



FIGURE 5.

The adaptation of wheat to a wide range of climatic conditions also contributes to the difficulty of limiting the supply. Acreage reductions in recognized commercial wheat areas may be offset by increases in wheat acreage in other areas where it can be grown fairly successfully.

The lack of production alternatives in the major wheat regions intensifies the difficulty of adjusting supply to demand. There are few good alternative uses for the land. It is difficult to get grasses established, and if a shift to livestock production is undertaken, the income is often reduced and any increase in the total farm income may be delayed for several years.

There is great variation in the acreage planted to wheat. It has varied from 50 million to 84 million acres during the last 45 years. The harvested acreage is somewhat less because of abandonment. Each year some seeded wheat acreage is abandoned because conditions are unfavorable for its growth. Winterkill because of drought conditions is the most frequent cause.

The production fluctuates as well as the acreage seeded. The average yield in the United States has varied from 12 to 19 bushels per acre harvested. On a seeded-acre basis, yields dropped as low as 8 bushels during several years of the drought of the 1930's. The acreage harvested, yield, production, and value of the wheat crop during nearly 50 years are shown in table 4. Production has varied from as low as 526 million to a high of 1,359 million bushels. Obviously, the fluctuation in acreage planted and in yield per acre results in considerable variation in annual production.

In recent years wheat supplies have been increasing. The supply of wheat in the United States by source is as follows, for the 5 years, 1950-54:

| Item                | 1950                     | 1951                   | 1952                     | 1953                     | 1954                   |
|---------------------|--------------------------|------------------------|--------------------------|--------------------------|------------------------|
| Production.....     | <i>Mil. bu.</i><br>1,019 | <i>Mil. bu.</i><br>981 | <i>Mil. bu.</i><br>1,299 | <i>Mil. bu.</i><br>1,170 | <i>Mil. bu.</i><br>970 |
| Imports.....        | 12                       | 32                     | 21                       | 6                        | 4                      |
| Stocks, July 1..... | 425                      | 396                    | 256                      | 562                      | 902                    |
| Total supply.....   | 1,456                    | 1,409                  | 1,576                    | 1,738                    | 1,876                  |

Stocks of wheat have accumulated so that we now have practically 2 years' total requirements on hand at the beginning of each harvest. A part of the problem of oversupply rises out of the extent of the acreage seeded to wheat in response to wartime demand. During both World War I and World War II adequate

supplies of food were essential. Prices of wheat and other foods increased rapidly. Farmers responded by plowing up grassland and increasing the wheat acreage by thousands of acres. The readjustment of this acreage to normal demands for wheat is more difficult than the expansion. In the Great Plains area it is difficult and costly to establish grass on cropland. A few years of good grain crops and high prices raise the hopes of farmers for high profits from wheat, and make them reluctant to seed the land to grass.

In 1954 farmers voted in favor of marketing quotas. Carryover stocks of wheat had mounted from a quarter of a billion bushels in 1952 to nearly a billion bushels in July 1954. Continued production at existing levels was not consistent with market demand conditions and price supports of more than \$2 per bushel for wheat. Largely, as a result of acreage controls and marketing quotas, wheat acreage harvested was reduced from 68 million in 1953 to less than 55 million in 1954. Farmers again voted in favor of marketing quotas in 1955 and 1956.

Table 2.—ACREAGE, PRODUCTION, AND VALUE OF WHEAT IN THE UNITED STATES: 1910 TO 1954<sup>1</sup>

| Year      | Harvested acreage | Yield per acre | Production             | Average price     | Farm value             |
|-----------|-------------------|----------------|------------------------|-------------------|------------------------|
|           | <i>Thousands</i>  | <i>Bushels</i> | <i>Million bushels</i> | <i>Per bushel</i> | <i>Million dollars</i> |
| 1954..... | 53,712            | 18.1           | 970                    | \$2.13            | \$2,063                |
| 1953..... | 67,661            | 17.3           | 1,169                  | 2.04              | 2,385                  |
| 1952..... | 70,926            | 18.3           | 1,299                  | 2.09              | 2,714                  |
| 1951..... | 61,492            | 16.0           | 981                    | 2.11              | 2,074                  |
| 1950..... | 61,610            | 16.5           | 1,019                  | 2.00              | 2,042                  |
| 1949..... | 75,910            | 14.5           | 1,098                  | 1.88              | 2,062                  |
| 1945..... | 65,167            | 17.0           | 1,108                  | 1.50              | 1,661                  |
| 1940..... | 53,273            | 15.3           | 815                    | .68               | 556                    |
| 1930..... | 62,637            | 14.2           | 887                    | .67               | 595                    |
| 1920..... | 62,358            | 13.5           | 843                    | 1.83              | 1,541                  |
| 1910..... | 45,793            | 13.7           | 625                    | .91               | 568                    |

<sup>1</sup> Agricultural Statistics, U. S. Department of Agriculture.

CLASSES OF WHEAT

Wheat is not the homogeneous product implied in some of the discussion of the problems of wheat farmers and farm programs. Several distinct classes of wheat are produced in this country. Each class is grown for a specific use, and is used in a limited number of products. The classes vary in their characteristics. Although there is a considerable overlapping in production areas, the classes of wheat are grown in fairly distinct areas. To a large extent the class produced in an area is greatly influenced by the climatic conditions.

Hard red winter and hard red spring wheats differ mainly in their habits of growth. In the areas where either kind can be grown, winter wheat usually produces a higher yield. These hard wheats are commonly used for the kind of bread flour that requires a high-protein grain. Flour from soft red wheat is especially suited for baking biscuits, pastry, and cakes, as these products require flour with a relatively low protein content.

White wheat, grown in the western and northeastern parts of the United States, is a soft wheat; it is used for pastries and cereals. Durum wheat is a very hard wheat that is grown in the spring wheat regions. It makes a very tough dough used in making macaroni, spaghetti, vermicelli, and noodles. Red durum wheat is grown mainly for livestock feed. The supply and distribution of wheat by classes is shown in table 3.