

FARM AND RANCH BULLETIN

Vol. 21, No. 10

October 1966

FOOD PRICES VARY — WHY?

Food prices may fluctuate on a monthly, weekly, or daily basis and for many reasons, according to the U.S. Department of Agriculture. Since demand remains rather constant, the factors that alter supply or cost have a great bearing upon price levels. These factors usually reflect physical changes, such as weather, or changes of an economic nature, such as labor costs or merchandising practices.

Weather is often a decisive factor in the production of food, whereas the assembly line continues its processing of consumer goods despite weather conditions on the outside. Since food production generally occurs outdoors, crops are at the mercy of the elements. A long drought can definitely reduce production because only a small percentage of farmland acreage is irrigated. Too much rain can also be as devastating to output as can too little precipitation. An earlier than usual freeze in some sections of the country or a freeze during the winter months in southern areas can destroy most of a crop overnight. A smaller supply likely will mean higher prices for a year if the crop is citrus, or for only several weeks if it is a vegetable, such as green beans.

Today, most foods are generally available on a year-round basis. Production schedules are staggered to match seasons and areas of the country. If the product is not available in the fresh state, it may be purchased in the frozen or canned form. The fresh product will be lower in price during harvest, especially in

nearby areas, and higher during the off-season, when it must be shipped from greater distances. Although lettuce, tomatoes, corn, and other fresh vegetables are found in display cases in February, they cost more than they do in July since few parts of the country have a climate warm enough to grow winter crops. For instance, only California, Arizona, and Florida produce winter lettuce. Thus, supplies are less abundant and require more transportation to make them available to consumers throughout the country.

The American housewife has a preference for convenience foods. Since one out of every three wives works outside the home, pre-washed, pre-peeled, and pre-cooked foods are very attractive to the homemaker. The saving in preparation time is similar to an extra helper in the kitchen. The built-in laborsaving technique for the housewife must be performed somewhere between the farm and retail outlet, and it costs to add these "maid" services. However, the added cost may not be as much as it seems when storability, less waste, and longer shelf life of the foods are considered.

Most foods that are produced in the United States are shipped great distances before being purchased by the final consumer. Some food products may require the assembling of various individual commodities from several parts of the country before the final item is made available. The transportation involved in bringing commodities together for processing and further distribution is sizable. Having the

product demanded at the right time and place involves considerable activity at wholesale and retail levels. The marketing bill for bringing together commodities grown in this country and making them available to consumers amounts to over \$50 billion a year. The 5 million people employed by the food industry receive about 45 percent of this sum, and another 40 percent goes for packaging, advertising, depreciation, and other marketing costs. Transportation accounts for 10 percent, and the remaining 5 percent is food industry profits.

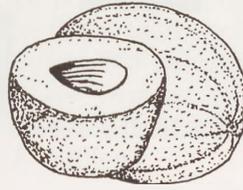
The homemaker has a veto power over what she will or will not buy. If she refuses to buy a product, it vanishes from the shelves. In today's average supermarket, the consumer has from 6,000 to 8,000 food items from which to choose. About 60 percent of these items are new since World War II. The food industry introduces over 5,000 new food items annually, but only 500 survive more than a year. The costs of developing, market testing, and advertising are usually large. The price of the item most often is reduced as the product is accepted and volume sales are attained.

Over a period of time, food prices have been rising, but the addition of new services has increased. Despite the availability of high-quality products in different forms, in all seasons, and in convenient packages, the housewife is spending a smaller and smaller percentage of her household budget for food.

How Now, Computerized Cow?

Computer programming for herd selection? Certainly, say dairy scientists at Michigan State University. Now that they have programmed the necessary mass of information on MSU's computer, the specialists can make a complete, updated genetic ranking of any registered cow in the State of Michigan within a matter of hours. Ten years were required to assemble the information, but now each cow has an index value which indicates how efficiently her offspring will perform in terms of milk production. The data are an excellent guide for deciding which calves to keep for improving herd production, as well as being useful in the selection of a breeding herd.

Black Plastic Boosts Cantaloupe Yields



Black plastic has been used successfully to boost cantaloupe yields on the Roland Dreahn farm near Hempstead, Texas. According to Texas A&M University, Mr. Dreahn harvested 1,490 pounds of cantaloupes from two 410-foot rows, compared with 60 pounds on two rows which were identical except for the plastic.

The use of black plastic results in early yields (and consequent higher prices) and larger output. The plastic conserves moisture and absorbs sunlight, which permits earlier planting and faster germination of seeds. Since weeds (except nutgrass) will not grow up through the plastic, less labor is needed for cultivation of the cantaloupes. Plastic should not be used on ground where nutgrass is present unless the soil is sterilized first.

The plastic comes in rolls that are 3 to 4 feet wide. It is rolled down the row before the cantaloupe seeds are planted, and each edge is covered slightly with dirt in order to hold the plastic in place. Holes are then punched in the material, and the seeds are planted. The plastic prevents the cantaloupes from rotting since the fruit rests on the material instead of on the ground. Plastic can also be used on watermelons, tomatoes, and most other vegetables.

Chemical Pesticides Not New

The use of pesticides is as old as the ancient Greeks, points out Frank G. Bieberly, Extension Specialist at Kansas State University. The Greeks applied brimstone (sulfur) as an insecticide. Common salt probably was the first chemical weed killer used in ancient times. Modern man has added a system of registering pesticides to make sure that the materials are effective and safe for use in accordance with label directions. The U.S. Department of Agriculture controls pesticide regulations at the national level.

Streamlined Steers

The amount of lean meat on steers has increased 3 percent in the past 4 years; at the same time, fat thickness has decreased, reports Frank Orts, Extension Meat Specialist at Texas A&M University. Mr. Orts, who collected information on steer carcasses from the major livestock shows in Texas for 4 years, says that the size of the rib eye has increased three-tenths of an inch, while fat thickness has decreased about two-tenths of an inch.

The trend toward the "meat-type" steer with less fat began with the consumer, according to the Texas A&M specialist. The housewife demanded more lean meat, and the trend worked its way through the packer to the feedlot and breeder. Today, ranchers are selecting and breeding animals for leaner, meatier-type cattle. The 3-percent increase in lean meat during the past 4 years came from the loin, rib, round, and chuck cuts. The majority of the steers graded medium Choice instead of the former high Choice. When lean meat cut-out increases 1 percent, it is worth about \$6 on the retail market; consequently, the 3-percent gain is worth about \$18.

Although the size of the rib eye is 67 percent inheritable, it does not affect appreciably the lean meat yield. Fat thickness is 30 percent inheritable and greatly affects yield. Breeding for a lower fat thickness is the area in which the most rapid progress is being made in the development of a meat-type animal, according to the specialist.

Facts About Food Fats

During 1965, civilians in the United States consumed 9.1 billion pounds of the following food fats and oils: Butter, cooking and salad oils, margarine, lard, and shortening. The volume was 2 percent larger than that in 1964.

Use of food fats and oils per person averaged 47.6 pounds in 1965, or about the same as that in 1964. Decreases in the use of butter and of cooking and salad oils more than offset increases for margarine, lard, and shortening. Retail prices for all food fats and oils products in 1965 averaged 4 percent above the 1964 levels.

First Texas Greenspan

Secretary of Agriculture Freeman recently announced the first Greenspan agreement in the State of Texas, under which a community park will be developed at Wills Point in Van Zandt County. The park will be on 50 acres of farmland located adjacent to the new Wills Point airport. It is planned as a combination beautification and recreation facility.

Greenspan is a special provision of the Cropland Adjustment Program, authorized in Title VI of the Food and Agriculture Act of 1965. The provision offers grants to municipalities and other governmental bodies to assist them in the purchase of cropland for their open-space and recreational needs.

Mesquite Floors for Beauty and Durability

Probably more money has been spent on the eradication of mesquite than of any other woody plant in Texas, according to James Smedley, District Forester of the Texas Forest Service at College Station. Found growing on more than 56 million acres in the State, this short, twisted, slow-growing tree or shrub has outlived its usefulness for firewood and fence posts and is now a prime obstacle in the rancher's battle for more and better land.

Mr. Smedley says that the search for a use for mesquite has taken a new turn with the fashioning of flooring blocks from trees which were cut near the city limits of Austin, Texas. Stability, durability, and appearance are the three primary factors in the selection of wood flooring material, and mesquite excels in all three characteristics.

Mesquite can be cut and processed into flooring one day and installed the next day. Preliminary tests on wood samples revealed an average total shrinkage of 1.7 percent from the green stage to the oven-dry state. This figure compares with 10 to 15 percent shrinkage for oak.

Mesquite flooring requires no filler and does not need a protective coat of varnish. The variable grain pattern is similar to that of fine walnut or mahogany. Proper mixing of sealer

and stain will result in a variety of colors and shades. Tests indicate that aging and heavy traffic seem to improve the depth of color in a mesquite floor. Since mesquite is not affected by water, maintenance time and materials are reduced.

Mesquite parquet flooring is being marketed at prices which compare favorably with those for walnut, teak, mahogany, ebony, and other exotic or specialty hardwood flooring materials. Prices average about 30 percent higher than those for installed parquet oak flooring, but as production of mesquite flooring increases, the price differential between mesquite and oak is expected to become less.

The Carrier Pigeon Returns

The carrier pigeon is back, according to the Economic Research Service. It is now 150 feet long and is increasing in length; it is fast and getting faster. In a few years, its speed will make it capable of crossing the Atlantic Ocean in 4 hours or less time. This "superbird" is the all-cargo jet plane, which was launched in the United States in 1963.

Air shipments of perishable farm products have experienced phenomenal growth since the giant jet was introduced. Although the tonnage of fruits, vegetables, and related products shipped by air remains relatively small compared with the total volume of all shipments, the volume of these commodities has increased materially in the past few years. Cut flowers comprise 40 percent of the total farm product volume of these carriers. Large quantities of shrubbery, plants, and ornamental greens also are transported by air.

The all-cargo jet can haul more than 40 tons of freight nonstop from coast to coast or 35 tons nonstop from New York to Paris. Moreover, the plane is versatile, for it can be changed as needed to part-cargo, part-passenger, or all-passenger service.

Principally because of the cargo jet's speed, size, and multiple-use features, airlines have been able to reduce agricultural freight rates substantially. In 1961, rates averaged between 18 and 20 cents per ton-mile. By 1965, the average rate was down to 12 cents, with rates

for fruits and berries as low as 7 cents. The lower air rates are a boon to shippers since they can transport regularly by air instead of using the method only when a commodity is in short supply.

Overseas air freight rates also are being reduced. In 1965, the rates for shipping meat from New York to London were reduced to 17 cents a pound for a minimum cargo of 2,200 pounds. Early this year, fruit and vegetable rates were decreased to 16 cents a pound for a minimum shipment of 1,100 pounds. A more regular flow of these airborne items to overseas markets may result from the rate cuts.

Airlines predict a marked increase in agricultural traffic in the future. They point to such factors as (1) lower operating costs and further rate reductions as a result of larger and faster planes, (2) more efficient use of equipment, (3) improved packaging, (4) increased automation in freight handling at air terminals, (5) growing consumer demand for high-quality perishables, and (6) better service to consumers on the part of shippers who choose air transportation.

By-Product Flour

A process developed by U.S. Department of Agriculture scientists can yield high-quality protein for human consumption from flour mill by-products that now go into low-value livestock feeds. Standard milling equipment was used for the extraction of wheat flour from bran and shorts, which are by-products produced at the rate of about 5 million tons annually by U.S. flour mills alone. This volume of by-products could yield the equivalent of 600,000 tons of protein, and the residue, after extraction, could still be used in livestock feeds.

The USDA scientists believe that the by-product flour can help solve the world's most urgent human nutrition problem, a shortage of low-cost, high-quality protein. Flours made from these by-products can be prepared for human consumption as bread, pastas, soup mixes, and other foods in which flour is an ingredient. Because they contain a desirable balance and abundance of nutrients, the by-product flours should be useful in baby foods and diets for the elderly.