crops. Most of these mutuals limit themselves to designated groups of counties, but a few operate on a State-wide basis. Their combined insurance in force exceeds $400,000,000.

Farmers Operate Telephone and Irrigation Mutuals

For many years Wisconsin farmers have taken cooperative action in establishing and maintaining mutual telephone companies. At the close of 1939, there were 569 telephone companies in Wisconsin with annual incomes from assessments or fixed charges of less than $3,000, most of these being farmers' mutual companies. Data assembled for the Farm Credit Administration by the Bureau of the Census in 1937 indicated that almost 90 percent of these farmers' mutuals were service line companies. Such companies as a rule are relatively small and generally do not operate switchboards of their own.

In the mutual companies which are commonly referred to as service line companies each farmer, as a rule, owns his telephone and keeps it in repair. He may provide the telephone poles on his property. It is customary for the subscribers to pay the actual cost of the service. Operating arrangements vary, depending on local conditions and requirements.

The operating companies are formed in communities where there are more subscribers and it is feasible for a farmers' mutual to install and operate a switchboard in a central office. Arrangements are usually made with a larger company for the construction and maintenance of lines. Some of these mutuals establish definite rates based on the cost of the service.

To produce good cranberry crops, an ample water supply is essential. In order to provide this, 15 Wisconsin cranberry producers in 1933 formed the Cranmoor Cooperative Co. at Wisconsin Rapids. A canal system was built from the Wisconsin River to the cranberry marshes, which are located about 12 to 15 miles away. In time of drought or low-water supply, an adequate supply of water can be brought to the cranberry bogs. Each co-op member holds stock in proportion to the acreage of cranberry planting that he owns and which is served with water by the company. These growers are using cooperative organization both to produce better crops by means of irrigation, and also to sell their cranberries to the best advantage through the marketing services of the Wisconsin Cranberry Sales Co.

Power Program Adopted

Even before the rural electrification program was inaugurated in May 1935, 39,206 Wisconsin farms, 1 in every 5, had electric service, an average almost twice that of the entire country. At that time the State ranked eighteenth in the Union in this respect. Quick to grasp the opportunities of the R. E. A. program, one Wisconsin community secured an allotment as early as May 1936, setting the pace which at the close of the fiscal year 1939 had brought electricity to another 17 percent of Wisconsin's farms. This lifted the State to seventeenth place.

By June 30, 1940, the Rural Electrification Administration had approved loans for 27 Wisconsin cooperatives and 1 municipality, and provided for 2 generating plants, including, at Chippewa Falls, the largest operating
cooperative power plant in the world. Allotments for these generating plants totaled $1,782,500 on June 30, 1940. On the same date allotments for construction of more than 10,000 miles of lines to make power available to 33,023 members, totaled $11,244,800.

Wiring and plumbing loans to members comprised $320,500 of the $13,347,800 total allotted to Wisconsin up to June 30, 1940. Members may borrow from their cooperative what they need to wire their homes or install plumbing. They make repayments monthly, quarterly, or semiannually. But many pay cash.

Farm Homes Wired

In 8 months, 600 farmers in one county wired their homes at an average cost of $200. Few used credit. Every electrician and electrical contractor in the area was busy for months.

Cooperative generating plants supply only part of the power needs of Wisconsin’s electrified farms, and a large part of the power is purchased wholesale—enough to increase Wisconsin’s annual electrical output materially. In 1939 the figure reached approximately 36,000,000 kilowatt-hours, and the cost to the cooperatives amounted to about half a million dollars.

A survey taken on Wisconsin R. E. A.-financed power systems between January and April 1940, shows how members are putting their new electric power to good use. Water pumps were in use on 20.7 percent of the farms reporting, 9.4 percent had put in a shower or tub, more than 15 percent had an electric cream separator, and 17.9 percent were using electric fences.

The number of electric motors is a good indicator of the extent to which electric power is applied to farm tasks. The returns show that 3.1 percent owned motors larger than 1 horsepower, and 29.7 percent owned motors of 1 horsepower or less. While motors under 1 horsepower are, of course, too small to power ensilage cutters, wood saws, and other heavy farm machinery, they prove their value in the farm repair shop, on water pumps, milking machines, small feed grinders, and the like.

Much of the heavy burden is being lifted from the shoulders of the farm wife through installation of electric equipment in the home. Of the farms reporting, 85.7 percent had electric irons, 86.8 percent had radios, 24.6 percent had purchased hot plates, 18.4 percent had refrigerators, 79.2 percent had washing machines, and 17 percent were using vacuum cleaners.

Wide use of early-morning and all-night lights to raise poultry production and maintain it throughout the winter is shown by the survey. More than one-fourth of all farms reporting were using electric lights in their laying houses.

Frozen-Food Lockers
a New Co-op Service

Since its inception during 1935 the frozen-food locker industry in Wisconsin has expanded at a rapid rate. A survey conducted jointly by the Farm Credit Administration and the Wisconsin College of Agriculture during the early part of 1940 indicates that there were 250 locker plants in operation, one-fifth of which were owned and operated by cooperatives.