

## CHAPTER XVIII.

### FARMYARD, DAIRY AND BEE PRODUCTS.

#### § 1. Introductory.

1. **General.**—The introduction of cattle into Australia and the early history of the dairying industry are referred to in some detail in earlier issues of this publication. It may here be noted that the original stock has been crossed with specially imported stud cattle, while further judicious crossings of strains have resulted in an increased and improved milk supply. In Australia, dairy cattle thrive in the open throughout the year, local climatic conditions demanding no protection other than tree plantations for shelter, and rugging in the coldest weather. Indigenous and imported grasses furnish food during the greater part of the year, and winter fodder, when necessary, is given to the cattle in the fields. With the wider application of scientific methods in the treatment of animals and pasturages and in the processes of manufacture, coupled with herd testing and effective State supervision, the dairying industry has shown rapid expansion. An investigation into the problems of the dairying industry was instituted by the Commonwealth Government in 1929, and the first report dealing with farm production was completed in 1930. It was proposed to issue additional reports, but the investigation was discontinued. Investigation by the British Medical Research Council into the vitamin content of Australian, New Zealand and British butter showed high and uniform results for the Australian product, the figures being on a par with those for the United Kingdom and other European countries. It was demonstrated also that Australian production and marketing methods do not adversely affect the vitamin content of the butter and that the loss during cold storage even for as long as two years is insignificant.

2. **Official Supervision of Industry.**—Dairy experts of the various State Agricultural Departments give instruction in approved methods of production, and inspect animals, buildings and marketable produce. A high standard of cleanliness, both of *personnel* and *materiel*, prevails. Financial assistance of a temporary nature is also given.

The export trade is regulated by the terms of the Commonwealth Commerce (Trade Descriptions) Act 1905-1933, and regulations thereunder. It will be sufficient to state here that the true trade description, etc., must be marked on all produce intended for export, while official inspection ensures the maintenance of purity and quality. Upon request of the exporter the goods are given a certificate by the inspector.

3. **Stabilization Scheme.**—(i) *Voluntary Plan.* During the period from January, 1926 to May, 1934, a voluntary scheme known as the "Paterson Plan" was in operation, and had the effect of stabilizing the price of butter in Australia. The scheme provided for the payment of a levy on all butter produced in Australia sufficient to pay a bounty on export which ranged from 3d. to 4½d. per lb. The local price was raised by the amount of the bounty per unit while the return to the producer on all butter produced was increased by approximately the difference between the rate of bounty paid and the rate of levy charged.

The scheme, however, did not receive the full support of all manufacturers of butter and was superseded by a system of compulsory control of sales.

(ii) *Compulsory Plan.* The Dairy Produce Act was passed by the Commonwealth Parliament towards the end of 1933, and at the same time complementary legislation was passed by the Parliaments of New South Wales, Victoria, Queensland and Tasmania. As a result of a referendum among producers held in 1936, Tasmania withdrew from the plan and the State Act expired. In the Commonwealth Act power was given to regulate interstate trade while the State Acts were designed to regulate trade within

the respective States. The authority set up by each State Act fixed the proportion of the State's production to be sold within the State, and the Commonwealth Act protected this allocation by regulating the movement of butter and cheese from one State to another and so ensured the removal from the Australian market of the surplus production.

The compulsory plan was invalidated by the decision of the Privy Council which declared in the James (Dried Fruits) Case that no power existed in the Commonwealth Constitution to regulate trade between the States; the home-consumption price scheme for the marketing of dairy produce is now being continued on a voluntary basis.

4. **Mixed Farming.**—Dairying is not now, as formerly, wholly confined to agriculturists, since many graziers in a large way of business also give it their attention. In non-coastal regions it is generally carried on in conjunction with agriculture and sheep-raising, sufficient fodder being grown to carry the cattle through the winter months. Local wants are thus met, and in many places remote from the metropolis well-equipped factories have been established. The extent to which dairy cows and pigs are run in conjunction with the growing of wheat is referred to in Chapter XVII. "Agricultural Production".

5. **Factory System.**—Cream separation and butter-making are often carried on together under the co-operative system. The creation of large central butter factories, supplied by numerous separating establishments or "creameries," has resulted in a considerable reduction in the cost of manufacture, since improved appliances such as refrigerators, etc., may be profitably worked at the larger establishments. The product is also of a more uniform quality and the number of farmers who prefer to convert the cream rather than send it to the factory is rapidly diminishing. Formerly the average quantity of milk used per pound of hand-made butter was about 3 gallons, but separator butter requires less than  $2\frac{1}{2}$  gallons.

6. **Butter and Cheese Factories.**—The factories in Australia for the manufacture of butter, cheese and condensed milk numbered 520 in 1939-40. They were distributed among the States as follows:—New South Wales, 127; Victoria, 167; Queensland, 102; South Australia, 50; Western Australia, 24; and Tasmania, 50. Fuller details regarding numbers of factories, output, etc., are given in Chapter XXI. "Manufacturing Industry".

7. **Ottawa Conference.**—Details of the agreement reached at the Imperial Economic Conference at Ottawa in August, 1932, regarding the dairying, bee and poultry industries are given in previous issues of the Official Year Book.

8. **Employment.**—The number of persons employed in the dairying industry is ascertained at the annual census of dairy production. The particulars collected are in respect of those persons who are permanently engaged in the actual work of the farm and include owner, occupier or manager, members of the family and other permanent employees. Casual hands are excluded; so are females whose duties are mainly domestic, although they may assist in the outdoor work of the farm.

#### EMPLOYMENT IN DAIRYING INDUSTRY.

Year and Sex.		N.S.W.	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	Total. (b)
		No.	No.	No.	No.	No.	No.	No.
1935-36	Males ..	38,150	42,972	27,000	4,500	5,465	3,539	120,726
	Females ..	6,481	7,790	7,000	2,756	1,249	2,462	27,738
1936-37	Males ..	37,450	41,922	28,600	4,578	5,261	3,332	121,143
	Females ..	5,444	7,666	7,000	2,331	1,143	2,234	25,818
1937-38	Males ..	35,940	41,878	(c) 29,000	4,540	5,495	3,634	120,487
	Females ..	6,027	7,406	(c) 7,000	2,779	1,129	2,146	26,487
1938-39	Males ..	35,860	41,829	27,000	4,436	6,365	3,917	119,407
	Females ..	6,505	7,222	7,000	2,812	1,661	2,200	27,400
1939-40	Males ..	35,975	41,854	28,800	4,757	6,362	3,670	121,358
	Females ..	7,130	7,314	7,000	2,418	1,678	2,064	27,604

(a) Estimated from returns of Queensland State Government Insurance Office.  
since last issue.

(c) As recorded by Government Statistician.

(b) Revised

The employment of males shown in the table below together with other details gives some indication of the expansion of the dairying industry since 1918-19.

### DAIRYING INDUSTRY : AUSTRALIA.

Year.	Number of Dairy Cows.	Production of Butter.	Value of Machinery employed on Dairy Farms.	Number of Males engaged.
	No.	lb.	£	No.
1918-19 .. ..	1,901,000	181,802,675	1,325,502	68,100
1928-29 .. ..	2,466,000	290,790,190	3,437,000	82,300
1938-39 .. ..	3,353,825	455,834,329	5,659,000	119,400
1939-40 .. ..	3,420,476	474,852,474	6,421,000	121,400

## § 2. Dairy Cattle and Dairy Products.

1. **Dairy Herds.**—The dairy herds of Australia were severely depleted during the drought of 1914-15, when the number was reduced to 1,684,393. Following that year there has been a steady expansion in the number of dairy cattle until in 1939 the number exceeded 3.4 million. In New South Wales, Victoria, South Australia and Tasmania the proportion of dairy cattle to all cattle is high. In Queensland, the Northern Territory and Western Australia there is a greatly preponderating number of other cattle, the main object in these areas being the production of beef. Dairying, however, has developed greatly in Southern Queensland since 1914-15, and the largest contribution to the Australian increase previously mentioned has been made by this State. The number of dairy cows shown in the following table includes heifers intended for milking and being within three months of calving. Figures for these heifers, however, are not collected in Tasmania, but in the other States they numbered 181,743.

A graph showing the distribution of dairy cows in Australia during 1938-39 appears on p. 454.

### NUMBER OF CATTLE AND DAIRY CATTLE.

State.		1935.	1936.	1937.	1938.	1939.
New South Wales	{ All Cattle ..	3,388,538	3,288,169	3,019,581	2,811,884	2,762,653
	{ Dairy Cows ..	1,091,562	1,069,888	1,047,332	1,026,299	1,027,000
Victoria	{ All Cattle ..	2,091,246	2,005,759	1,880,429	1,697,295	1,787,597
	{ Dairy Cows ..	987,676	968,555	952,006	889,259	917,051
Queensland	{ All Cattle ..	6,033,004	5,950,572	5,959,165	6,097,089	6,198,798
	{ Dairy Cows ..	955,746	914,815	985,858	1,050,569	1,080,430
South Australia	{ All Cattle ..	335,354	328,013	324,163	318,897	351,013
	{ Dairy Cows ..	173,706	169,761	164,903	164,110	173,089
Western Australia	{ All Cattle ..	882,761	792,508	740,241	767,680	799,175
	{ Dairy Cows ..	130,132	126,301	124,278	128,726	130,388
Tasmania	{ All Cattle ..	270,935	261,597	254,812	262,407	252,484
	{ Dairy Cows ..	97,350	93,657	92,493	93,816	91,417
Northern Territory	{ All Cattle ..	900,535	855,398	891,640	899,472	922,581
	{ Dairy Cows ..	(a)	(a)	(a)	(a)	(a)
Australian Capital Territory	{ All Cattle ..	10,186	9,856	8,325	7,057	5,879
	{ Dairy Cows ..	1,052	1,116	1,129	1,046	1,101
Australia	{ All Cattle ..	13,911,659	13,491,872	13,078,356	12,861,781	13,080,180
	{ Dairy Cows ..	3,437,224	3,344,093	3,368,899	3,353,825	3,420,476

(a) Not available.

2. **Milk.**—The annual quantity of milk produced per dairy cow varies greatly with breed, locality and season, reaching as high as 1,000 gallons, but averaging for the whole of Australia for all dairy cows and for all seasons prior to 1916 considerably under 300 gallons per annum. In recent years not only has there been an improvement in the quality of the cattle, but the application of scientific methods is being continually extended, and the 300-gallon average has been exceeded in each year since 1924, the yield of 392 gallons in 1931 constituting a record. The average annual yields per cow given

in the following table for the last five years are based on the number of dairy cows which were in milk during any part of the year. The average given is, therefore, below that for cows which were yielding during the greater part of the year. It should be noted that there are many difficulties attending the collection of the total quantity of milk obtained during any year. In addition, there is the further difficulty of ascertaining with any degree of accuracy the average number of cows in milk during the same period. The average yield per cow shown hereunder may be accepted as sufficiently reliable to show the general trend :—

## MILK PRODUCTION.

Heading.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia. (b)
1935-36—								
Dairy Cows (a) .. No.	1,055,539	925,295	910,760	156,122	123,932	94,286	988	3,266,922
Production 1,000 gals.	345,346	399,742	261,266	59,042	38,138	33,737	272	1,137,543
Aver. per cow .. gal.	327	432	287	378	308	358	275	348
1936-37—								
Dairy Cows (a) .. No.	1,036,131	938,966	899,092	157,485	121,697	95,504	1,022	3,249,897
Production 1,000 gals.	317,617	423,305	206,315	63,699	36,771	31,156	365	1,079,228
Aver. per cow .. gal.	306	451	227	404	302	326	357	332
1937-38—								
Dairy Cows (a) .. No.	1,013,739	926,353	902,866	154,705	118,979	93,075	1,056	3,210,773
Production 1,000 gals.	328,008	408,271	274,043	69,067	44,740	32,425	374	1,156,928
Aver. per cow .. gal.	324	441	304	446	376	348	354	360
1938-39—								
Dairy Cows (a) .. No.	994,155	889,719	961,674	152,686	119,183	93,154	1,041	3,211,612
Production 1,000 gals.	311,384	377,882	347,336	72,521	45,541	34,102	350	1,189,116
Aver. per cow .. gal.	313	425	361	475	382	366	336	370
1939-40—								
Dairy Cows (a) .. No.	982,765	861,442	1,010,884	154,523	120,833	92,617	1,017	3,224,081
Production 1,000 gals.	314,709	459,050	325,342	77,316	44,723	34,576	388	1,256,104
Aver. per cow .. gal.	320	533	322	500	370	373	382	390

(a) Mean for the year.

(b) Exclusive of Northern Territory.

3. Butter and Cheese.—Although the quantity of dairy production is affected by the nature of the season, the large increase in the output of butter has been maintained in recent years despite the unfavourableness of some seasons. The average annual production rose from 270,000,000 lb. for the quinquennium 1924-1928 to 438,000,000 lb. for the latest five years. The largest production of butter in Australia was recorded in 1939-40 when, as a result of a specially favourable season, 475,000,000 lb. were manufactured.

Preliminary figures indicate a total production of 432,500,000 lb. in 1940-41. This represents a reduction of output of more than 42,000,000 lb. on that of the previous year and was due to unfavourable seasonal conditions experienced throughout Australia during the year.

The total output of cheese is likewise dependent upon seasonal conditions. The production in 1939-40 was 69,784,000 lb., which exceeded the previous record in 1938-39 by 4,000,000 lb. The production in 1940-41 was estimated at 60,000,000 lb.; a reduction of over 9,000,000 lb. due to adverse seasonal conditions.

There has been a remarkable development in the production of cheese in Australia during recent years. Since 1935-36 the output has grown from 39,000,000 lb. to nearly 70,000,000 in 1939-40. The States contributing to this development were mainly Victoria and South Australia; the production in Victoria has nearly doubled, while that in South Australia has been even greater. Formerly Queensland was the chief producing State, but although its output is increasing, Queensland is now only the third largest producer. In Tasmania there has also been a notable increase in production, but in New South Wales the output averaged only 7,400,000 lb.

Further development is expected in the cheese industry as a result of a change-over from the manufacture of butter to cheese. This will arise from the quantity reduction of butter to be taken by the United Kingdom and the increase in the quantity under the cheese contract. This will necessitate the diversion of a proportion of the milk used for the production of butter-fat to the manufacture of cheese.

The production of butter and cheese for the five years ended 1939-40 was as follows :—

## BUTTER AND CHEESE PRODUCTION.

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
<b>BUTTER.</b>					
	lb.	lb.	lb.	lb.	lb.
New South Wales .. ..	125,169,296	109,830,751	120,882,732	118,820,717	116,813,692
Victoria .. ..	148,132,527	154,769,391	141,321,445	130,573,013	164,826,094
Queensland .. ..	115,920,415	87,474,757	118,244,260	157,625,746	142,846,421
South Australia .. ..	20,964,305	20,892,369	22,428,298	20,716,584	22,938,381
Western Australia .. ..	12,908,745	12,360,924	15,373,334	16,244,449	15,551,189
Tasmania .. ..	10,613,358	10,918,278	11,997,323	11,835,500	11,861,190
Australian Capital Territory .. ..	13,849	15,223	14,218	17,415	15,507
<b>Australia .. ..</b>	<b>433,722,475</b>	<b>396,261,693</b>	<b>430,261,610</b>	<b>455,834,329</b>	<b>474,852,474</b>
<b>CHEESE.</b>					
	lb.	lb.	lb.	lb.	lb.
New South Wales .. ..	7,356,203	7,417,640	8,004,873	7,485,907	6,803,510
Victoria .. ..	10,973,804	13,350,124	16,466,038	19,554,061	24,495,121
Queensland .. ..	9,149,283	7,789,890	11,963,445	15,768,543	13,848,936
South Australia .. ..	8,103,663	12,164,819	15,516,879	18,457,598	20,550,047
Western Australia .. ..	865,482	1,012,139	885,418	980,254	846,301
Tasmania .. ..	2,150,281	2,994,227	3,770,189	3,399,626	3,240,328
<b>Australia .. ..</b>	<b>38,598,716</b>	<b>44,728,839</b>	<b>56,606,842</b>	<b>65,645,989</b>	<b>69,784,243</b>

4. **Condensed or Concentrated Milk.**—The manufacture of this product is of comparatively recent growth, the quantity of milk treated in 1901 being negligible, but production increased annually until in 1911 the output reached 23 million lb., nearly doubling that of the previous year. Thenceforward rapid progress was made, the greatest development taking place in Victoria. The output of condensed, concentrated and powdered milk in this State amounted in 1935-36 to 38,598,154 lb.; in 1936-37 to 53,159,599 lb.; in 1937-38 to 57,634,422 lb.; in 1938-39 to 51,741,477 lb., and in 1939-40 to 37,112,664 lb. Production in New South Wales during 1939-40 was 10,515,977 lb. No condensed or concentrated milk is made in Tasmania. Information regarding production in the remaining States is not available for publication, but the volume is relatively unimportant. The total production for Australia in 1939-40 amounted to 91,108,343 lb. Imports of milk into Australia consist almost entirely of malted or otherwise medicated milk.

5. **War-time Contract—Butter, Cheese and Preserved Milk.**—At the outbreak of war in September, 1939, contracts were negotiated between the Governments of the Commonwealth and the United Kingdom whereby the latter undertook to purchase from Australia at prices fixed according to grade 75,500 tons of butter and 13,000 tons of cheese for the period ending June, 1940. The contracts were further extended to June, 1941, and June, 1942. Under the last contract, the quantity of butter was reduced and the grades were restricted to choicest and first quality only. Prices, however, remained unaltered. A further increase in the quantity of cheese was arranged under the cheese contract for the year ended June, 1942, as well as an advance in price of 5s. 9d. per cwt. sterling or 7s. 2d. in Australian currency.

While no similar contract exists in regard to preserved and powdered milk, a ready market for these commodities exists in the United Kingdom and elsewhere in Eastern Asia, particularly in Malaya. Manufacturers in Australia are increasing production as far as possible to meet this demand.

6. **Oversea Trade in Butter, Cheese and Milk.**—The production of butter and cheese in Australia is considerably in excess of local requirements and consequently a substantial surplus is available for export overseas. The extent of this surplus is chiefly dependent

upon the conditions during the season. Normally, the quantity of butter and cheese consumed in Australia is about 230 million lb. and 30 million lb., respectively, and production in excess of these amounts may be regarded as available for export.

The bulk of these exports is consigned to the United Kingdom. During 1938-39 217 million lb. or 95 per cent. of butter was shipped to Britain, and nearly 35 million lb. or 97 per cent. of cheese exported was consigned to that country. Details for later years are not available for publication.

All butter and cheese exported comes under the provisions of the Exports (Dairy Produce) Regulations and is subject to the supervision, inspection and examination by officers appointed for that purpose. These commodities are graded according to quality which has been fixed by Regulation as follows:—Flavour and aroma, 50 points; texture, 30 points; and condition, 20 points. Butter and cheese graded at 93 to 100 points is of choicest quality; at 90 to 92 points, first quality; at 86 to 89 points, second quality; and at 80 to 85 points, pastry or cooking quality or, in the case of cheese, third quality.

In the following table particulars are given of the relative proportions of butter and cheese graded for export according to quality. Fuller details, which include actual quantities by States, are to be found in *Production Bulletin* No. 34, Part II.

#### BULK BUTTER AND CHEESE, GRADED FOR EXPORT: AUSTRALIA.

Grade.	Butter.			Cheese.		
	1938-39.	1939-40.	1940-41.	1938-39.	1939-40.	1940-41.
	%	%	%	%	%	%
Choicest .. ..	54.30	51.54	51.74	17.69	17.48	15.42
First Quality ..	33.69	36.19	35.72	47.40	51.03	52.04
Second Quality ..	10.17	10.86	10.76	34.91	31.49	32.54
Third Quality ..	1.84	1.41	1.78	(a)	(a)	(a)
Total .. ..	100.00	100.00	100.00	100.00	100.00	100.00

(a) Included with Second Quality.

The following tables give the imports, exports and net exports of butter, cheese and condensed milk. In each of the five years, the exports exceeded the imports:—

#### BUTTER, CHEESE, AND MILK: IMPORTS AND EXPORTS, AUSTRALIA.

*Australian Currency Values.*

Products.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
IMPORTS.					
Butter .. .. lb.	3,826	2,678	1,691	3,425	4,646
" .. .. £	309	167	133	286	436
Cheese .. .. lb.	88,511	130,864	126,066	156,188	83,598
" .. .. £	7,052	10,225	9,969	11,551	8,022
Milk—concentrated and preserved lb.	12,861	129,039	79,737	44,135	155,093
" " " " £	942	3,876	2,515	1,048	3,768

BUTTER, CHEESE, AND MILK: IMPORTS AND EXPORTS, AUSTRALIA—*contd.**Australian Currency Values.*

Products.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
<b>EXPORTS.</b>					
Butter .. .. . lb.	212,646,177	174,309,396	197,345,647	229,542,779	(a)
" .. .. . £	9,832,733	8,801,643	10,781,124	12,891,837	15,894,718
Cheese .. .. . lb.	12,972,627	13,924,572	27,245,638	35,924,467	43,055,779
" .. .. . £	337,467	384,027	845,130	1,074,008	1,440,140
Milk—concentrated and preserved lb.	16,961,023	22,169,680	24,717,435	19,106,953	32,219,408
" .. .. . £	722,301	851,769	963,873	791,100	1,126,066

**NET EXPORTS.**

Butter .. .. . lb.	212,642,351	174,306,718	197,343,956	229,539,354	(a)
" .. .. . £	9,832,424	8,801,476	10,780,991	12,891,551	15,894,282
Cheese .. .. . lb.	12,884,116	13,793,708	27,119,572	35,768,279	42,972,181
" .. .. . £	330,415	373,802	835,161	1,062,457	1,432,118
Milk—concentrated and preserved b.	16,948,162	22,040,641	24,637,698	19,062,818	32,064,315
" .. .. . £	721,359	847,893	961,358	790,052	1,122,298

(a) Not available for publication.

7. **Local Consumption of Butter and Cheese.**—The local production of butter and cheese, minus the net export or plus the net import for the corresponding period, represents approximately the quantity available for consumption in Australia. The figures for the five years ended 1939-40 are as follows:—

**BUTTER AND CHEESE: LOCAL CONSUMPTION.**

Products.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	lb.	lb.	lb.	lb.	lb.
Butter—Total .. .. .	221,080,124	221,954,975	232,917,654	226,294,975	(a)
Per head of population ..	32.75	32.62	33.93	32.67	(a)
Cheese—Total .. .. .	25,714,600	30,935,131	29,487,270	29,877,710	26,812,062
Per head of population ..	3.81	4.55	4.30	4.31	3.83

(a) Not available for publication.

Consumption in 1938-39 averaged 32.67 lb. of butter and 4.31 lb. of cheese per head of population. The consumption of butter in the United Kingdom, Canada and New Zealand was 24.8 lb., 32.7 lb., and 40.7 lb. per head per annum respectively, and that of cheese amount to 8.6 lb., 3.5 lb., and 8 lb. respectively.

**§ 3. Pigs and Pig Products.**

1. **Pigs.**—The number of pigs in Australia has varied considerably since the commencement of the present century. In 1904, the total amounted to 1,062,703, but after a period of fluctuations it declined to 695,968 in 1919. In 1921 the number increased to 960,000 and from that year it remained fairly constant up to 1928. Since that year more than 1,000,000 pigs have been recorded annually in Australia with the maximum figure of 1,455,341 in 1939. The distribution of pigs among the States and Territories in 1939 was—New South Wales, 451,064; Victoria, 297,655; Queensland, 391,333; South Australia, 119,660; Western Australia, 149,604; Tasmania, 44,941; Northern Territory, 483; Australian Capital Territory 601; total 1,455,341. The figures for New South Wales, Victoria and the Australian Capital Territory represent the number as on the 31st March, 1940.

A more accurate index of the development of pig-raising in Australia is provided in the following table which combines the number of slaughtering with the number returned each year from 1930. The table discloses substantial increases in the number of pigs raised over the period under review :—

#### NUMBER OF PIGS AND NUMBER SLAUGHTERED : AUSTRALIA.

Year.	Number of Pigs.	Number Slaughtered.	Year.	Number of Pigs.	Number Slaughtered.
1930 .. ..	1,071,679	1,469,718	1935 .. ..	1,293,964	1,983,745
1931 .. ..	1,167,845	1,510,635	1936 .. ..	1,202,752	2,073,909
1932 .. ..	1,162,407	1,585,133	1937 .. ..	1,100,082	1,897,430
1933 .. ..	1,046,867	1,636,974	1938 .. ..	1,155,591	1,839,597
1934 .. ..	1,158,274	1,763,332	1939 .. ..	1,455,341	1,952,552

A great increase in the production of pork has taken place in Australia. Up to the year 1928-29, production was sufficient to meet local requirements and to provide a small surplus for export. Since that year, however, all local requirements have been met, and the exports have grown rapidly to more than 52 million lb. of pork.

2. Consumption, Pork and Bacon and Ham.—Particulars available regarding the consumption of pork, as such, give an average for Australia of 6.48 lb. per head of population. This decrease from the previous year was due to the increased volume of exports recorded during 1939-40 which was achieved at the expense of the quantity available for local consumption. The per capita consumption of bacon and ham has remained constant at about 10½ lb. Although exports have increased since the commencement of the War in 1939, production expanded sufficiently to maintain consumption at that figure. The average consumption of pork and bacon and ham per head of population amounted to 17 lb. compared with 22 lb. in New Zealand, 57 lb. in Canada, and 64 lb. in the United States of America. The figures for Australia for each of these commodities during the last five years are as follows :—

#### PORK AND BACON, ETC. : LOCAL CONSUMPTION.

Product.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	lb.	lb.	lb.	lb.	lb.
Pork—					
Quantity .. ..	60,433,372	68,492,630	52,044,818	52,169,753	45,353,242
Per head of population	8.95	10.06	7.58	7.53	6.48
Bacon and Ham—					
Quantity .. ..	75,565,065	70,877,086	68,198,109	72,352,774	73,759,675
Per head of population	11.19	10.42	9.94	10.44	10.55

3. War-time Contract.—A contract for the sale of the surplus production of Australian pig meats was concluded between the Governments of the Commonwealth and the United Kingdom for the year ended 30th September, 1940. Details of this contract will be found in Chapter XXVII. "Miscellaneous".

4. Bacon and Ham.—The highest production of bacon and ham was reached in 1939-40 with an output of 78,585,970 lb. compared with 74,733,000 lb., the average for the last five years. The production in 1939-40 was distributed among the several States as follows :—New South Wales, 26,046,025 lb.; Victoria, 17,886,305 lb.; Queensland, 20,040,740 lb.; South Australia, 7,046,860 lb.; Western Australia, 4,671,665 lb.; Tasmania, 2,893,805 lb.; Australian Capital Territory, 570 lb. Practically the whole of the bacon and ham produced is consumed locally. On the experience of the last five years the local consumption was about 71,200,000 lb. per year, or 10.46 lb. per unit of population. The bacon and ham exported from Australia is consigned chiefly to the Pacific Islands and the East.



5. Oversea Trade in Pig Products.—The oversea trade in pigs and pig products for the five years ended 1939-40 is shown in the following table:—

**PIG PRODUCTS : OVERSEA TRADE, AUSTRALIA.**

*Australian Currency Values.*

Particulars.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
<b>Pigs.</b>					
Imports.. .. No.	39	10	56	28	12
" .. .. £	2,124	413	3,079	1,007	413
Exports.. .. No.	131	164	152	69	54
" .. .. £	708	607	979	621	387
Net Exports .. No.	92	154	96	41	42
" .. .. £	-1,416	194	-2,100	-386	-26
<b>BACON AND HAM.</b>					
Imports.. .. lb.	5,168	2,760	7,212	9,681	737
" .. .. £	313	209	605	597	81
Exports.. .. lb.	1,701,575	1,752,518	1,675,969	1,739,053	4,247,554
" .. .. £	109,760	112,680	117,654	119,994	274,932
Net Exports .. lb.	1,696,407	1,749,758	1,668,757	1,729,372	4,246,817
" .. .. £	109,447	112,471	117,049	119,397	274,851
<b>LARD.(a)</b>					
Imports.. .. lb.	13,366	29,644	28,244	106,821	97,499
" .. .. £	415	941	1,240	3,065	2,737
Exports.. .. lb.	2,792,008	4,051,472	4,213,026	5,490,959	14,324,614
" .. .. £	53,603	69,374	63,662	67,744	182,564
Net Exports .. lb.	2,778,642	4,021,828	4,184,782	5,384,138	14,227,115
" .. .. £	53,188	68,433	62,422	64,679	179,827
<b>FROZEN PORK.</b>					
Imports.. .. lb.	85,942	7,746	34	31,805	..
" .. .. £	3,513	210	3	1,770	..
Exports.. .. lb.	23,577,743	26,816,453	33,959,412	30,716,417	52,202,821
" .. .. £	587,410	687,043	934,575	882,117	1,561,432
Net Exports .. lb.	23,491,801	26,808,707	33,959,378	30,684,612	52,202,821
" .. .. £	583,897	686,833	934,572	880,347	1,561,432

(a) Includes Lard Oil, and Refined Animal Fats.  
NOTE.—The minus sign (—) signifies net imports.

Hitherto the output of pig products in Australia was usually sufficient to meet local requirements and provide a small surplus for export. During the five years ended 1939-40, however, oversea exports of frozen pork showed a remarkable increase averaging 33,450,000 lb. as compared with an average of 373,000 lb. for the five years ended 1930-31. The chief pig product consumed in the United Kingdom is bacon and ham, the imports of which during 1939 amounted to 7.9 million cwt., valued at £36,706,000, the supplies being obtained chiefly from Denmark and Canada.

The agreement at the Ottawa Conference regarding the regulation of supplies from foreign countries and the Dominions and its substitution by a Bacon Marketing Scheme by the British Government is referred to in detail in previous issues of the Official Year Book. At the outbreak of war in September, 1939, these arrangements were superseded by the war-time contract referred to in par. 3 above. The loss of supplies from Denmark and other European countries owing to war provides an opportunity for the expansion of the industry in Australia. Plans for this development are now being considered.

## § 4. Total Dairy Production.

The dairy production for each State in 1939-40 is shown below :—

## DAIRY PRODUCTION, 1939-40.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Total.
<b>MILK.</b>								
Used for—	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.
Butter ..	232,024,898	358,150,161	291,433,481	45,098,761	33,075,955	25,407,374	49,165	985,239,795
Cheese ..	6,892,441	24,388,632	13,380,593	19,544,182	850,747	3,294,671	..	68,351,266
Condensing and concentrating ..	11,887,542	28,189,378	(a)	(a)	(a)	..	..	(b)40,076,920
Other purposes ..	63,904,146	48,321,691	220,527,628	122,673,229	110,796,223	5,873,520	339,195	162,435,632
Total ..	314,709,027	459,049,862	325,341,702	77,316,172	44,722,925	34,575,565	388,360	1,256,103,613

## BUTTER.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
In Factories ..	112,019,857	161,289,017	139,795,042	19,843,023	14,002,180	9,309,881	..	456,259,000
On Dairy and other Farms ..	4,793,335	3,537,077	3,051,379	3,095,358	1,549,009	2,551,309	15,507	18,593,474
Total ..	116,813,692	164,826,094	142,846,421	22,938,381	15,551,189	11,861,190	15,507	474,852,474

## CHEESE.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
In Factories ..	6,634,079	24,379,610	13,841,405	20,549,867	842,831	3,121,588	..	69,372,380
On Dairy and other Farms ..	169,431	115,511	7,531	180	3,470	115,740	..	411,863
Total ..	6,803,510	24,495,121	13,848,936	20,550,047	846,301	3,240,328	..	69,784,243

## CONDENSED, CONCENTRATED AND POWDERED MILK.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
In Factories ..	15,708,917	67,093,385	(a)	(a)	(a)	..	..	691,108,343

## BACON AND HAM.

	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
In Factories ..	25,628,982	17,385,348	19,949,697	6,643,434	4,642,625	2,559,005	..	76,809,591
On Dairy and other Farms ..	417,043	500,457	91,043	403,420	29,040	334,800	570	1,776,379
Total ..	26,046,025	17,886,305	20,040,740	7,046,860	4,671,665	2,893,805	570	78,585,970

(a) Figures not available for publication.  
milk used for condensing and concentrating.

(b) Excluding States marked (a).  
(d) Including States marked (a).

(c) Includes

Particulars in regard to the production of other milk products are not available for all the States, but casein amounting to 6,875,847 lb., valued at £130,274, was manufactured in Australia during 1939-40.

### § 5. Value of Dairy Production.

1. Value of Production—Gross and Net.—(i) *General.* The values of dairy production on a gross, local and net basis are shown in the following table. The presentation of these values has become possible by the adoption in the several States of uniform principles in determining production and marketing costs. Production values for this and other industries are dealt with more fully in Chapter XXVII. "Miscellaneous".

#### GROSS, LOCAL AND NET VALUE OF DAIRY PRODUCTION, 1939-40.

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Farm Costs.		Net Value of Production. (a)	Depreciation (estimated).
				Fodder fed to Farm Stock.	Value of Other Materials used in process of Production.		
	£	£	£	£	£	£	£
New South Wales ..	14,174,000	1,526,000	12,648,000	1,746,000	15,000	10,887,000	64,000
Victoria ..	14,854,336	582,165	14,272,171	1,615,349	324,000	12,333,822	24,000
Queensland ..	11,449,000	310,000	11,139,000	1,100,000	240,000	9,799,000	100,000
South Australia ..	2,792,649	89,290	2,703,359	392,459	116,733	2,194,167	13,059
Western Australia ..	1,832,586	55,471	1,777,115	659,990	211,753	905,372	12,361
Tasmania ..	1,164,350	43,730	1,120,620	337,240	58,530	724,850	7,740
Total ..	46,266,921	2,606,656	43,660,265	5,851,038	966,016	36,843,211	221,160

(a) No deduction has been made for depreciation and maintenance.

(ii) *States 1930-31 to 1939-40.* In the following table the net value of dairy production and the net value per head of population are given by States for each year since 1930-31.

#### NET VALUE OF DAIRY PRODUCTION.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
	£	£	£	£	£	£	£
1930-31 ..	8,379,000	7,263,062	5,841,714	1,142,389	598,576	543,910	23,768,651
1931-32 ..	7,811,000	7,484,164	5,058,779	1,217,398	468,786	524,140	22,564,267
1932-33 ..	7,429,000	7,873,426	4,092,671	1,419,590	391,315	427,190	21,633,192
1933-34 ..	8,011,000	6,232,393	4,626,681	1,138,928	369,050	384,200	20,762,252
1934-35 ..	8,844,000	7,531,415	5,798,796	1,121,089	619,810	445,130	24,360,240
1935-36 ..	9,195,000	9,344,742	5,860,000	1,393,141	505,401	540,600	26,847,884
1936-37 ..	9,128,000	10,778,186	4,957,000	1,587,796	554,010	542,070	27,547,062
1937-38 ..	10,181,000	10,495,005	7,443,000	1,891,356	825,354	753,620	31,589,335
1938-39 ..	10,446,000	9,958,474	9,878,000	1,942,994	893,428	662,860	33,781,756
1939-40 ..	10,887,000	12,332,822	9,799,000	2,194,167	905,372	724,850	36,843,211

#### NET VALUE PER HEAD OF MEAN POPULATION.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1930-31 ..	3 5 10	4 1 0	6 7 3	1 19 9	1 7 9	2 8 10	3 13 2
1931-32 ..	3 0 10	4 3 0	5 8 8	2 2 2	1 1 7	2 6 4	3 8 10
1932-33 ..	2 17 4	4 6 9	4 7 0	2 9 0	0 17 10	1 17 6	3 5 6
1933-34 ..	3 1 3	3 8 4	4 17 4	1 19 1	0 16 9	1 13 7	3 2 5
1934-35 ..	3 7 2	4 2 0	6 0 9	1 18 5	1 8 0	1 18 10	3 12 8
1935-36 ..	3 9 3	5 1 4	6 0 9	2 7 6	1 2 7	2 7 0	3 19 7
1936-37 ..	3 8 1	5 16 5	5 0 9	2 14 0	1 4 6	2 6 8	4 1 0
1937-38 ..	3 15 2	5 12 10	7 9 7	3 4 0	1 16 1	3 4 1	4 12 0
1938-39 ..	3 16 5	5 6 3	9 16 3	3 5 5	1 18 8	2 16 0	4 17 6
1939-40 ..	3 18 10	6 10 6	9 12 6	3 13 6	1 18 10	3 0 9	5 5 4

(a) No deduction has been made for depreciation and maintenance.

### § 6. Poultry-Farming.

1. **General.**—Poultry is kept in varying numbers by farmers, and production therefrom furnishes a considerable addition to the annual agricultural or dairying returns. For many years, however, poultry-keeping has been carried on as a separate industry, while it is also practised in conjunction with other rural industries. Special poultry-farms have been instituted by the State Governments for scientific breeding, experts have been appointed to advise and instruct in the care and management of the various kinds of poultry, and exhibitions of leading breeds have been arranged, as well as egg-laying competitions. Co-operative egg-collecting circles have been formed in some districts; eggs are also delivered with milk and cream to the local butter factories, and thence forwarded to market.

2. **Number of Principal Kinds.**—The number of principal kinds of poultry is included in the annual census of live stock in all States except Victoria and Tasmania. The former State completed a census at 30th June, 1933, and the numbers at that date are shown in the table below. The details for Tasmania have been estimated. In 1913 a complete census was also taken and these data have been included for comparative purposes in the following table:—

#### POULTRY : NUMBER OF PRINCIPAL KINDS.

State.	Fowls.	Ducks.	Geese.	Turkeys.
1913.				
New South Wales ..	No. 3,351,629	No. 261,075	No. 23,948	No. 216,274
Victoria ..	3,855,538	288,413	59,851	(a) 100,000
Queensland ..	841,630	35,337	7,457	27,192
South Australia ..	1,440,385	55,659	18,245	49,066
Western Australia ..	999,452	100,828	6,243	49,588
Tasmania (a) ..	350,000	35,000	12,000	8,000
Total ..	10,838,634	776,312	127,744	450,120

#### 1939-40.

New South Wales ..	No. 5,474,350	No. 202,395	No. 23,263	No. 212,779
Victoria (a) ..	5,496,969	292,882	39,283	113,966
Queensland ..	1,312,536	44,377	5,237	20,357
South Australia ..	2,100,602	49,813	14,587	51,326
Western Australia ..	1,402,455	40,748	1,732	38,367
Tasmania (b) ..	450,000	35,000	10,000	10,000
Total ..	16,236,912	665,215	94,102	446,795

(a) 30th June, 1933.

(b) Estimated.

3. Value of Poultry Products—Gross and Net.—(i) *General.* Difficulty is experienced in obtaining complete figures for the production of poultry products. The following table sets out the values accruing to the poultry industry for Australia on a gross, local and net basis, and has been compiled from data actually collected or carefully estimated by the State Statisticians:—

**GROSS, LOCAL AND NET VALUE OF POULTRY PRODUCTS, 1939-40.**

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Feed and Other Costs.	Net Value of Production. (a)
	£	£	£	£	£
New South Wales ..	3,836,000	338,000	3,498,000	1,161,000	2,337,000
Victoria ..	4,617,090	346,280	4,270,810	1,170,949	3,099,861
Queensland ..	707,000	113,000	594,000	265,000	319,000
South Australia ..	952,173	99,003	853,170	320,423	532,747
Western Australia ..	583,018	106,969	476,049	183,293	292,756
Tasmania ..	468,090	35,110	432,980	35,510	397,470
Total ..	11,163,371	1,038,362	10,125,009	3,136,175	6,978,834

(a) No deduction has been made for depreciation and maintenance.

(ii) *States 1930-31 to 1939-40.* In the following table the net value of poultry products and the net value per head of population are given by States for each year since 1930-31:—

**NET VALUE OF POULTRY PRODUCTS.**

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
NET VALUE. (a)							
	£	£	£	£	£	£	£
1930-31 ..	1,958,000	2,854,752	387,824	339,184	258,934	350,640	6,149,334
1931-32 ..	1,779,000	2,756,077	239,163	329,543	283,737	315,280	5,702,800
1932-33 ..	1,815,000	2,138,513	290,064	243,735	306,224	311,960	5,105,496
1933-34 ..	1,810,000	2,243,044	270,584	250,037	307,185	298,510	5,179,360
1934-35 ..	1,849,000	2,185,047	248,679	339,335	322,478	317,120	5,261,659
1935-36 ..	2,203,000	2,333,620	299,000	257,088	270,414	305,440	5,668,562
1936-37 ..	2,186,000	2,301,568	322,000	244,354	288,624	338,540	5,681,086
1937-38 ..	2,248,000	2,902,026	362,000	326,492	251,060	367,110	6,456,688
1938-39 ..	2,658,000	3,112,609	376,000	436,425	294,216	425,240	7,302,490
1939-40 ..	2,337,000	3,099,861	319,000	532,747	292,756	397,470	6,978,834

**NET VALUE PER HEAD OF MEAN POPULATION.**

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1930-31 ..	0 15 4	1 11 10	0 8 6	0 11 10	0 12 0	1 11 6	0 18 11
1931-32 ..	0 13 10	1 10 6	0 5 2	0 11 5	0 13 1	1 7 11	0 17 4
1932-33 ..	0 14 0	1 3 7	0 6 2	0 8 5	0 14 2	1 7 4	0 15 6
1933-34 ..	0 13 10	1 4 7	0 5 8	0 8 7	0 13 11	1 6 1	0 15 7
1934-35 ..	0 14 1	1 3 10	0 5 2	0 11 7	0 14 7	1 7 8	0 15 8
1935-36 ..	0 16 7	1 5 5	0 6 2	0 8 9	0 12 1	1 6 6	0 16 10
1936-37 ..	0 16 4	1 4 10	0 6 6	0 8 4	0 12 9	1 9 2	0 16 8
1937-38 ..	0 16 7	1 11 2	0 7 3	0 11 1	0 11 0	1 11 3	0 18 10
1938-39 ..	0 19 5	1 13 2	0 7 6	0 14 8	0 12 9	1 15 11	1 1 1
1939-40 ..	0 16 11	1 12 10	0 6 3	0 17 10	0 12 7	1 13 4	1 0 0

(a) No deduction has been made for depreciation and maintenance.

4. *War-time Contract—Eggs.*—At the outbreak of war in September, 1939, a contract was negotiated between the Governments of the Commonwealth and the United Kingdom whereby the latter undertook to purchase 9 million dozen eggs for the season ended 31st December, 1939. The contract was extended to 31st December, 1940. Prices are fixed according to grade, but in 1940 they were 1½d. per dozen higher than in 1939.

On account of the shortage of refrigerated shipping space, plans have been made to reduce the export of eggs in shell by the substitution of powdered egg. Plant for the drying of eggs has been erected in New South Wales and Victoria and exports from these States will be in that form. Similar plant will be operating in the remaining States, excepting Tasmania, during 1941-42. The loss of supplies from Europe provides an opportunity for an expansion of the poultry industry in Australia, and shipments of the powdered egg arriving in England have been very favourably received.

5. *Oversea Trade in Poultry Products.*—The Australian overseas export of poultry products is confined chiefly to eggs in shell and egg contents which are mainly consigned to the United Kingdom; New South Wales, Victoria and South Australia are the largest exporters, the total exports of eggs and egg contents in 1939-40 amounting to £597,872. Exports of eggs from Australia rose from less than 3 million dozen valued at £219,000 in 1928-29 to 21.7 million dozen valued at more than £1.1 million in 1934-35, but declined to 10.3 million dozen in 1939-40.

The overseas trade during the five years ended 1939-40 was as follows :—

### POULTRY PRODUCTS : TRADE, AUSTRALIA.

*Australian Currency Values.*

Particulars.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
<b>LIVE POULTRY.</b>					
Imports .. .. No.	154	2,780	39	29	3
„ .. .. £	605	1,256	81	139	20
Exports .. .. No.	1,733	1,099	2,175	2,189	4,462
„ .. .. £	973	572	860	970	3,772
Net Exports .. No.	1,579	—1,681	2,136	2,160	4,459
„ .. .. £	368	—684	779	831	3,752
<b>FROZEN POULTRY.</b>					
Imports .. .. lb.	11,671	11,589	1,349	83	148
„ .. .. £	467	616	150	8	8
Exports .. .. pair	52,377	40,754	35,358	21,768	63,310
„ .. .. £	36,078	35,432	36,803	19,917	43,457
Net Exports .. .. (a)	(a)	(a)	(a)	(a)	(a)
„ .. .. £	35,611	34,816	36,653	19,909	43,449
<b>Eggs.</b>					
Imports .. .. doz.	7,311	7,625	8,388	105,330	5,364
„ .. .. £	397	361	458	8,188	318
Exports .. .. doz.	17,365,132	16,473,894	11,287,363	10,144,344	10,279,346
„ .. .. £	910,892	954,578	686,713	638,159	597,854
Net Exports .. doz.	17,357,821	16,466,269	11,278,975	10,039,014	10,273,982
„ .. .. £	910,495	954,217	686,255	629,971	597,536
<b>EGG CONTENTS.</b>					
Imports .. .. lb.	46,917	32,634	31,954	68,567	60,075
„ .. .. £	3,957	3,953	3,547	4,936	4,087
Exports .. .. lb.	290,612	652,858	426,320	650,470	560
„ .. .. £	7,170	19,756	16,926	23,065	18
Net Exports .. lb.	243,695	620,224	394,366	581,903	—59,515
„ .. .. £	3,213	15,803	13,379	18,129	—4,069

(a) Quantity not available.

NOTE.—Minus sign (—) signifies net imports.

### § 7. Bee-Farming.

1. **General.**—Although practised to some extent as a separate industry, bee-farming is frequently carried on in conjunction with agriculture or dairying. The returns of honey from productive hives during 1939-40 gave an average of 52.1 lb. per hive, and the average quantity of wax was 0.74 lb. per hive.

2. **Production of Honey and Bees-wax.**—The number of hives and the production of honey and bees-wax during the year 1939-40 are given in the following table. As these details have been collected from holdings of one acre and upwards, any production from smaller areas is omitted and consequently the production to that extent is understated. In Victoria and South Australia, however, the compulsory registration of bee-keepers enables the collection to cover all producers and the production for these States is considered to be complete.

**BEEHIVES, HONEY AND BEES-WAX, 1939-40.**

State.	Beehives.			Honey Produced.		Bees-wax Produced.	
	Pro- ductive.	Unpro- ductive.	Total.	Quantity.	Gross Value.	Quantity.	Gross Value.
	No.	No.	No.	lb.	£	lb.	£
New South Wales ..	59,670	22,779	82,449	2,477,381	43,767	42,393	3,012
Victoria ..	52,253	17,839	70,092	2,752,125	74,537	35,630	2,969
Queensland ..	13,468	6,088	19,556	1,049,442	15,304	15,259	953
South Australia ..	39,492	14,332	53,824	2,388,647	34,834	30,952	1,838
Western Australia ..	17,054	2,705	19,759	828,168	11,182	11,549	794
Tasmania ..	3,609	2,096	5,705	164,764	3,775	1,668	125
Aust. Cap. Territory	24	24	48	770	14	25	2
<b>Australia ..</b>	<b>185,570</b>	<b>65,863</b>	<b>251,433</b>	<b>9,661,297</b>	<b>183,413</b>	<b>137,476</b>	<b>9,693</b>

The table hereunder gives the production of honey and bees-wax for the latest available five years :—

**HONEY AND BEES-WAX PRODUCTION.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
<b>HONEY.</b>								
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1935-36	4,577,097	5,901,463	584,288	4,160,006	916,929	238,055	7,000	16,384,838
1936-37	2,935,282	3,439,262	500,000	3,273,441	1,601,161	154,931	2,570	11,906,647
1937-38	3,356,609	4,541,516	435,274	2,408,043	1,541,691	297,311	2,475	12,582,919
1938-39	2,723,719	1,340,046	1,164,536	2,940,877	754,254	148,473	1,280	9,073,185
1939-40	2,477,381	2,752,125	1,049,442	2,388,647	828,168	164,764	770	9,661,297
<b>BEES-WAX.</b>								
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1935-36	62,886	61,849	8,656	46,570	13,952	3,416	26	197,355
1936-37	52,461	40,612	8,000	41,660	26,424	2,171	28	171,356
1937-38	49,945	54,184	7,726	31,411	27,626	3,069	31	173,992
1938-39	43,780	22,285	17,463	40,257	15,050	1,780	60	140,675
1939-40	42,393	35,630	15,259	30,952	11,549	1,668	25	137,476

The production of honey and bees-wax varies greatly from year to year according to the conditions during the season. During the last five years New South Wales produced on the average 3,214,000 lb. of honey and 50,300 lb. of bees-wax; Victoria produced 3,595,000 lb. of honey and 42,900 lb. of wax; and South Australia 3,034,000 lb. of honey and 38,170 lb. of wax. These States together accounted for 82.6 per cent. of the total Australian production of honey and 80.0 per cent. of the bees-wax. Next in order of importance were Western Australia, Queensland and Tasmania.

3. Value of Production—Gross and Net.—(i) *General.* The following table shows the gross, local and net values of production which have been compiled by the Statisticians of the several States on uniform methods. These data are based upon actual records but as previously explained it is known that the production in some States is understated. As production costs are not known they are not taken into account and consequently the gross production valued at the farm and net values shown are identical.

#### GROSS, LOCAL AND NET VALUE OF BEE PRODUCTS, 1939-40.

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Net Value of Production.(a)
	£	£	£	£
New South Wales .. ..	47,000	5,000	42,000	42,000
Victoria .. ..	77,506	14,668	62,838	62,838
Queensland .. ..	16,000	2,000	14,000	14,000
South Australia .. ..	36,672	4,974	31,698	31,698
Western Australia .. ..	11,976	..	11,976	11,976
Tasmania .. ..	3,900	190	3,710	3,710
Total .. ..	193,054	26,832	166,222	166,222

(a) No deduction has been made for depreciation and maintenance.

(ii) *States 1930-31 to 1939-40.* In the following table the net value of bee products and the net value per head of population are given by States for each year since 1930-31:—

#### NET VALUE OF BEE PRODUCTS.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
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#### NET VALUE. (a)

	£	£	£	£	£	£	£
1930-31 .. ..	46,000	45,498	9,465	18,078	11,410	2,590	133,041
1931-32 .. ..	34,000	37,308	4,531	16,700	4,401	1,250	98,190
1932-33 .. ..	47,000	53,936	8,830	45,748	7,119	3,450	166,083
1933-34 .. ..	22,000	17,345	8,740	24,140	9,491	4,170	85,886
1934-35 .. ..	95,000	39,540	10,458	43,052	14,037	1,420	203,507
1935-36 .. ..	68,000	77,505	6,000	31,367	12,137	4,210	199,219
1936-37 .. ..	43,000	45,360	5,000	28,053	19,803	2,740	143,956
1937-38 .. ..	51,000	59,930	5,000	20,645	18,850	5,180	160,605
1938-39 .. ..	43,000	23,448	15,000	27,857	10,591	2,770	122,666
1939-40 .. ..	42,000	62,838	14,000	31,698	11,976	3,710	166,222

(a) No deduction has been made for depreciation and maintenance.



NET VALUE OF BEE PRODUCTS—*continued*.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
NET VALUE PER HEAD OF MEAN POPULATION. (a)							
1930-31 ..	s. d. 0 5	s. d. 0 6	s. d. 0 2	s. d. 0 8	s. d. 0 6	s. d. 0 3	s. d. 0 5
1931-32 ..	0 3	0 5	0 1	0 7	0 2	0 1	0 5
1932-33 ..	0 5	0 7	0 2	1 7	0 4	0 4	0 6
1933-34 ..	0 2	0 2	0 2	0 10	0 5	0 4	0 3
1934-35 ..	0 8	0 5	0 3	1 6	0 7	0 1	0 7
1935-36 ..	0 6	0 10	0 1	1 1	0 6	0 4	0 7
1936-37 ..	0 4	0 6	0 1	0 11	0 10	0 3	0 5
1937-38 ..	0 5	0 8	0 1	0 8	0 10	0 5	0 6
1938-39 ..	0 4	0 3	0 3	0 11	0 5	0 3	0 4
1939-40 ..	0 4	0 8	0 3	1 1	0 6	0 4	0 5

(a) No deduction has been made for depreciation and maintenance.

4. **Oversea Trade in Bee Products.**—In normal years the production of honey exceeds Australian requirements, and a small quantity is available for export. The imports into the United Kingdom average 78,000 cwt. annually, of which Australia supplies approximately 7,700 cwt. At the Imperial Economic Conference at Ottawa in 1932 the representatives of the United Kingdom, on behalf of their Government, agreed to the imposition of an import duty of 7s. per cwt. on foreign honey. For the year 1939-40 the exports from Australia amounted to £129,000 compared with a total of £14,000 in the preceding year. The more general use of frame hives has reduced the production of wax, and as a result the quantity imported has exceeded that exported during each of the last five years.

For the year 1939-40, the imports of honey amounted to 7,970 lb. and the exports to 4,631,781 lb. The imports of bees-wax amounted to 56,577 lb. in 1939-40 and the exports to 24,323 lb.

## § 8. Exports of Australian Farmyard, Dairy and Bee Products.

The quantities and values of Australian farmyard, dairy and bee products exported during each of the five years ended 1939-40 are shown below :—

## AUSTRALIAN FARMYARD, DAIRY AND BEE PRODUCTS : EXPORTS.

Particulars.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
QUANTITY.					
Bees-wax .. ..	lb. 395	48,656	21,109	5,565	24,323
Butter .. ..	212,646,177	174,309,396	197,345,647	229,542,779	(b)
Cheese .. ..	12,972,627	13,924,572	27,245,638	35,924,467	43,055,779
Eggs not in shell .. ..	290,612	652,858	426,320	650,470	560
Eggs .. ..	17,365,132	16,473,894	11,287,363	10,144,344	10,279,346
Feathers, undressed .. ..	(a)	(a)	(a)	(a)	(a)
Honey .. ..	lb. 764,606	1,934,162	1,365,364	687,007	4,631,781
Lard .. ..	2,792,008	4,051,472	4,213,026	5,490,959	14,324,614
Meats—					
Bacon and Ham .. ..	1,701,575	1,752,518	1,675,969	1,739,053	4,247,554
Frozen poultry .. ..	52,377	40,754	35,358	21,768	63,310
Frozen pork .. ..	lb. 23,577,743	26,816,453	33,959,412	30,716,417	52,202,821
Milk, concentrated and preserved .. ..	16,961,023	22,169,680	24,717,435	19,106,953	32,219,408
Pigs, live .. ..	No. 131	164	152	69	54
Poultry, live .. ..	1,733	1,099	2,175	2,189	4,462

(a) Quantity not available.

(b) Not available for publication.

AUSTRALIAN FARMYARD, DAIRY AND BEE PRODUCTS: EXPORTS—*contd.*

Particulars.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
VALUE.					
	£	£	£	£	£
Bees-wax .. .. .	28	2,934	1,322	148	2,127
Butter .. .. .	9,832,733	8,801,643	10,781,124	12,891,837	15,894,718
Cheese .. .. .	337,467	384,027	845,130	1,074,008	1,440,140
Eggs not in shell .. .. .	7,170	19,756	16,926	23,065	18
Eggs .. .. .	910,892	954,578	686,713	638,159	597,854
Feathers, undressed .. .. .	2,257	3,110	1,192	307	665
Honey .. .. .	12,840	30,380	21,081	13,957	128,974
Lard .. .. .	53,603	69,374	63,662	67,744	182,564
Meats—					
Bacon and Ham .. .. .	109,760	112,680	117,654	119,994	274,932
Frozen poultry .. .. .	36,078	35,432	36,803	19,917	43,457
Frozen pork .. .. .	587,410	687,043	934,575	882,117	1,561,432
Milk, concentrated and preserved .. .. .	722,301	851,769	963,873	791,100	1,126,066
Pigs, live .. .. .	708	607	979	621	387
Poultry, live .. .. .	973	572	860	970	3,772
Total .. .. .	12,614,220	11,953,905	14,471,894	16,523,944	1,257,106

## § 9. British Imports of Dairy Products.

1. Quantities and Values.—The following table gives the quantities and values of the principal dairy products imported into the United Kingdom during the years 1935 to 1939. Figures for later years are not available for publication :—

## DAIRY PRODUCTS: IMPORTS INTO UNITED KINGDOM.

Products.	1935.	1936.	1937.	1938.	1939.
Butter .. .. . cwt.	9,608,016	9,740,735	9,417,669	9,517,913	8,736,967
" .. .. . £	39,328,128	44,385,148	47,362,965	50,873,133	48,424,422
Cheese .. .. . cwt.	2,714,351	2,676,371	2,935,907	2,927,326	2,845,425
" .. .. . £	6,649,093	7,783,747	9,252,915	9,681,245	8,868,544
Milk, concentrated and preserved .. .. . cwt.	2,005,528	1,926,629	1,978,313	1,989,552	1,698,896
" .. .. . £	2,435,822	2,407,028	2,819,107	3,160,266	2,817,760
Bacon and ham .. .. . cwt.	7,603,672	7,241,374	7,600,154	7,532,436	7,895,493
" .. .. . £	30,462,249	30,247,252	32,440,620	33,936,331	36,706,410
Pork (a) .. .. . cwt.	915,098	1,025,156	1,057,159	1,180,866	988,804
" .. .. . £	2,509,315	2,780,455	3,250,389	3,680,644	3,036,040

(a) Chilled or frozen.

2. Butter.—(i) Imports. Australia has for many years supplied a large proportion of the butter imported into the United Kingdom. The quantity in 1939 amounted to 1,973,454 cwt., or 23 per cent. of the total importation. The Australian contribution was valued at £11,090,254 and was exceeded only by that received from New Zealand and Denmark. These three countries combined supplied 71 per cent. of the total imports in 1938 and in 1939. Later details are not available for publication :—

## BUTTER: IMPORTS INTO UNITED KINGDOM, 1939.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
	Cwt.	£		Cwt.	£
New Zealand .. .. .	2,094,417	12,060,037	Estonia .. .. .	149,807	707,027
Denmark .. .. .	2,031,353	11,799,324	Argentine Republic .. .. .	113,198	606,024
Australia .. .. .	1,973,454	11,090,254	Union of South Africa .. .. .	112,617	646,601
Netherlands .. .. .	834,106	4,078,747	British Possessions, n.e.i. .. .. .	112,194	597,192
Lithuania .. .. .	247,509	1,268,671	Foreign Countries, n.e.i. .. .. .	40,104	206,320
Sweden .. .. .	239,165	1,315,660			
Latvia .. .. .	237,284	1,118,944			
Eire .. .. .	227,368	1,386,750			
Poland .. .. .	162,575	728,346			
Finland .. .. .	161,816	814,425	Total .. .. .	8,736,967	48,424,422

(ii) *London Prices.* Fluctuations in prices in London during recent years are given in the following table. Until September, 1939, the prices quoted represent the mean of the top prices quoted weekly for choicest salted Australian butter together with their f.o.b. equivalents in Sydney and Melbourne in terms of Australian currency. Since September, 1939, the price represents that fixed in accordance with the contract between the Governments of Australia and the United Kingdom for choicest Australian butter. Pence have been omitted throughout.

**AVERAGE PRICE PER CWT. OF AUSTRALIAN CHOICEST BUTTER IN LONDON  
(WITH F.O.B. EQUIVALENTS IN AUSTRALIAN CURRENCY).**

Month.	1936-37.		1937-38.		1938-39.		1939-40.		1940-41-42.	
	London.	Aus- tralia. (a)	London.	Aus- tralia. (a)	London.	Aus- tralia. (a)	London.	Aus- tralia.	London.	Aus- tralia.
	Shil- lings (Stg.).	Shil- lings (Aust.).	Shil- lings (Stg.).	Shil- lings (Aust.).	Shil- lings (Stg.).	Shil- lings (Aust.).	Shil- lings (Stg.).	Shil- lings (Aust.).	Shil- lings (Stg.).	Shil- lings (Aust.).
July ..	113	126	112	126	120	135	114	(a)127	(c)110	(b)137
August ..	118	132	116	130	118	132	110	(a)123	(c)110	(b)137
September ..	108	120	119	134	116	130	120	(a)135	(c)110	(b)137
October ..	100	111	139	158	111	124	(c)110	(b)137	(c)110	(b)137
November ..	108	120	130	147	104	115	(c)110	(b)137	(c)110	(b)137
December ..	98	108	111	124	107	119	(c)110	(b)137	(c)110	(b)137
January ..	94	103	109	122	120	134	(c)110	(b)137	(c)110	(b)137
February ..	86	94	111	124	118	132	(c)110	(b)137	(c)110	(b)137
March ..	97	107	117	131	115	128	(c)110	(b)137	(c)110	(b)137
April ..	104	116	124	140	113	126	(c)110	(b)137	(c)110	(b)137
May ..	106	118	127	143	107	119	(c)110	(b)137	(c)110	(b)137
June ..	108	120	120	135	113	126	(c)110	(b)137	(c)110	(b)137

(a) Sydney and Melbourne. (b) Equivalent of contract price. (c) Contract price—equivalent under pre-war conditions would be 122s. stg.

3. *Cheese.*—The value of cheese imported into the United Kingdom in 1939 was £8,868,544, of which £4,469,171 was received from New Zealand, and £2,440,005 from Canada. Small experimental shipments from Australia were made in 1908 and following years, fair prices being realized. The value of the imports from Australia during 1939 amounted to £958,333. Later details are not available.

4. *Bacon and Ham.*—Of a total import of bacon and ham valued in 1939 at £36,706,410, the United Kingdom received imports to the value of £16,625,749 from Denmark, £7,200,278 from Canada, £2,886,537 from the Netherlands, £2,338,465 from Eire, £2,279,955 from the United States of America, and £1,860,740 from Poland. The import from Australia was small. Later details are not available.

5. *Pork.*—The value of the United Kingdom imports of pork (frozen and chilled) was £3,036,040 in 1939. Imports from Australia were valued at £938,956, showing a further increase over the imports in previous years. The bulk of the supplies were received from New Zealand, namely, £1,293,035. Later details are not available.

6. *Other Products.*—The imports into the United Kingdom from Australia of bees-wax, poultry, game, lard and honey in 1939 were unimportant, but frozen rabbits to the value of £204,931 and eggs in shell to the value of £418,687 representing 80 per cent. and 3 per cent. respectively of the total imports were imported during the year. Later details are not available.