# F ARM AND R ANCH B ULLETIN

Vol. 22, No. 6

June 1967

# THE RED MEAT PICTURE

The United States produces the greatest volume of red meat in the world, but it ranks fifth as a meat consumer. A recent report of the Foreign Agricultural Service shows that U.S. red meat output totaled about 31.5 billion pounds in 1965. Of this amount, beef and veal accounted for 62 percent; pork, 36 percent; and mutton, lamb, and goat meat, 2 percent. In that same year, the U.S.S.R. ranked second in meat production. The other major meatproducing countries are France, West Germany, Argentina, Brazil, the United Kingdom, and Australia.

Beef and veal output in the United States in 1965, at 19.7 billion pounds, was substantially above that of the U.S.S.R., which was in second place. Other important beef-producing nations include Argentina, Brazil, and Australia.

Pork production in the United States, which averages 11.2 billion pounds annually, far exceeds that in any other country of the world. In 1965, West Germany ranked second; France, third; and Denmark, fourth.

Australia and New Zealand are the largest producers of mutton and lamb, with a total output in 1965 of 1.3 billion pounds and 1.1 billion pounds, respectively. The United States ranked third, with 651 million pounds.

#### Who Eats the Most Meat

Although the United States produces the greatest amount of red meat, this country ranks only fifth as a consumer. U.S. red meat consumption in 1965 amounted to only 167

pounds per person, compared with 234 pounds in New Zealand, 210 pounds in Australia, and 206 pounds in Argentina.

Uruguay is the major beef-consuming country in the world, with a yearly per capita quantity of about 181 pounds. Beef consumption in the United States is around 105 pounds per person annually. Denmark ranks first as a pork-consuming country, while the United States is in seventh place. The only major lamb- and mutton-consuming countries are New Zealand and Australia. In the United States, per capita consumption of these meats is only about 4 pounds per year. Small amounts of horse meat are consumed in most European countries, but practically none is consumed in the United States.

#### How the Exporters Rank

Australia and Denmark are the principal red meat exporters in the world. In 1965, red meat exports from these two countries were around 1.5 billion pounds each. Argentina ranked third, and New Zealand was fourth. These four countries accounted for more than one-half of the world's red meat exports. The United States was far down the list, with shipments totaling only 111 million pounds.

Australia and Argentina are the major beefexporting countries. In 1965, Australia became number 1, with exports amounting to 1.1 billion pounds, compared with 933 million pounds for Argentina. The take-over of the number 1 spot by Australia resulted from severe and prolonged drought conditions in Argentina. Shipments of beef from the United States totaled only 54 million pounds that year.

Denmark is the world's leading exporter of pork, followed by the Netherlands, Yugoslavia, and Poland. Pork exports from the United States in 1965 comprised less than 2 percent of the world market. New Zealand and Australia account for about 87 percent of the lamb and mutton export business. In 1965, New Zealand was by far the leader. The United States ships only very minor quantities of lamb, generally to Canada.

#### The Big Importers

The situation in the United States with regard to imports of red meat is entirely different from that for exports. In 1965 this country was the leading importer of beef. The United Kingdom — usually the leading importer — was a close second. Other relatively large beef importers were Italy and West Germany.

Although the United States is the world's major producer of pork, it also ranks high as an importer. The United Kingdom led the world in the importation of pork in 1965, while the United States was in second place. Most of the pork entering the United States is in the form of canned hams originating in Europe. The United Kingdom is the world's leading importer of lamb and mutton, followed by Japan and the United States.

In 1965 the United States imported \$830 million worth of livestock and meat products and exported \$487 million worth. Valuewise, beef and veal imports were the largest. Pork was second; wool, third; and cattle, fourth.

#### The By-Product Business

Although the United States is only a minor exporter of red meats, it is the world's largest exporter of livestock by-products. In the past few decades, incomes of U.S. cattlemen and packers have been supplemented as a result of new scientific developments, especially in the area of inedible by-products. New industrial uses have been found for tallow, and animal glands are now used extensively in the production of such pharmaceuticals as insulin. In value, U.S. tallow exports are the most important. This trade reached \$195 million in 1965. Hides and skins were second, followed by variety meats (such as liver and tongue) and lard.

# More Liquid Fertilizers Used

According to the U.S. Department of Agriculture, the use of liquid fertilizers has risen sharply in recent years. Liquid fertilizer consumption in this country during 1964-65 totaled nearly 5.4 million tons, or 12 percent more than a year earlier and nearly 10 times the amount used in 1954. Moreover, liquid fertilizers accounted for 18 percent of total fertilizer consumption in 1964-65.

Illinois, California, Iowa, Indiana, and Texas (in descending order of rank) are the leading states in utilization of liquid fertilizer. Use of this product in top-ranked Illinois totaled 572,195 tons in 1964-65 and accounted for more than one-third of all fertilizer used in the State during that year.

#### **Crop-Hail Insurance Reviewed**

A recent report of the Economic Research Service shows that insurance protection against hail damage to crops has doubled during the past 15 years, keeping pace with rising costs of production and increased values of harvests. The publication reviews hail insurance for crops, including volume of coverage, kinds of crops insured, and the percentage of harvest covered. The report contains premiums and indemnities for 1965 and tabulates comparisons of coverage for a period of approximately 30 years.

In all except 3 years since the 1930's, the volume of crop-hail insurance has increased, reaching an all-time high of \$3.1 billion in 1965. Coverage in 1965 was 6 percent above the preceding year. The Corn Belt accounted for more than one-half of the coverage of all U.S. crop-hail insurance in 1965, because severe (although infrequent) hail in that region often causes heavy damage. The risk is high to both production and the value of the corn crop.

Of the major commodities, tobacco has the largest proportion (about one-third) of the crop insured against hail damage, while approximately one-fourth of the wheat crop is insured against hail damage. The majority of the crops in most areas do not require such a high proportion of coverage. The citrus crop, for example, is not insured against hail damage since hailstorms seldom occur in citrus-producing areas. In 1965, premiums for hail-crop insurance were highest in the Plains States and lowest in the Corn Belt and Pacific States.

Single copies of "Crop-Hail Insurance, 1965 — Volume, Cost, Indemnities," ERS-342, may be obtained, without charge, from the Division of Information, Office of Management Services, U.S. Department of Agriculture, Washington, D. C. 20250. The USDA asks that the person's ZIP Code be included with the request for the publication.

# Wasps Can Be Dangerous

Wasps generally are beneficial insects, but they can become "tough customers" when they are disturbed. Phil Hamman, Assistant Extension Entomologist at Texas A&M University, says that this situation often occurs when the insects build their nests in close proximity to the home, or even in the home.

Hornets, yellow jackets, mud daubers, the cicada killer, and Polistes (the larger wasps which are reddish to mahogany in color) are all wasps and, as a group, are beneficial insects. They destroy harmful insects around homes and in gardens, but they will also attack people. Mud daubers and cicada killers usually will not sting unless they are touched or get caught in a person's clothing. On the other hand, people should stay away from the nests of hornets, yellow jackets, and Polistes.

A wasp stings by driving its needle-like ovipositor into the flesh and injecting a venomous fluid into the wound. The sting causes a painful swelling that may last for several days. In some people, a wasp sting results in severe illness or even death. Because of the possibility of serious trouble, a sharp lookout should be maintained for the insects and especially for their nests. Nests and insects can be destroyed by applying recommended insecticides. Control work should be done at night, at which time wasps are less active and most of them are in the nests. Since nests are often located in trees and shrubbery or on the house, the entomologist suggests the use of a water-base spray containing DDT, chlordane, or dieldrin. If wasps are nesting in the ground, the same materials in a dust form are recommended. Information concerning suggested insecticides for wasp control may be obtained from local county agricultural agents.

#### Downy Mildew Is Attacking Sorghums



In widespread areas of the Texas Coastal Plains, both forage and grain sorghums are under attack from downy mildew. Dr. Richard A. Frederiksen, Assistant Professor in Texas A&M University's Department of Plant Sciences,

says that this spore-borne disease directly affects the seed-producing capability of grain sorghum. Plants may be infected by either soilborne or air-transported spores. Young plants infected by soil-borne spores show yellow or chlorotic areas of varying sizes on leaves. Sometimes the entire leaves are yellowed. This condition may occur as early as 3 weeks after emergence. New growth is stunted, and the undersides of chlorotic leaves are densely covered with down, which liberates air-transported spores.

Leaves that continue to grow on the plants reveal a yellow striping between the veins. These leaves do not have down on them. As the plant matures, the striped leaves shred, giving the impression of hail damage to the crop. The spores liberated from chlorotic leaves can be carried thousands of feet by air currents to infect other plants.

Once downy mildew attacks a crop, there is little that can be done; but preventive measures can be taken to guard against a recurrence. Sorghums should not be planted for at least 2 years in a field that has a history of producing downy mildew. Moreover, grain sorghum should not be planted following Sudan grasses or Sudan-sorghum hybrids. Dr. Frederiksen says that research is under way in an effort to produce lines of forage and grain sorghums that are resistant to downy mildew.

# Bloat Control in Cattle

Control of bloat in cattle grazing on alfalfa has proven successful this year in a demonstration in Hidalgo County, New Mexico, reports Ed Hitson, County Agricultural Agent. Poloxalene, a feed additive for bloat control in cattle, was fed to a group of beef cattle for a period of 90 days while the animals were grazing on alfalfa. During this period, there was no incidence of bloat in treated cattle, but there were six deaths in the untreated group.

#### New Treatments Improve Cottons

Durable-press cotton garments — already popular consumer items — may soon become even more attractive buys as a result of three new chemical vapor treatments developed under contract research with the U.S. Department of Agriculture. After one of these treatments, a cotton shirt retains its shape and resists abrasion longer than do cotton shirts receiving present treatments, says the USDA.

Basic to each process is the use of chemical vapors or combinations of vapors and liquids to produce chemical changes in cotton without unduly weakening the fabric. In one of the new processes, the fabric is pretreated with any of a number of the same liquid chemicals currently used in producing wash-and-wear clothing. This procedure is followed by a treatment with dichlorosilane vapors, which causes two chemical reactions (grafting and crosslinking) and gives the garment its durable press.

A second process also includes liquid chemical pretreatment, with the subsequent use of formaldehyde and formic acid vapors. No pretreatment is involved with the third process, in which garments are treated only with formaldehyde and formic acid vapors. In addition to obtaining satisfactory results with colored fabrics, this treatment also works well with white fabrics because the finish does not yellow when the material is subjected to chlorine bleaching.

# Grain-Cooling System Described

A two-fan crossflow ventilation system for upright grain-storage structures, which was developed by the U.S. Department of Agriculture and the Kansas Agricultural Experiment Station, is described in a new USDA publication. Written by Harry H. Converse, an engineer with the USDA's Agricultural Research Service at Manhattan, Kansas, the publication explains the system and the research upon which it is based.

The new system cools stored grain rapidly and dries it slightly. Newly harvested wheat and sorghum grain frequently contain 1 or 2 percent too much moisture for safe storage. At many country elevators, there is not enough volume or sufficient moisture in the grain to justify the expense of installing heated-air dryers. Conventional floor-duct aeration systems are not satisfactory because they are designed to move air vertically through the entire depth of grain. The volume of air needed for rapid cooling and drying requires excessive fan power.

With a crossflow aeration system, the air is moved horizontally across the bin instead of vertically through the much greater grain depth. Although both systems require the same horsepower, air-flow rates are as much as 10 times higher than conventional floor-duct systems.

Single copies of ARS 52-20, "A Two-Fan Crossflow Ventilation System for Upright Grain Storages," may be obtained, without charge, from the Transportation and Facilities Research Division, ARS, USDA, Federal Center Building, Hyattsville, Maryland 20782. The person's ZIP Code should be included with the request for the ARS publication.

Lassie, the famous collie, is now the Nation's mascot in the war against litter on the highways and in parks, forests, and public recreational areas. The collie's help was enlisted by Keep America Beautiful, Inc. Lassie is featured on a new poster and has thus become the symbol of the campaign to prevent litter, as Smoky the Bear has led the fight to prevent forest fires.