

What Determines the Price of Wheat?

The wheat market is world wide. Wheat can be shipped anywhere, so it is the demand of the whole population of the earth and the condition of the wheat supply in every producing country that must be taken into account in any attempt to work out the conditions which determine the price of wheat at any given time. Many countries produce more wheat than they can consume, while other countries draw a part of their supply from abroad each year. The most important countries having a wheat surplus are: Canada, United States, Argentine, Chili, Uruguay, Austria-Hungary, Bulgaria, Roumania, Russia, Turkey, British East Indies, Australia, and North Africa. The most important wheat importing countries are: Great Britain, Belgium, Denmark, France, Germany, Greece, Italy, Netherlands, Portugal, Spain, Norway, Sweden, Switzerland, Japan and China.

Wheat from North America goes to Europe and competes with wheat brought in from India, Russia, and the Argentine. A portion of the wheat from farms of California, Washington and Oregon is sent to China and Japan and there meets the product of India and the East India Islands. The commerce in wheat is world wide and the price of wheat is determined by the supply and demand upon a market which is world wide. Hence the price does not vary universally as the yield in any one country, for a short crop in one is often made up for by an unusually large one in another. Then it is to be remembered too, that there are certain products that may be substituted for wheat and thus keep prices from rising so high or sinking so low as they otherwise might. In Northern Europe rye bread is consumed very largely when the rye crop is larger and the wheat crop smaller than usual. When the rye crop is smaller than usual the wheat crop may be large enough to balance the shortage in rye. Thus it is the world's supply of wheat and wheat substitutes, and the world's demand for bread and bread substitutes, that fixes the price of wheat on the world's market at any given time.

Liverpool is the center of the world's wheat trade, and conditions which regulate the price of wheat on the Liverpool market, may be said to regulate the price throughout the world. The surplus wheat of America is brought together at the "primary" grain markets, the most important of which are: Chicago, Minneapolis, Winnipeg, Duluth, Superior, St. Louis, Milwaukee, Toledo, Kansas City, Cincinnati and Detroit. From these points it is distributed to the various portions of the continent where wheat is not produced in sufficient quantity to supply demand. After these are supplied, the surplus still remaining is sent abroad. The price at which wheat sells in any primary market will equal the price in Liverpool minus the charges made for putting the wheat on the Liverpool market. The local price at any point in any surplus producing region will equal the price at the nearest primary market, minus the charges incident to putting the wheat on that market, the charges made for transporting and handling the grain have been spoken of, rather than the cost of transporting and handling for the reason that it is not just certain that the charges made by the transportation and handling companies are exactly the same as the cost of these services to these transporting and handling concerns, and yet if these companies are able to charge more than sufficient to pay all cost this becomes as important in determining the price as if it actually cost the company more to give the services.

World's Wheat Crop of 1907.

The official estimates issued from Buda-Pesth of the world's production of wheat in 1907 gives the grand total at between 3,100,130,000 and 3,205,550,000 bushels. By countries the amounts in bushels are as follows:

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| Great Britain..... | 52,250,000 |
| France..... | 348,330,000 |
| Germany..... | 122,830,000 |
| Austria..... | 52,250,000 |
| Italy..... | 181,500,000 |
| Holland..... | 5,680,000 |
| Switzerland..... | 4,180,000 |
| Belgium..... | 13,380,000 |
| Denmark..... | 4,400,000 |
| Sweden..... | 5,870,000 |
| Norway..... | 290,000 |
| Spain..... | 110,000,000 |

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| Portugal..... | 8,800,000 |
| Greece..... | 8,070,000 |
| Egypt..... | 14,670,000 |
| Hungary (including Croatia and Slavonia)..... | 130,000,000 |
| Bosnia and Herzegovina..... | 2,270,000 |
| Russia and European Asia..... | 555,500,000 |
| Roumania..... | 53,170,000 |
| Bulgaria and East Roumelia..... | 31,170,000 |
| Servia..... | 11,000,000 |
| Turkey, European Asia..... | 47,670,000 |
| East India..... | 311,960,000 |
| United States..... | 641,670,000 |
| Canada..... | 93,500,000 |
| Argentina..... | 150,500,000 |
| Chili..... | 16,130,000 |
| Uruguay..... | 8,250,000 |
| Australia..... | 73,700,000 |
| Algiers..... | 33,800,000 |
| Tunis..... | 6,230,000 |
| Tripoli..... | 4,400,000 |
| Mexico..... | 16,500,000 |
| Japan..... | 23,830,000 |

Reports from South Africa, Paraguay and Brazil have not yet arrived. The crop is 288,270,000 bushels less than last year.

Selecting Seed Potatoes.

The selection of seed potatoes is not a matter that receives very much attention from the ordinary farmer or potato grower, yet if we think about it only for a minute it is not difficult to perceive that this is the most important thing concerned in the potato production, in truth the mainstay of the whole industry. Neither, when we observe the carelessness that characterizes the usual methods of seed potato selection, is it difficult to understand why standard potato varieties so frequently "run out," nor why growers have a common habit of believing that luck, not the application of common sense practices, place the most important part in determining what the nature of the crop shall be that springs from the particular tubers planted. There may be such a thing as luck all right, influencing the potato crop, but the men who are making the largest success in potato growing are those who disregard its existence altogether and make reason the basis of their work.

In selecting seed potatoes it is well to bear in mind that this crop differs entirely from every other farm crop grown. That portion of the potato which we use for seed, the tuber itself, is, in reality a portion of the stem of the plant from which it springs. It is a cutting as it were, and cuttings tend to reproduce the characteristics of the plants from which they came more certainly than those characteristics would be reproduced by seeds. Hence seed for next year's crop should always be selected, while the plants are growing, or at least while the crop is being harvested. It should be taken from hills that have produced a good number of large sized, smooth tubers, typical of the variety grown; from hills that show no tendency to disease of any kind, and have few small, ill formed tubers. After the crop is dug it is impossible to tell whether or not the seed we are selecting has come from plants that produced well; that were strong, vigorous growers. We take the large size potatoes, the medium sized or the small and we are as likely to get as good results from one kind as from another. Growers who year by year select the largest sized tubers they can find for seed, may, in the course of a few years develop a strain of large sized potatoes, but the chances are exactly even that they won't. The seed they select, however, large and fine it may be in appearance, may have come from plants that set a large number of small tubers, and just as surely as these tubers produce their generation, will they produce that in kind and the plants and crop that spring from them will partake of all the character, good and bad, of the plant and crop from which they come.

POULTRY

Fattening Poultry in Pens.

Pen feeding is the most satisfactory method for the average farmer to use in fattening poultry. All of the fowl which are to be fattened should be placed in a small pen, under cover, with a medium-sized yard attached. They should be fed three times daily, all the mash they will eat up clean, the mash consisting of ground grain mixed with bran or shorts. Hoats or

barley are used sieve out the hulls. Make the mash sticky and not too sloppy. Skimmilk or buttermilk is better than water for damping the grain. In addition skimmilk should be kept before them all the time, if it is not available, water may be used for drinking purposes or the moistening of food, but in that case green stuff of some kind, roots or cabbages, should be fed in addition to the mash.

Before being placed in the pen to fatten, each fowl should be well dusted with sulphur to kill all vermin. This is very important as vermin annoys the fowls and prevents them from fattening.

Horticulture and Forestry

Storing the Garden Crop.

Everyone appreciates the value of fresh vegetables in adding variety to the diet during the long winter months and a little care at this season in handling and storing these crops, care that will ensure of the vegetables retaining their quality, will add greatly to the enjoyment of their use. A cellar is of course, the most satisfactory storing place, in fact the only storage worthy of the name. It should be well ventilated. The doors and windows being kept open at least during the day, from the time the crop is stored until the weather gets too cold to leave them open any longer. It is also a good plan to shade the windows so that strong light shall not fall on the vegetables causing them to wither, decay or grow. Cellars which contain furnaces are apt to be too warm and dry for the storage of vegetables. In such it is best to partition off a portion at one end as a root cellar and endeavor to keep the temperature in it as low as it can be maintained without injuring the roots. All vegetables keep better and retain more of their quality if held at a temperature as near the freezing point as possible.

No special directions need be given on the storing of potatoes. They should be free from soil particle and put into separate bins if there is more than one variety. If the cellar floor is earthen it is apt to be damp, so the bins should be bottomed with boards. This will decrease the sprouting tendency of the tubers.

Roots, turnips, carrots, should have the leaves clipped close and be placed in boxes or bins. Celery should be taken up with long roots, placed upright in a box, and packed with moist earth. Cover the leaves with several thicknesses of paper. Parsnips may best be stored in sand or earth, first, of course, clipping off their leaves. Squashes and turnips should have the stems left on and be gathered well before frost comes. Onions are best kept in covered boxes or another way if only a small quantity is required is to tie in bunches and suspend from the ceiling in some dark corner. Cabbage heads should be cut from the stock and the loose leaves removed. Each head is then wrapped separately in many layers of paper, tied with a cord and hung up as in the case of the onion bunches, or they may be laid in a dry place. Another way is, pull the head with the stalk and pile upright head to head in the corner. Two or three tiers may be placed upon the first. The first of these methods will preserve cabbages much longer than the latter.

Injured vegetables should never be placed in a cellar, or if they are should be used before they begin to decay. The odors given off from decaying vegetables make the cellar an unhealthy place, the air in the rest of the house is liable to be contaminated from it, and other vegetables stored in such a place rot much more readily.

Rhubarb Growing in the Cellar in Winter.

The winter forcing of rhubarb is so simple and inexpensive that any family possessing a few rhubarb roots may enjoy this luxury all winter, while the forcing may be done anywhere. A few roots can be set in a box, a corner of the cellar is the best place to set the plants. For the purpose of demonstrating how cheaply and easily this work may be done a small bed was prepared in the house cellar. Only ten roots were used; being placed at the end of the cellar close beside a potato bin. The bed was shut off from the rest of the basement by simply tacking an old hemp carpet to the floor and sleepers above, simply letting it fall to the cellar bottom, the wall formed one side of the enclosure and the carpet was so nailed to the floor above as to form the other side and ends. The heating cost less than two cents per day, and was only used at intervals. The bed was for family use. The bearing season was prolonged at will by using the heat only occasionally.

To prepare such a bed only a few inches of soil is required on the bottom. The rhubarb roots were simply dug up from the garden and replanted in this soil. The enclosure was kept at a suitable temperature for growth, the soil was moistened occasionally with the result that more than ten dozen bunches of stalks were produced. Rhubarb thus forced draws little nutrient from the soil in which it grows, but it is very exhausting on the plant, and roots thus forced are entirely worthless for planting outside again. J. E. MORSE, in *The New Rhubarb Culture*.