table for each year 1945 to 1950.

TALLOW: PRODUCTION IN SLAUGHTERING ESTABLISHMENTS, AUSTRALIA.

Type.		1945.	1946.	1947.	1948.	1949.	1950.
Edible Inedible		898,831 222,533	354,934 712,840	437,232 618,990	524,690 670,631	565,774 784,259	
Total	••	1,121,364	1,067,774	1,056,222	1,195,321	1,350,033	1,569,368

2. Consumption.—Details of net exports and consumption in factories are shown in the following table for the five years 1945-46 to 1949-50 in comparison with 1938-39:—

TALLOW: NET EXPORTS AND CONSUMPTION IN FACTORIES, AUSTRALIA.

(0)						
Particulars.	1938–39.	1945–46.	1946-47.	1947–48.	1948–49.	1949–50.
Net Exports Consumption by Fac- tories	<i>a</i> 560,241			·		407,723 1,063,000

(a) Inedible only.

3. Marketing.—A modified control operates on the marketing of tallow, tallow products and derivatives. Exports are closely regulated. In respect of tallow shipped overseas the excess returns received over the fixed Australian domestic prices are paid by the exporters into a pool or equalization fund, from which a distribution is made to tallow producers generally.

A contract with the United Kingdom has been entered into annually in recent years. The 1950-51 contract provided that the United Kingdom would purchase the whole of Australia's exportable surplus of tallow, but shipments of certain grades could be made available elsewhere. Ceylon received 1,000 tons in 1950-51, and significant quantities of white mutton tallow are sold to India.

Prices in Australia are fixed, and from 19th October, 1951, the price of prime bright mixed tallow for home consumption rose from £32 10s. to £47 10s. per ton. Under the present United Kingdom contract, the price of this grade of tallow has been increased from 1st October, 1951, from £99 to £122 per ton.