

## AGRICULTURE

# Surplus Wheat to Russia

Wheat, man's staff of life, piled high in U.S. warehouses, has stirred up bushels of trouble over its contemplated sale to Russia—By Barbara Tufty

► MORE THAN A BILLION bushels of wheat are being stored in warehouses throughout the country at enormous cost. Even if our current wheat crop failed, we would not need to use this surplus to feed our people.

The decision to sell part of this surplus wheat for hard cash to Russia has stirred up turmoil with political and moral overtones. For many agricultural experts, however, the decision is a good one. The excess wheat should be moved and sold.

As of Sept. 20, the U.S. Government had 1,048 million bushels stored in commercial warehouses—worth about \$2,099 million. The golden grains are constantly being added and taken out from these storage bins—much like money in the bank. Like dollars in your bank account, the original grains of wheat do not remain in the same bin, but are turned over and over in exchange, while the total amount in storage remains essentially the same.

Wheat can be stored for relatively long periods of time without spoiling—for as long as five or six years if the bin is dry, with less than 13% moisture. Yet in some places it can be stored for only four or five months.

## Stored in Grain Belt

Most of our wheat is stored in the great wheat belt area—on the plains extending from North Dakota, through South Dakota, Kansas, Nebraska, Oklahoma, south to Texas. At harvest time, the wheat is reaped, stored and moved to terminals in the wheat area; then moved to terminals along the seacoast.

The U.S. Government pays storage at about 13.5 cents a bushel per year, but the individual or commercial firm owning the warehouse is completely responsible for the grain's quality. They have to watch it, inspect it, keep it free from the thousand pests that plague it—moisture, dryness temperature changes, insects, rodents and fungus.

The total "desirable" surplus of stored wheat for the country is about 600 million bushels, state U.S. Department of Agriculture officials. The extra 400 million, above and beyond the desirable surplus, is viewed as a waste by agricultural economists. Even if our wheat crop totally failed one year—an almost impossible probability—our own people could not possibly eat all this wheat.

Besides, the potential for America to grow more wheat is considered "tremendous." In one year, U.S. wheat growers could replenish our whole storage supply.

Details are now being worked out concerning the internal transportation, port facilities and shipment of the wheat to Russia. Estimates for the amount of wheat range

from 115 to 225 million bushels. Russia has already negotiated with Canada for 500 million bushels.

Cultivated and prized in all ages and by all nations, wheat is one of the most important cereal grasses grown today, mainly because it contains basic food elements essential to human and animal nutrition, is adaptable to many climates and is easy to grow.

With the botanical Latin name *Triticum aestivum*, wheat is a member of the Gramineae, which is a grass family with such other important food crops as corn, sugar cane, rice, oats and barley. Rye, millet and sorghum are also members of this straight-veined leaf family—as well as the grass on your lawn, and the decorative bamboo that grows to a height of 120 feet.

## Prized for Centuries

Wheat has been cultivated and prized for centuries—some say as many as 15,000 years. Wheat remains have been found in the lake dwellings of the Stone Age in Switzerland and in relics of the Bronze Age in Italy. The grain has been found in the tombs of Egypt and Mesopotamia, 5000 years B.C., and in the ruins of Mohenjo-Daro in the Indus Valley.

In Ancient Egypt, Rome and Greece,



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grain was so important in the national economy that taxes were paid in measures of grain. During the Middle Ages wheat was widespread throughout Europe, but was unknown in the Americas until 1494 when Christopher Columbus brought it to the West Indies.

Throughout its history, wheat has basically remained its own simple self—golden seeds on top of a slender stalk of grass, two or more feet tall. Carried by primitive wanderers, it has adjusted to new conditions of climate, elevation, soil and treatment. Today science and man have added many forms and varieties to give higher yields and more protein, as well as to resist the ravages of drought, and rust and smut fungus.

Wheat has been traditionally successful as food for man and his beasts. Breads, cakes, cookies, pastries and cereals have been staples of many civilizations. It takes one bushel or 60 pounds of wheat to make 67 loaves of bread.

Parts of wheat have been used by laundries as starch; or as paste for binding books or hanging wallpaper. Plastics, fibers, films and adhesives have also been produced—but not on a commercial scale, because they are so brittle. Parts of the wheat kernel not used for bread are used for supplementary food for cows, sheep, horses, swine and poultry.

A vast potential for wheat is as wheat straw for livestock feed, animal bedding, compost, mulch for strawberries and other plants, and fertilizer with its high nitrogen, potash and phosphate content. Sometimes this straw has been made into corrugated paper for shipping containers.

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## Larger Fertilizer Supply Helps Feed Hungry World

► U.S. CHEMISTS are producing more ammonia for needed fertilizers than ever before.

Last year more than four and one-half million tons were produced, S. Strelzoff and S. Vasan of Chemical Construction Corporation, New York, reported. This is almost four times the amount the U.S. was producing in 1945 at the end of World War II.

Production of ammonia in Japan has been increasing at a "tremendous rate," the chemists told the 51st national meeting of the American Institute of Chemical Engineers in San Juan, Puerto Rico.

Countries like Formosa, Mexico, Egypt and India have also been expanding their nitrogenous fertilizer production.

These synthetic chemicals will play an important part in providing food for billions of hungry people on this earth—a population figure expected to reach six billion in the next 30 years.

More food can be produced with new synthetic materials and with increased use of cheaper raw fertilizer materials such as ammonia, urea, nitric acid and ammonium nitrate, the scientists said.

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