

## PASTORAL RESOURCES.

NOTWITHSTANDING the fact that the soil, climate, and indigenous herbage of Australia are admirably adapted to the multiplication and sustenance of animal life, no systematic attempt was made to test the capabilities of the land as a feeding ground for flocks and herds, until the example of Captain Macarthur had demonstrated beyond doubt that Nature favored the production in Australia of a quality of wool unsurpassed by that of any part of the world. Then the settlers began to understand and utilise the natural resources of the country, and as the indomitable spirit of exploration gradually opened up the apparently boundless plains of the interior, pastoralists extended their domain, and sheep and cattle in increasing numbers spread over the face of Eastern Australia. The expansion of the pastoral industry is gradually converting the central and western portions of the continent into holdings, devoted to the production of the greatest element of the wealth of Australasia.

Commencement  
of the pastoral  
industry.

The stock of animals landed by Governor Phillip with the first expedition was :—

1 bull,	1 stallion,
4 cows,	3 mares,
1 calf,	3 colts,

and a few sheep, goats, and swine.

The extension of free immigration, and the spread of settlement on what were termed "waste" lands, gave an impetus to grazing pursuits. The following figures give the number of stock in New

Impetus to  
pastoral  
pursuits.

Stock during  
period of early  
settlement.

South Wales and Tasmania (virtually colonized Australasia) at  
the dates mentioned below :—

Year.	Horses.	Cattle.	Sheep.	Swine.
1800	203	1,044	6,124	.....
1810	1,134	12,442	25,888	9,544
1821	4,564	102,939	209,158	33,906

Owing to incomplete data the exact figures for the years intervening between 1821 and 1842 cannot be given, but the subjoined table shows the increase in stock in Australasia generally from the latter year :—

Year.	Horses.	Cattle.	Sheep.	Swine.
1842 .....	70,615	1,014,833	6,312,004	66,086
1861 .....	449,250	4,039,839	23,741,506	281,143
1871 .....	782,558	4,713,820	49,773,584	737,477
1881 .....	1,249,765	8,709,628	78,563,426	903,271
1888 .....	1,504,137	9,278,540	96,580,639	1,140,205

Stock per  
inhabitant.

The numbers of each class of stock per inhabitant at the same periods were :—

Year.	Horses.	Cattle.	Sheep.	Swine.
1842 .....	0·29	4·09	25·45	0·27
1861 .....	0·36	3·19	18·74	0·22
1871 .....	0·41	2·45	25·86	0·38
1881 .....	0·46	3·17	28·64	0·33
1888 .....	0·41	2·53	26·30	0·31

Undeveloped  
pastoral re-  
sources.

In connection with the foregoing table it will be seen that the increase of stock from period to period has been, on the whole, equal to the increase of population, and we may therefore suppose that it will be many years before the area adapted to pastoral pursuits will be fully utilized. To illustrate the extent of country

still unoccupied, or not utilized to its full stock-carrying capacity, the following figures are of use. It will be, of course, understood that sheep equivalent to the cattle and other live stock has been added to the number actually depastured, allowance being made at the rate of ten sheep to every head of large stock. Thus in New South Wales there are, if other stock be not allowed for, 4.21 acres per sheep, but allowing for cattle, horses, &c., there are but 2.92 acres per sheep; similarly for Queensland, without allowing for other stock, there would appear to be 32 acres per sheep, but allowance being made, the average is only 6.75 :—

Colony.	No. of acres per sheep.
New South Wales .....	2.92
Victoria.....	2.01
Queensland .....	6.75
South Australia .....	42.86
Western Australia .....	176.70
Tasmania .....	5.23
New Zealand .....	2.21
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Australasia .....	9.42

Stock compared with area.

Taking New South Wales, though not by any means stocked to its full carrying capacity, as a standard, there is scope in Australia for a further increase of over 200 million sheep, or the equivalent in other stock, over the number at present depastured.

The demands of agriculture must, of course, affect the area at the disposal of the pastoralist; this is, at present, most noticeable in connection with Victoria and New Zealand, but in resisting the temptation to overstock inferior country, and by increasing the natural carrying capacity by irrigation, water conservation, and the cultivation of artificial grasses, the colonies where agriculture has made most progress will be able to carry stock even in larger numbers than they have hitherto attempted.

Effects of agriculture.

The stock depastured in the colonies reached the following numbers in the year 1888.

Colony.	Sheep.		Horned Cattle.		Horses.		Swine.	
	Number.	Percentage in each Colony.	Number.	Percentage in each Colony.	Number.	Percentage in each Colony.	Number.	Percentage in each Colony.
New South Wales .....	46,503,469	48·15	1,622,907	17·49	411,368	27·35	248,583	21·80
Victoria .....	10,818,575	11·20	1,370,660	14·77	323,115	21·48	245,818	21·56
Queensland .....	13,444,005	13·92	4,654,932	50·17	324,326	21·56	68,994	6·05
South Australia .....	7,150,000	7·40	430,000	4·64	170,000	11·30	170,000	14·91
Western Australia .....	2,112,392	2·19	95,822	1·03	41,390	2·75	25,083	2·20
Tasmania .....	1,430,065	1·48	142,019	1·53	29,238	1·95	43,227	3·79
New Zealand ..	15,122,133	15·66	*962,200	10·37	*204,700	13·61	*338,500	29·69
Total, Australasia ...	96,580,639	100·00	9,278,540	100·00	1,504,137	100·00	1,140,205	100·00

NOTE.—The figures for all the Colonies, with the exception of New Zealand, are for the year ended 31st March, 1889. In the case of New Zealand the number of sheep is for May, 1888. \* Estimated

It is estimated that the capital invested in pastoral properties throughout Australasia amounts to £373,000,000, and of this sum the value of stock alone represents £67,000,000. The annual return from pastoral pursuits, including dairy farming, is £35,387,000, the share of each colony in the production being—

New South Wales .....	£13,059,000
Victoria .....	6,280,000
Queensland .....	6,444,000
South Australia.....	2,500,000
Western Australia .....	661,500
Tasmania .....	657,500
New Zealand .....	5,785,000
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Australasia .....	£35,387,000

Capital invested  
in pastoral pur-  
suits.

The return from each branch of the great pastoral industry is approximately as follows :—

Return from  
pastoral  
industry.

Sheep .....	£21,488,000
Cattle for meat, &c.....	6,200,000
Dairy cattle .....	4,144,000
Horses .....	2,319,000
Swine .....	1,236,000
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	£35,387,000

In connection with the above statement it will be understood that the value of agricultural produce consumed on dairy farms, and for fattening stock, has been deducted from the totals, and will be credited to agricultural production.

As might be supposed the greater part of the value of stock returns is due to wool. Thus, out of the £35,387,000 quoted above, £17,100,000 is the value of wool. The clip of the Australasian colonies during 1888 was 553,000,000 pounds weighed in the grease, the export value being £19,333,000—that is to say, £2,230,000 more than shown by the foregoing tables. The latter

Export of Wool.

Value of export. sum represents the cost of freight, handling, and brokerage between the sheep-walks and the port of shipment. The export value of the clip of each colony was as follows :—

## Export Value of Wool.

Colony.	Weight of clip in the grease.	Value.
	lb.	£
New South Wales .....	269,739,000	9,120,868
Victoria .....	61,436,285	2,467,000
Queensland .....	72,000,000	2,400,000
South Australia .....	39,000,000	1,170,000
Western Australia.....	11,600,000	348,000
Tasmania .....	9,300,000	400,000
New Zealand .....	90,000,000	3,425,000
Total.....	553,075,285	19,330,868