

The World's Meat Supply

*Rise and Fall of livestock population---Supply and Consumption per capita in different countries.
Effects of War---Percentage of meat to other foods*

Thruout the world cattle are hardly increasing in number, sheep are declining and swine are increasing. A comparison with increasing population will show sheep are far from maintaining their numbers, that cattle are scarcely doing so, and that tho there has been some gain in the number of swine, it has been small. The United States is the most prominent nation in the production and consumption of meat. The number of cattle on farms and ranges in United States reached its height about 1907, when the estimated number was 72,534,000. Cattle declined to 56,500,000 in 1913, and in 1916 the figure was 61,441,000. The number of cattle in Canada has not increased in the last five years, but has rather been on the decrease recently. It is approximately 6,500,000 at present. The following table gives some idea of the total cattle and the cattle per capita in various countries. It must not be assumed, however, that numbers alone represent their meat-producing value. The cattle of the United Kingdom, we believe, would be found to be worth more on the average for meat production than the cattle of any other country, not only because scientific breeding has reached its greatest perfection there, but also because feeding and finishing is more carefully carried on. The cattle of Brazil would perhaps be one of the poorest, lacking not only the results of improved breeding in conformation, but they would also be nearly all range stock and more subject to diseases of the tropical regions.

Cattle in Different Countries

Country	Cattle	Per capita
United States	61,441,000	.60
Russian Empire	62,000,000	Asiatic .54 European .25
Argentina (1911)	30,000,000	3.60
United Kingdom (1913)	12,000,000	.26
Brazil	31,000,000	—
Germany (1912)	21,000,000	.31
France (1911)	15,000,000	.37
Australia (1912)	11,560,000	2.4
New Zealand (1911)	2,070,000	2.0
Austria-Hungary (1910)	16,000,000	.32
Canada	6,066,000	.75
British S. Africa	7,000,000	1.18
Italy (1908)	6,200,000	.18
Uruguay	9,000,000	8.00

Uruguay and Argentina stand out prominently as the two greatest cattle countries in proportion to population, particularly the former. That is a small republic on the Atlantic coast just south of Brazil. Its lands are admirably adapted for cattle raising, but not finishing, so that most of its cattle are sold for jerked beef and beef extract. The same is done with the Brazilian product.

Tho there is not a great change in the production of cattle in these countries in recent years, the number in proportion to the population is steadily diminishing. In 1908 we had 1.13 animals per head of population, and in 1914 only three-quarters of one animal per person. The prominent countries in which cattle seem to be materially increasing at present are United States, Uruguay, Asiatic Russia, British East and South Africa, German East Africa and Denmark. Cattle have been decreasing recently in Argentina, Canada, Australia, New Zealand, Germany, Bulgaria and European Russia. Countries where the production of cattle seems to be remaining stationary are the United Kingdom, France, Spain, Japan and Hungary. China is not included in any of these calculations, as no statistics are available. The production of pork predominates there, as it furnishes most cheaply the greatest amount of meat for the very dense population. This is the experience of 40 centuries of agriculture, so that the reduction of farms to only a few acres has enabled practically nothing but the hog to survive. Brazil and Rhodesia (S. Africa) seem to offer the greatest possibilities for a rapid and early increase in beef production, at least under range conditions.

Canadian exports of cattle were as high as 213,000 in 1898. This number decreased to 44,000 in 1913. In that year the United States market was thrown open, and we exported 219,729 in 1914. In 1915 we exported 185,903 head, and in 1916 (ending March 31) 241,560, practically all of which went to the United States.

Decline of Sheep

The number of sheep in the world is steadily declining. It would seem that sheep, even tho they produce both meat and wool, are steadily being displaced by more economic animals. Of course, this varies in different countries and at different times. At present sheep are undoubtedly one of the most profitable of all livestock in Canada, both on account of the unusual prices and the immense pastoral resources we possess. The conflict of range and farm has reduced both cattle and sheep, but in this process sheep have and will suffer much more than cattle. The latter are better able to readapt themselves to more intensive farming, while sheep are tending to gradually lessen in numbers under

The figures in this article are practically all taken from a very complete bulletin, "The Meat Situation in the United States," issued July 3, 1916, and edited by Geo. K. Holmes. They may not all be absolutely correct, but they are as nearly so as possible to get, and give the world's situation in a very concise manner indeed. Anyone interested in keeping statistics might well preserve these figures.

such conditions. United States passed rapidly into range conditions, and is passing rapidly out of it. Canada is undergoing the same evolution. Farms are rapidly encroaching on the range in Argentina. Great droughts are persistently destroying vast numbers of sheep in Australia. It would seem quite probable Asiatic Russia will make great strides in this line in the next decade or two. The sheep exports of the nine principal exporting coun-



Approximate contributions to total world's export trade in beef, pork and mutton, made by different countries

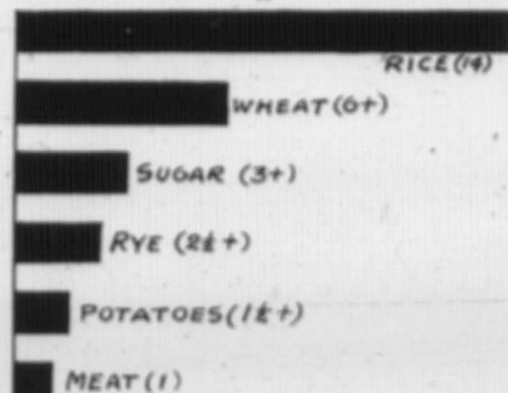
tries 20 years ago was 50 per cent. greater than those of cattle, or about 1,500,000 head, but the number has dwindled more than have those of cattle. By 1912 the total world's export of sheep was 695,000. Nearly a quarter of the exports of sheep from United States came to Canada in 1895-1904. This number increased to 94 per cent in 1913. Practically all the rest from United States went to the United Kingdom.

Sheep in Different Countries

Country	Sheep	Per capita
Australia	83,240,000	17.5
Argentina	80,000,000	9.75
United States	49,000,000	.58
New Zealand	24,270,000	22.70
United Kingdom	27,550,000	.6
Germany	5,780,000	.08
France	16,425,000	.41
Austria-Hungary	9,000,000	.41
Russian Empire	77,300,000	Asiatic 1.27 European .29
Canada	2,000,000	.25
British S. Africa (1912)	36,000,000	5.78
Italy (1908)	11,200,000	.33
Spain (1912)	15,800,000	.80
Uruguay (1909)	26,300,000	25.2
Algeria (1917)	9,600,000	1.5
Brazil	10,650,000	.43

Increase of Swine

United States produces three-quarters of the world's corn crop. This has an enormous influence



Comparative total energy or food producing power of the different world-crops as now produced. Meat is figured as 1.

on the production of swine in that country, and the presence or absence of corn has generally a great influence in other countries. Other factors influencing the numbers of sheep and swine, such as range, climate, disease, have tremendous influence. As

previously mentioned, the greatest factor making for the increase of swine is their rapid rate of reproduction, their adaptation to intensive farming conditions, their rapid and their economical production of food for human consumption. The greatest swine-producing countries outside of China are United States, Argentina Austria-Hungary, Canada, France, Germany, European Russia and the United Kingdom, and the number of swine in United States in June, 1910, was about equal to that in all the other countries just mentioned. Great fluctuations occur in the numbers of swine owing to the prevalence of disease, such as cholera. In two years the number of swine in United States was reduced 6,500,000 thru cholera, but in two years the number increased over 9,000,000, and this year was again 68,000,000. From 1911 to 1916 the number of swine in Canada decreased from 3,600,000 to 3,100,000 (1915) in spite of an increase in our farms. Denmark increased her swine from 829,000 in 1893 to 1,457,000 in 1903. Six years later this was still only 1,468,000. This may be about the limit of Denmark's production, since swine-raising there depends on dairying. Germany more than doubled her swine production in 21 years. It was 25,600,000 in 1913. She stands next to United States (except China), and feeds potatoes extensively instead of corn. Generally speaking, swine have been showing a declining ratio to population in Australia, Canada, Chile, the United Kingdom and some Balkan countries.

Swine in Different Countries

Country	Swine	Per capita
United States	68,000,000	.67
United Kingdom	3,300,000	.07
Germany	22,000,000	.38
Austria-Hungary	13,250,000	.31
France	6,800,000	.18
Argentina	3,500,000	.43
Australia	840,000	.35
New Zealand	350,000	.35
Brazil	18,000,000	.74
Canada (1915)	3,100,000	.42

Effects of War

There is no reason to doubt that the war will have made tremendous inroads into the livestock of all the belligerent countries. Not only will stock be slaughtered for food, but thru lack of feed. The unusual prices of grain is causing a reduction in stock, particularly swine, for tho the price of hogs is abnormally high, it has scarcely kept pace with the prices of grain. This, added to the shortage of labor, is making many farmers sell their stock rather than take a chance on feeding it grain at present prices. Stock prices, war or no war, will be high next spring, but with war still on, it seems likely they will establish sky records.

The rebellion in Cuba preceding the loss of that country to Spain reduced the cattle and sheep about 85 per cent. and the swine 40 per cent. In the devastated area practically no stock was left. At the conclusion of the Boer war the Orange Free State was practically depleted of livestock. The British Board of Agriculture and Fisheries estimates that during the year ending June, 1915, the cattle in the United Kingdom decreased one-tenth of one per cent., sheep increased 1.1 per cent., and swine decreased four per cent.

The Department of Agriculture of France estimated that from Dec. 1, 1913, to July 1, 1915, in the territory unoccupied by the enemy, cattle decreased 17 per cent., sheep 16.8 per cent., and swine 22.1 per cent. The Allies have drawn heavily on Australian, South American and North American supplies, disturbing the conditions of meat distribution to a great extent in these areas. There is little question but the same has happened even more so with the Central Powers and in the nearby continental countries from which the economic malstrom caused by abnormal prices in Germany has drawn huge supplies.

Position of Meat as Food

It may be interesting to know that meat and meat products form but a very small part of the world's food. The meat production of the world is somewhere about 60 billion pounds, or more. A diagram in this article shows the small percentage of this compared to the energy produced by the principal grain crops. The people of a few countries eat most of the meat, and most of the meat is produced in a few countries. United States is the greatest producer and consumer. The percentage of the world's meat production that is exported is 7.7 per cent. This is mostly done by about nine countries. The percentage of the world's export trade in 1912 was about as follows:

Argentina and Uruguay	36
United States	31.1
Australia and New Zealand	18.7

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