



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

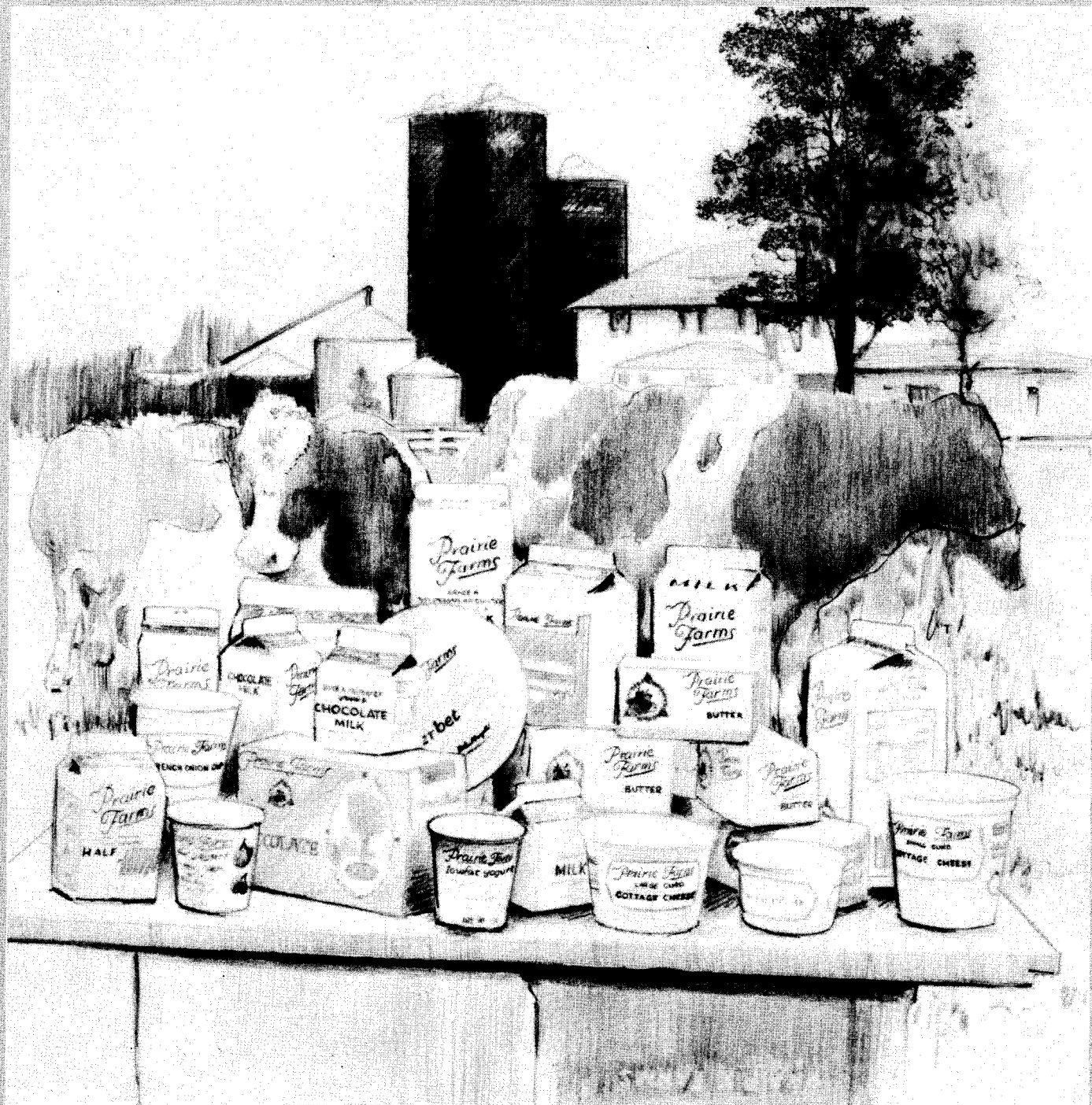
Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Prairie Farms Dairy, Inc.

WAITE MEMORIAL BOOK COLLECTION
DEPT. OF AGRIC. AND APPLIED ECONOMICS
Economic Impact
Of a Dairy Cooperative



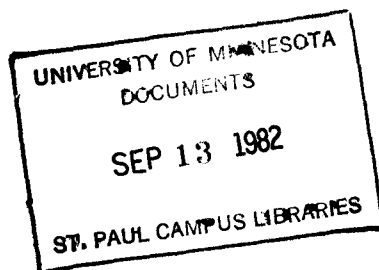
WAITE MEMORIAL BOOK COLLECTION
DEPT. OF AGRIC. AND APPLIED ECONOMICS

PRAIRIE FARMS DAIRY, INC. Economic Impact of a Dairy Cooperative. By Hugh L. Cook and Robert P. Combs of the Department of Agricultural Economics, Research Division, College of Agricultural and Life Sciences, University of Wisconsin-Madison; and George C. Tucker, Agricultural Cooperative Service, U.S. Department of Agriculture, Agricultural Cooperative Service, Research Report 12.

Abstract

This study of the history and development of Prairie Farms Dairy, Inc., sheds light on how and why the cooperative grew and its economic impact on members, employees, other cooperatives, and the area served. Local creameries, encouraged by Illinois Agricultural Association formed one of the Nation's larger milk bottling cooperatives. Success came largely from making judicious choices among alternatives. Growth was largely through acquisitions of small dairies unable to continue as successful firms. Key staff was retained and used with flexibility and local initiative. Employee loyalty was demanded, observed and rewarded. About half of its milk was purchased from other cooperatives. Members were paid competitive prices plus an attractive thirteenth check. By 1978, impact on the trade area had reached 2,300 jobs, \$48 million in income and \$433 million in output.

Key words: Dairy cooperative, fluid milk, processing, distribution, history, economic impact.



Acknowledgments

The authors are grateful for help from a number of sources. They are especially conscious of the unreserved cooperation of Fletcher Gourley, general manager, Prairie Farms Dairy, Inc., in furnishing records and other information upon request, and in making freely available the services of his staff to explore any questions. This staff whose help has been noteworthy include: Donald Kullman, Leonard Southwell, Harold Hauter, Norm Rushing, Frank Trakinat, Gary Lee, Gary Kuhlmann, Robert Erickson and John Campbell.

Data from public agencies were generously furnished by James R. Kendall, Federal-State agricultural statistician, Springfield; Harold E. McAvoy, chief, Division of Milk Control, Illinois Department of Health, Springfield; Silvio Capponi, Dairy Division, Agricultural Marketing Service, USDA; Mike McDonald, Office of Chicago Federal Order Administrator; Fred Shipley, retired administrator, St. Louis-Ozarks Federal Order Market and Donald Nicholson, the present administrator; and M.C. Jenkins, administrator, Indiana Federal Order Market.

John R. Campen, manager, Illinois Milk Producers Association of the Illinois Agricultural Association, gave background on the IAA and the Prairie Farms Dairy relationship. Leonard Gardner, executive secretary, and other staff for the Illinois Agricultural Association reviewed the manuscript and offered valuable suggestions.

Tom Townsend, vice president, Mid-America Dairymen, Inc., contributed information on the joint venture with Prairie Farms Dairy, Inc., and was generous in other help.

Robert Van Liere and Gerald Gehling, general and associate manager, respectively, of Associated Milk Producers, Inc., Mid-States region, generously furnished information.

Professors Ron Shaffer and Richard Bishop, Department of Agricultural Economics, University of Wisconsin-Madison, gave valuable assistance in considering multiplier effects of Prairie Farms' activities. Professors Willard F. Mueller, William D. Dobson and Frank W. Groves, Department of Agricultural Economics, University of Wisconsin-Madison, reviewed the manuscript and made valuable suggestions.

Dr. Randall E. Torgerson, administrator, Agricultural Cooperative Service, and staff have been invaluable in conceptualizing the study and offering suggestions at various stages of work. Staff whose help has been noteworthy include James E. Haskell, James R. Baarda, William J. Monroe, and James B. Roof.

Mention of commercial brands should not be interpreted as constituting an endorsement.

Highlights

This economic history of Prairie Farms Dairy, Inc., sheds light on how and why it grew, and its economic impact on members, staff, and the areas served. Attention is given to the policies followed in the cooperative's growth process.

Over a period of more than four decades, Prairie Farms has become one of the Nation's larger cooperatives that primarily processes and distributes fluid milk. With 18 operating plants distributing milk and 23 additional distribution points, the cooperative distributes milk in seven States but primarily serves Illinois and St. Louis. It gets half of its milk supply directly from about 690 producers, but obtains the other half from other cooperatives. Using about 1,500 direct-hire employees in all 41 locations, its sales volume in 1979 was \$233 million.

In 1932, the Illinois Agricultural Association (IAA), a part of the Illinois Farm Bureau, encouraged the organization of local cooperative creameries and a statewide organization known as Illinois Producers Creameries to replace the earlier pools that handled farm separated cream.

IAA provided promotional support for organizing the cooperatives, put its prestige behind the stock issued by each of the local creameries, and was given a voice in managing the cooperatives through the way the stock was originally structured. County Farm Bureau advisers held informational meetings to encourage cooperatives, and Farm Bureau offices collected payment on stock purchases.

Producers Creamery of Carlinville was organized in 1938, and later renamed Prairie Farms Creamery of Carlinville. After participating in a second major merger of the Illinois producers creameries in 1962, the combined organization was named Prairie Farms Dairy, Inc.

Until 1942, these creameries shipped most of their butter to a central plant in Chicago for wholesale operations. Butter quality gradually improved, and the central plant was able to pay premiums.

In response to War Food Programs including price controls in 1942, condensers and driers were installed at some cooperative plants including Carlinville, and substantial conversion began to whole milk deliveries.

In 1949, Prairie Farms Creamery of Carlinville purchased equipment to process and package fluid milk in paper cartons and went into distribution.

The 1950's brought a cluster of innovations in dairy marketing such as improved milking facilities, mechanical refrigeration on farms, farm bulk tanks, good roads, refrigerated transport trucks, pasturization, homogenization, and the paper milk carton. Because they required expensive equip-

ment and more volume, these rapid changes put most of the Prairie Farms creameries in serious trouble. A butter operation alone could not bid against grade A outlets for large-volume producers.

In 1954, Prairie Farms Creamery of Carlinville began growing through mergers or consolidations, acquisitions, and joint ventures leading to its present size. Nine of the 10 original cooperative creameries were ultimately closed or consolidated into Prairie Farms.

Since January 1954, Prairie Farms has made 36 outright acquisitions and been involved in 9 mergers. The units acquired ranged in sales volume from well under \$1 million to about \$7 million annually. More recently, growth has included joint venture agreements with two other cooperatives to supply milk while Prairie Farms operated the plants and carried on distribution.

Prairie Farms' processing plants are usually specialized for one product or a small number of closely related ones. However, these specialized plants are clustered around the Prairie Farms' trade area so all distribution points can be readily supplied with whatever product line they require.

Some of the major sales policies of Prairie Farms are: (1) Within general guidelines, most pricing is decentralized to local plant distribution point managers to maintain maximum flexibility and local initiative. (2) Although there is a balanced advertising program, expenditures are relatively low, and other features are used also for promotion. (3) Great emphasis is placed on service and product quality. (4) Competition is met but not with predatory price cuts during price wars. (5) Heavy use is made of sales staff as opposed to route drivers for selling. (6) All kinds of sales outlets are sought, though minor emphasis is placed on house-to-house accounts. (7) The cooperative aims for a gross of 25 percent above the cost of finished products at distribution points. (8) The cooperative has never competed for milk sales in Chicago, although it distributes ice cream in the Chicago suburbs.

By 1963, Prairie Farms was no longer actively competing for direct-ship patrons. Having chosen to avoid the need for balancing plants, it was aiming to procure only 50 to 60 percent of its milk supply from direct-ship patrons and to obtain the rest in tankloads from other cooperatives.

From 1939 to 1978, Prairie Farms' total assets increased from \$36,000 to \$46 million, and total net worth increased from \$23,000 to \$21 million. During most of that time, the ratio of net worth to total assets was higher than the industry median ratios taken from Robert Morris Associates studies. Since 1963, the current ratio has been greater than the industry median. In 1939, total sales for Prairie Farms were \$84,000 and net margins were \$3,400. In 1978, total sales

were \$206 million and net margins were \$2.3 million. Compared with the industry median, net margins as a percentage of sales were higher in some years and lower in others, as were the net margins as a percentage of total net worth.

Since the mid to late 1960's, the majority of Prairie Farms' capital has been supplied by retained margins. Some two-thirds to seven-eighths of the retained margins are allocated and revolved fairly rapidly. Therefore, the organization has been able to rely upon recent years' margins for its capital needs.

Farmer patrons have benefited from membership. Although gross pay prices have usually been about the same as those of competitors, net pay prices have been higher in recent years than those of other dairy cooperatives in the same trade area. Prairie Farms has maintained a small checkoff. At the same time, patronage margins, both retained and paid out per hundredweight, ranged from 20 cents to 55 cents in the 1970's.

The loyalty of employees at Prairie Farms is probably unsurpassed by that of other cooperative dairies. There is a policy of retaining employees from acquired and consolidated plants to the greatest extent feasible. An unusual degree of loyalty has been demanded, observed, and rewarded over the years by the general manager and was probably one of the more significant factors in the success of the cooperative.

The impact of Prairie Farms on other cooperatives is principally indicated by: (1) It buys 40 percent to 50 percent of its milk from other cooperatives, making them members of Prairie Farms and treating them the same as all other members. (2) Prairie Farms' thirteenth check (distribution of margins) has been unusually high. (3) Some competing cooperatives say Prairie Farms contributes little toward covering the expense of political education or other programs to maintain stable markets at reasonable prices and fight attacks on cooperatives, Federal orders, milk prices, and the like.

The impact of Prairie Farms on noncooperative competition is: (1) Prairie Farms obtained milk paying competitive prices plus a thirteenth check and equity in the cooperative. (2) Over the years, Prairie Farms acquired nearly all the processors in Illinois south of the Chicago suburbs. With only two or three exceptions, almost none of these processors could have survived alone. Their plants were well below minimum viable plant size by 1971. Prairie Farms furnished a market for assets of these small dairies and employed a number of their personnel.

In 1968, the estimated impact of Prairie Farms on the trade area was around 2,000 jobs, \$16 million in income, and \$79 million in output. By 1978, this had grown to around 2,300

jobs, \$48 million in income, and \$433 million in output. These figures are based on estimated multiplier effects arising from linkages in the general trade area.

In essence, Prairie Farms' success has come from making judicious choices among alternatives when confronted with changing circumstances.

Contents

Early Market Conditions	1
Cooperative Creameries Formed	1
Relationship with the Illinois Agricultural Association	2
Change in Milk and Cream Supply	2
 History of Merger and Acquisition	 6
 Facilities and Operations	 16
Products Sold	17
Distribution System and Policies	21
 Marketing Operations Analyzed	 27
Accounting System	27
Balance Sheets	30
Margins	32
Member Equity	32
 Prairie Farms' Impact on Region Served	 35
Impact on Farmer Patrons	35
Impact on Employees	38
Impact on Other Cooperatives	42
Impact on Noncooperative Competition	44
Impact on the Community and the Economy of the Trade Area	45
 Summary of Basic Management Policies	 48
 Bibliography	 49
 Appendix I	 50
 Appendix Tables	 52

Prairie Farms Dairy, Inc.

Economic Impact Of a Dairy Cooperative

Hugh L. Cook
Robert P. Combs
Department of Agricultural Economics
University of Wisconsin-Madison

George C. Tucker
Agricultural Cooperative Service
U.S. Department of Agriculture

This economic history of Prairie Farms Dairy, Inc., (Prairie Farms) sheds light on how and why it grew and its economic impact on members, staff, and the area served. Attention is given to the policies followed in the cooperative's growth process.

Over more than four decades, Prairie Farms, a cooperative headquartered at Carlinville, Ill., has developed into one of the larger cooperatives primarily processing and distributing fluid milk over a wide territory. With 18 operating plants distributing milk and 23 additional distribution points, the cooperative distributes milk in seven States but primarily serves Illinois and St. Louis.

Prairie Farms has about 690 direct-ship producers but obtains about half of its milk supply from other cooperatives. It has about 1,500 direct hire employees in all locations. As of 1978, its sales volume totaled \$206,321,000.

Prairie Farms is affiliated with the Illinois Agricultural Association (IAA, a part of the Illinois Farm Bureau) but operates as a separate entity.

Early Market Conditions

In 1922, much of the milk produced in downstate Illinois was sold as farm separated cream.¹ Most farms had a few dairy cows for family needs and sold the excess sour cream to large independent creameries such as Swift, Armour, and Sugar Creek Creameries for butter manufacturing.

Farm Bureau leaders were greatly concerned with margins taken by these independent creameries that reflected low return to Illinois farmers for their sour cream butterfat. The prevailing price paid farmers for sour cream butterfat in downstate Illinois ranged from 8 to 13 cents per pound butterfat below the Chicago Mercantile Exchange quotations for 90 score bulk butter. In sharp contrast, Iowa dairy farmers, through their cooperative creameries, were said to receive a price of from 2 to 4 cents above Chicago Mercantile Exchange quotations.

¹The early history of market conditions for farm-separated cream in Illinois, formation of cream pools, and subsequent cooperative creameries is condensed from "The Prairie Farms Dairy Story" by Robert Erickson, *Prairie Farms News*, June 1964.

To correct this disparity, the dairy marketing division of the Illinois Agricultural Association encouraged the formation of local bargaining associations called "cream pools." Members of these associations agreed to market their cream as a group, with the entire supply going to the independent creamery submitting the highest bid.

The first cream pool was organized at Mt. Vernon in Jefferson County in 1922 and was viewed as successful. Other cream pools were organized until 1932. However, as early as 1929, competitive bids of the independents were fast becoming identical, and cream pools were losing their effectiveness.

Cooperative Creameries Formed

After observing the operations of successful cooperative creameries in Iowa, Minnesota, and Wisconsin, IAA in 1932 encouraged the formation of local cooperative creameries with a statewide organization, Illinois Producers Creameries, to facilitate the marketing of cream in Illinois.

Economic conditions in the early 1930's were not particularly favorable for the sale of capital stock to start a cooperative creamery. With butter selling for about 10 cents a pound, the purchase of a \$25 share was a sacrifice. However, many dairy farmers in downstate Illinois purchased a share of stock, and nine producers creameries were organized.

The first cooperative creamery organized was the Quality Milk Association in 1932, followed by the Farmers Creamery of Bloomington on February 9, 1933; Peoria Producers Creamery on May 1, 1933; Producers Creamery of Champaign, September 13, 1934; Producers Creamery of Olney, November 12, 1935; Producers Creamery of Carbondale, April 1, 1935; Producers Creamery of Galesburg, July 10, 1935; Producers Creamery of Mt. Sterling, December 10, 1935; and Producers Creamery of Carlinville on May 14, 1938. Creameries at Mt. Carroll, Henry, and Carlyle joined the group later.

Almost without exception, the cooperative creameries were confronted with problems, many from inadequate operating capital. Expected margins were not immediately forthcoming, resulting in loss of volume, high costs, and eventual inability to meet competitive prices. Even so, these creameries apparently did improve prices paid for sour cream butterfat in the State.

The central plant for this organization of cooperative creameries was in Chicago. Though some of the butter made by these creameries was printed for sale in their local area, most was shipped to the central plant in Chicago. There the butter was graded, printed, branded, and stored in public storage for sale. On 92 score butter, the central plant paid a

premium; but where farm-separated cream was picked up only twice a week, most of the butter made no better than 90 score. When some plants began to pick up cream three times a week and some on-farm cooling was done, 92 score butter became more general.

After the outbreak of World War II in Europe, the establishment of the Lend Lease Administration, and later the War Food Administration, price ceilings, floors, set asides, priorities and such, placed a heavy premium on whole milk deliveries to plants. To survive, the newly organized creameries had to enter the field of purchasing and processing whole milk into butter, condensed milk, dry milk, and cheese. To do so, extensive and expensive changes were necessary to provide equipment to receive and process whole milk. On January 12, 1942, the Illinois Producers Creameries ordered four roller dryers for installation at Mt. Sterling, Carlinville, Galesburg, and Olney. Later, condensers and spray dryers were installed at Mt. Sterling, Carbondale, Bloomington, and Olney. Large volumes of dry milk and butter were produced during the next 15 years. In the late 1940's, these cooperatives (now called Prairie Farms Creameries) at Mt. Sterling, Olney, and Carlinville purchased equipment to process and package fluid milk in disposable paper milk cartons. This marked the entrance of Prairie Farms Creameries into marketing fluid milk, heretofore dominated by local producers' dairies.

The 1950's brought a cluster of innovations in dairy marketing such as improved milking facilities, mechanical refrigeration on farms, farm bulk tanks, good roads, refrigerated transport trucks, pasteurization, homogenization, and paper milk cartons. These rapidly changing conditions found the Prairie Farms creameries (with the exception of Carbondale, which had installed cottage cheese operations, and the cooperatives with bottling facilities at Carlinville, Mt. Sterling, and Olney) in serious trouble, because they required expensive equipment and more volume. Also, a butter operation alone could not bid for the large-volume producers against grade A milk outlets. In some cases, such as the creameries at Galesburg, Bloomington, Henry, and Carlyle, plants were either sold or consolidated into other dairy organizations.

A description of the early background of the major predecessor to Prairie Farms Dairy, Inc., the cooperative creamery headquartered at Carlinville, can be concluded with 1950. By then, the cooperative had been receiving whole milk for several years, (although it still received some farm separated cream) and had installed its own bottling plant. It was financially sound, and the path it would follow in subsequent expansion appeared established. In 1954, it began growth through mergers, consolidations, acquisitions, and joint ventures leading to its present size.

Relationship with the Illinois Agricultural Association

Producers Creamery of Carlinville, now the headquarters of Prairie Farms, was the ninth of the twelve cooperative creameries to be encouraged by IAA (1938). Prairie Farms had its basic origin in the Illinois Producers Creameries, a statewide association of these co-op creameries begun in 1932, and later renamed Prairie Farms Creameries.

IAA provided promotional support for organizing these cooperative creameries and put its prestige behind the stock issued by each of the local creameries. When the cooperatives that make up Prairie Farms today were first formed in the 1930's, the county farm advisers worked to encourage the cooperatives and held informational meetings. Additionally, the Farm Bureau offices acted as collection points in the various counties for payment on stock purchases.

The original stock structure of the creameries involved Class A Preferred and Class B Preferred. The Class B Preferred stock was issued to give IAA a voice in the management of the cooperative creameries. It was expected that this voice would be used sparingly, and indeed this has been so. The purpose and objectives of the Class B Preferred stock are set forth in *Policy Resolution No. 8, Articles of Incorporation, By-Laws and Policy Resolutions, Illinois Agricultural Association*, as amended effective December 13, 1978.²

IAA has also been helpful to Prairie Farms on other occasions. For example, in 1956, it was able to prevent the Carbondale and Olney cooperatives from merging with the largest cooperative in the St. Louis market, which could have meant a death blow to Carlinville. By having Ohio State University make an impartial study of the welfare of local producers and holding a series of informational meetings, IAA was able to prevent this move. Shortly thereafter, those two creameries merged with Carlinville.

Under an agreement, Illinois Agricultural Service Co., owned by IAA, provides an advisory service to the Prairie Farms board of directors on management and management's recommendations. The board of directors of Prairie Farms is ultimately responsible for determining final action on recommendations made under the agreement.

Change in Milk and Cream Supply

The data on historical changes in raw milk and cream supply in Illinois (table 1 and appendix table 1) will furnish a backdrop to the unfolding epic of Prairie Farms' origin, growth, and development in the dairy industry of Illinois.

²The policy resolution referred to here can be seen in its complete form in appendix I.

From its beginnings, the creamery at Carlinville, major predecessor to Prairie Farms, along with other cooperative creameries encouraged by the Illinois Agricultural Association competed for farm-separated cream, which amounted to about 28 percent of total milk supply in Illinois in 1938 and nearly all of the supply in southern Illinois except for a few fluid grade milk shippers to St. Louis. During the war years, farmers increasingly shifted from marketing farm-separated cream to manufacturing grade milk, and some of the other early creameries began to compete vigorously.³ By 1950, the supply of farm-separated cream was declining rapidly, while the actual quantity of manufacturing grade whole milk was showing the stable level it was to hold for some years. Supplies eligible for fluid markets (grade A) were increasing as a percentage of the total supply, as Carlinville began to compete for grade A milk after going into bottling. By 1950, total milk supplies in Illinois were falling, a decline that accelerated until 1978 when total production was substantially less than half what it had been four decades earlier. In 1978, eighty-one percent of it was grade A, and since the mid-1960's, less than 1.0 percent had been farm-separated cream.

Data on grade A and manufacturing grade whole milk and farm-separated cream are not available by sections of the State for the 1938-78 period. But it seems appropriate to view Prairie Farms' growth and development in terms of all units that, in the course of four decades, became part of Prairie Farms. These units were dispersed throughout Illinois (except for the northern two or three tiers of counties that were part of the Chicago milk shed). Viewed in this way, the Illinois milk supply was the milk supply in the area where Prairie Farms operated and developed.

Table 2 and appendix tables 2 and 3 use the Carlinville cooperative as the original point of reference, that is, the earliest milk receipt figures include only milk received at Carlinville, while milk received at Carbondale and Olney is included in the total receipts after the formation of Prairie Farms of Southern Illinois in 1956 and 1957. Appendix table 2 breaks out the various component parts of the Prairie Farms milk receipts in terms of millions of pounds, while appendix table 3 shows the same breakdown in percentages. The milk receipts increased because of changes brought about by mergers with other cooperatives, outright acquisitions, supply changes from the internal growth of the cooperative's membership, and the increased productivity of members. Figure 1 gives a graphic representation of the makeup of Prairie Farms' milk supply from 1938-1978 using the data shown in appendix table 3.

³Manufacturing grade milk is milk produced on farms with no official inspection and approval for fluid use by the appropriate State agency.

From the opening of the Carlinville Creamery in 1938 until 1942, purchases were limited to farm-separated cream. Beginning in 1942, whole milk purchases grew quickly to about 75 percent of Carlinville's total supply and remained in that range through 1948, when Carlinville began purchasing grade A milk in addition to nongrade A whole milk. After Carlinville's entry into bottled milk sales in 1948, farm-separated cream shrank quickly to an extremely small percent of the total supply. Early in 1963, Prairie Farms stopped purchasing farm-separated cream altogether.

From the first grade A milk purchases in 1948, the volume received grew quickly and has continued to the present. The volume of non-grade A receipts from producers, on the other hand, began a general decline. Major exceptions to this movement toward grade A milk are 1957 and 1962, when two important mergers leading to the formation of Prairie Farms of Southern Illinois and subsequently Prairie Farms Dairy, Inc. occurred. The first increase in manufacturing grade milk, for the most part, resulted from Carbondale having a larger processing plant primarily supplied by manufacturing grade sources. After the formation of Prairie Farms of Southern Illinois, the manufacturing grade milk again began to shrink steadily until 1962. Then, Prairie Farms Dairy, Inc., was formed by combining Prairie Farms of Southern Illinois, Prairie Farms of Western Illinois, and Danville Producers Creamery. Again an influx of manufacturing grade milk into the total supply can be seen in appendix table 2. The manufacturing grade supply continued to shrink and purchases from producers were discontinued in 1970.

Figure 2 is a graphic representation of the breakdown between Prairie Farms' direct-ship and other cooperative grade A supply. In 1948, when Carlinville began selling bottled milk, it had no bottling facilities of its own and purchased its packaged milk needs from the Dressel-Young Dairy in Granite City, Ill., the first "other source" grade A supply in Carlinville history. Not until 1950 was Carlinville able to install its own bottling facilities. After 1950, the direct-ship grade A supply grew rapidly, while the other cooperative grade A supply steadily declined as a percentage of the total grade A supply. Grade A milk purchased from other cooperatives continued to represent a small percent of the total grade A receipts until 1965, when it began a period of rapid growth. By 1971, it accounted for more than one-half of Prairie Farm's grade A supply. This apparent dependence on grade A milk procured from other cooperatives continues to the present.

It was a key management decision to procure 40 percent or more of its fluid milk needs from sources other than direct-ship patrons. This meant there would be no need to maintain balancing plants, resulting in considerable cost savings.

Table 1—Volume of raw milk by grade and farm-separated cream marketed by Illinois producers, selected years, 1939-78¹

Item	1978	1973	1968	1963	1958	1953	1948	1943	1939
<i>Million Pounds</i>									
Grade A milk	1,916	1,977	2,132	2,701	2,892	3,046	2,842	2,676	2,614
Non-grade A milk	449	688	964	1,405	1,513	1,606	1,493	1,621	1,197
Farm-separated cream ²	-	8	13	50	260	510	833	1,055	1,416
Total	2,365	2,673	3,109	4,156	4,665	5,162	5,168	5,352	5,227
<i>Percent</i>									
Grade A milk	81.0	74.0	68.6	65.0	62.0	59.0	55.0	50.0	50.0
Non-grade A milk	19.0	25.7	31.0	33.8	32.4	31.1	28.9	30.3	22.9
Farm-separated cream ²	-	0.3	0.4	1.2	5.6	9.9	16.1	19.7	27.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(-) means "none."

¹ Data taken from "Milk Production, Disposition, Income", "Illinois Agricultural Statistics", "Federal Milk Order Market Statistics." Volume breakdown for 1939 and 1943 computed using an estimate of 50 percent of total being Grade A. (see Appendix table 1 for more details.)

² Farm-separated cream shown in terms of milk equivalent.

Table 2—Milk and farm-separated cream received by Prairie Farms for selected fiscal years, 1939-78¹

Form of receipt	1978	1973	1968	1963	1958	1953	1948	1943	1939
<i>Million pounds</i>									
Grade A—direct ship	403	320	220	173	91	9	(²)	-	-
Grade A—other co-ops	441	336	144	4	3	(³)	(²)	-	-
Total Grade A	844	656	364	177	94	9	(²)	-	-
Non-grade A—direct ship	-	-	25	53	65	17	(²)	(⁴)	(⁴)
Non-grade A—other co-ops ⁵	70	47	-	(³)	(³)	(³)	(²)	(⁴)	(⁴)
Total nongrade A	70	47	25	53	65	17	27	(⁴)	(⁴)
Farm-separated cream ⁶	-	-	-	(³)	1	1	9	(⁴)	(⁴)
Total receipts	914	703	389	230	160	27	36	10	7
<i>Percent</i>									
Grade A—direct ship	47.8	48.8	60.3	98.0	96.9	97.8	(²)	-	-
Grade A—other co-ops	52.2	51.2	39.7	2.0	3.1	2.2	(²)	-	-
Total Grade A	92.4	93.2	93.6	77.0	59.0	33.6	(²)	-	-
Non-grade A—direct ship	-	-	100.0	99.6	99.5	98.8	(²)	(⁴)	(⁴)
Non-grade A—other co-ops ⁵	100.0	100.0	-	0.4	0.5	1.2	(²)	(⁴)	(⁴)
Total nongrade A	7.6	6.8	6.4	22.9	40.6	64.1	74.2	(⁴)	(⁴)
Farm-separated cream ⁶	-	-	-	0.1	0.4	2.3	25.8	(⁴)	(⁴)
Total receipts	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(-) means "none."

¹ Data for fiscal years ending September 30 except for 1963 that ended February 28.

² Data not available on grade and source of milk receipts.

³ Less than 500,000 pounds.

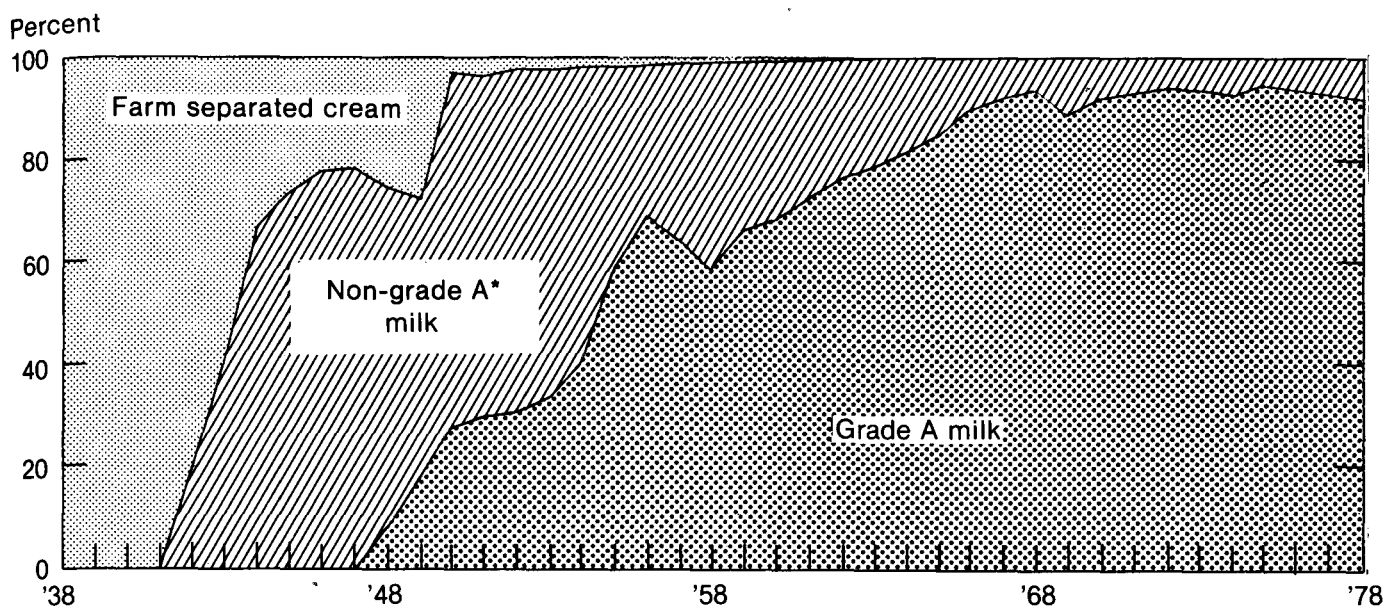
⁴ Data not available on milk and cream receipts separately.

⁵ Includes cream, powder, and condensed milk in terms of milk equivalent.

⁶ Farm-separated cream shown in terms of milk equivalent.

Figure 1

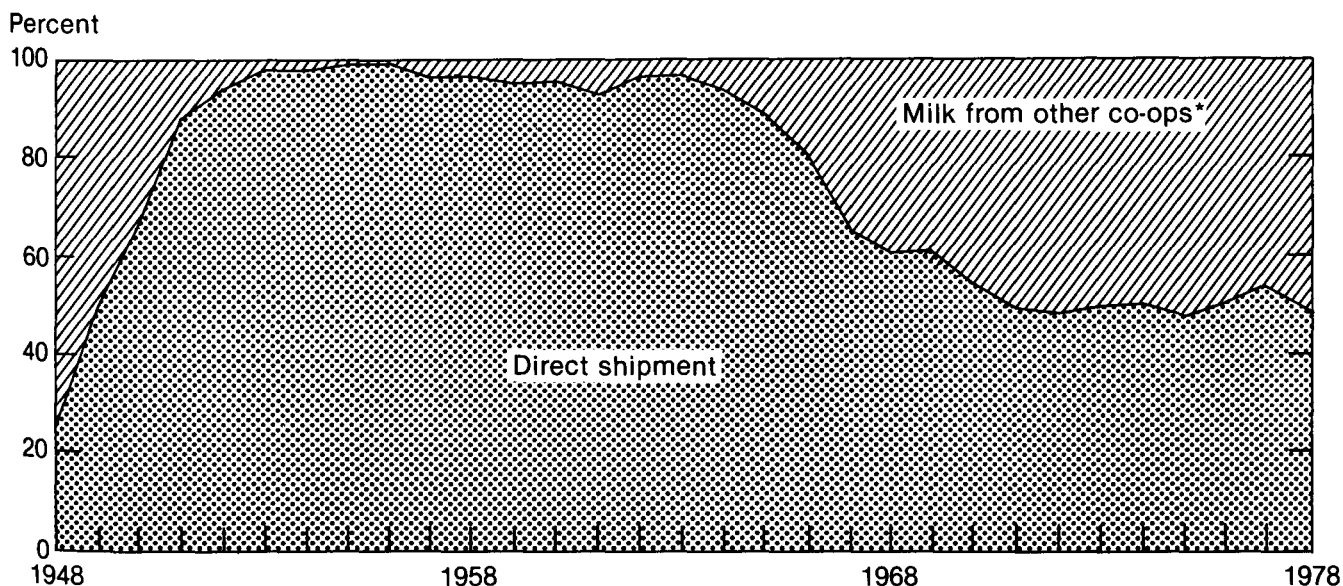
Prairie Farms' Milk Supply by Type of Receipts, 1938-78



*This classification includes manufactured products purchased by Prairie Farms Dairy, Inc.

Figure 2

Prairie Farms' Grade A Milk Supply by Source of Receipts, 1948-78



*To some extent, and especially in the very early history of the cooperative, this non-direct ship milk was acquired from non-cooperative enterprises.

History of Merger and Acquisition

The first merger of predecessors to Prairie Farms occurred on June 1, 1948, when the Jacksonville Producers Dairy merged with Prairie Farms Creamery of Mt. Sterling. This was followed by the merger of the Quincy Producers Dairy into the same group on January 1, 1950. The surviving cooperative was renamed Prairie Farms of Western Illinois.

In January 1954, Prairie Farms of Carlinville embarked on a program of merger and acquisition to develop a more efficient and effective milk marketing system.⁴ By October 1979, the surviving organization, Prairie Farms Dairy, Inc., was the product of nine mergers, 36 acquisitions and 2 joint ventures. A brief description of each follows, including the date, name, and location of unit acquired, number of patrons, annual volume of milk, products made or major activity at the location when acquired, value of annual sales, procurement area, distribution area, and comments.

1. January 1, 1954—acquired Community Dairy of Alton, Ill.; milk receipts, 4 million pounds annually from 40 producers; milk bottled in glass; annual sales of \$250,000; milk procurement area within 20 miles of Alton; distribution in the metropolitan area of Alton.

Comments: Prairie Farms of Carlinville purchased the business and equipment of Community Dairy including an option to buy the land to get a sales outlet in the Alton area. The cooperative continued use of the Community Dairy trade name on the glass bottled products. Products packaged in paper were supplied from the Carlinville plant. The former manager of Community Dairy continued to manage the plant.

2. October 1, 1954—acquired Prairie Farms of Carlyle, Ill.; milk receipts, 3.5 million pounds annually from 35 producers; raw grade A milk shipped directly to St. Louis; annual sales of \$350,000; milk procurement in the Carlyle area; distribution of packaged milk in the Carlyle area and raw grade A milk in St. Louis.

Comments: In late 1949, F. A. Gourley became general manager of Carlyle cooperative in addition to performing the same function for the Carlinville cooperative. Because its margins were insufficient to cover operating expenses, the Carlyle cooperative became heavily indebted to the Carlinville cooperative; and Carlinville secured a mortgage on the Carlyle property and facilities. In June of 1953 both Carlinville and Sanitary Milk Producers of St. Louis (SMP) offered financial proposals to the Carlyle board. Carlyle

accepted the proposal made by SMP, stating SMP would furnish the necessary funds to meet the outstanding checks, if the Carlyle board would ask the Federal Court for corporate reorganization. In June 1953, the Carlyle board petitioned the Federal Court in East St. Louis for corporate reorganization. The Federal Court appointed two trustees and authorized issuance of certificates of indebtedness in the amount of \$10,000 that would hold first lien on all of the Carlyle assets. To protect its \$24,000 mortgage on those assets, Carlinville purchased these certificates of indebtedness. Later in 1953, Carlyle paid off \$5,000 of the certificates of indebtedness with money received in a breach of contract suit filed against Beatrice Foods. This brought Carlyle's indebtedness to Carlinville to: mortgage \$24,000; certificates of indebtedness \$5,000; and \$5,000 on open account for a total of \$34,000. On October 1, 1954, Carlyle accepted a new proposal offered by Carlinville. This plan stated that Carlinville would pay the Carlyle operation 0.75 cents per unit on all milk that Carlinville bottled and sold in the Carlyle area. It was agreed that if after 18 months the operation was not profitable, Carlinville could close the plant.

3. December 1, 1956—merged with Prairie Farms of Carbondale, Ill.; milk receipts, 64 million pounds annually from 1,000 producers; products include butter, cottage cheese, dry and condensed milk; annual sales of \$3.3 million; milk procurement in southern one-fifth of Illinois; distribution throughout that supply area.

Comments: The merger resulted in a newly formed cooperative named Prairie Farms of Southern Illinois. The Carbondale plant was a diversified manufacturer with no bottling capacity. At the time plans were made for merger, management intended to divert the Carlinville manufacturing volume to Carbondale to increase volume there and have Carlinville become exclusively a bottling plant. Savings in labor and equipment expenses were expected from such an arrangement. Additionally, some grade A patrons at Carbondale could enter the St. Louis market through the Carlyle plant.

4. April 1, 1957—merged with Prairie Farms of Olney, Ill.; milk receipts, 50 million pounds annually from 750 producers; products include dry and bottled milk; annual sales of \$2.5 million; milk procurement and distribution areas both in southeastern Illinois.

Comments: Merger with Olney was being considered when the Carlinville-Carbondale merger was considered. Until late in 1956, the Olney operations were in a financially depressed condition. For reasons apparently unknown to management, the operations of the plant had deteriorated rapidly during 1956. F. A. Gourley took over as manager of Olney after the previous manager resigned August 1, 1956. During the last 4 months of 1956, the cooperative

⁴The terms merger and consolidation are used interchangeably in this report.

recovered completely and net margins for those 4 months totaled around \$80,000. This merger agreement was similar to the one for the merger between Carbondale and Carlinville, i.e., stock in Prairie Farms of Southern Illinois was exchanged for Olney's outstanding stock.

5. February 1, 1960—acquired Walnut Grove Dairy of Alton, Ill.; milk receipts of 5 million pounds annually from 50 producers; milk bottled; annual sales of \$250,000; both milk procurement and distribution in the Alton area.

Comments: This dairy was purchased to be combined with the Community Dairy operations in Alton, Illinois, acquired in January 1954. Walnut Grove Dairy was the oldest dairy in the Alton area. Its owners stayed on with Prairie Farms of Southern Illinois. The bottling operation was discontinued April 30, 1960.

6. February 1, 1960—acquired Farmers Dairy of Metropolis, Ill.; milk receipts of 5 million pounds annually from 50 producers; milk bottled; annual sales of \$250,000; both milk procurement and distribution in the Metropolis area.

Comments: Metropolis, Ill., with a population of around 10,000, is across the Ohio River from Paducah, Ky. Farmers Dairy was consolidated into the operations of the Carbondale unit of Prairie Farms of Southern Illinois. The bottling operation was discontinued April 30, 1960.

7. October 1, 1960—merged with Producers Dairy of Springfield, Ill.; milk receipts of 40 million pounds annually from 80 producers; milk was 95 percent bottled and 5 percent used in ice cream; annual sales of \$2 million; both milk procurement and distribution in the Springfield area.

Comments: Producers Dairy of Springfield was the largest dairy in Springfield, Ill. Its 80 shippers were all Grade A, and about 85 percent of them had farm bulk tanks. Producers Dairy had \$400,000 in retained margins at the time of the merger agreement. Prairie Farms of Southern Illinois also had \$400,000 in retained margins from operations in 1958, 1959, and 1960. The total of \$800,000 in retained margins was expected to be used for the organization's capital needs. Most of the milk volume at the Springfield plant was diverted to the Carlinville, Olney, and Danville plants by July 1962, although this plant continued to produce some ice cream.

8. March 1, 1962—merged with Producers Dairy of Danville, Ill.; milk receipts of 60 million pounds annually from 250 producers; marketed bottled milk; annual sales of \$3 million; both milk procurement and distribution in East Central Illinois and part of Indiana.

Comments: In addition to the unit at Danville, Ill., Producers Dairy included a unit at Champaign and a unit at Lafayette, Ind., that was formerly Grandview Dairy. At the time of merger, Producers Dairy had about \$400,000 in retained margins and was in good financial condition, with procurement and sales in both Illinois and Indiana.

9. March 1, 1962—merged with Prairie Farms of Western Ill.; milk receipts of 60 million pounds annually from 300 producers; marketed bottled milk and manufactured products; annual sales of \$3 million; both milk procurement and distribution in East Central Illinois and part of Indiana.

Comments: At the time of the consolidation, Prairie Farms of Western Illinois had two operating plants: one at Quincy and the other at Mt. Sterling. By September 1962, the plant at Mt. Sterling was closed and operated as a receiving station. The Mt. Sterling plant was leased to Hanson Dairy of San Jose, Ill., in February 1963, but closed in April 1963, when Hanson decided it could no longer operate the plant. This merger of Prairie Farms of Southern Illinois, Prairie Farms of Western Illinois, and Producers Dairy of Danville created Prairie Farms Dairy, Inc., with operations covering the area from western Indiana to eastern Missouri and southeastern Iowa, and from Paducah, Ky., to an east-west line about 100 miles south of Chicago. Major reasons for the merger of these three organizations included greater security through enhanced market power in the areas served and better coordination of operations. There had been fears that continued competition among the three organizations would only do economic damage to all. At the time of the merger, all three were in good financial condition, and none wanted to jeopardize this good economic health. For about 2 years after the merger, the main office of Prairie Farms was in Springfield, Ill., at the old Producers Dairy of Springfield plant. This was part of the merger agreement. The main office was later returned to Carlinville, where the accounting office for the organization had remained.

10. May 1, 1962—acquired Sangamon Dairy of Springfield, Ill.; milk receipts of 15 million pounds annually from 30 producers; marketed bottled milk; annual sales of \$700,000; both milk procurement and distribution in the Springfield area.

Comments: The Sangamon Dairy was purchased to acquire its sales volume. The plant was closed and it was hoped sale of equipment might cover the cost of acquiring the unit.

11. January 1, 1964—merged with Equity Union Creamery of Pana, Ill.; milk receipts of 60 million pounds annually from 750 producers; marketed bottled milk; annual sales of \$1.5 million; both milk procurement and distribution in central Illinois.

Comments: Equity Union Creamery and Prairie Farms had overlapping procurement and sales areas. They were both in strong financial condition and did not want lack of coordination of operations to endanger their financial well being. In addition, Equity Union had sales in large population centers outside of Prairie Farms' area, and Prairie Farms was trying to expand its sales into larger metropolitan markets. Equity Union Creamery included a bottling plant at Pana, Ill., and two distribution points, one at Gillespie, Ill., and the other at Lincoln, Ill.,

12. April 1, 1964—acquired sales area in and around Bloomington, Ill.; market for full line of dairy products; annual sales of \$800,000; distribution in the Bloomington area.

Comment: This acquisition involved taking over the Bloomington sales area from the Pure Milk Association. At first Prairie Farms intended to continue the PMA Dairy Lane trade name for some time before shifting to the Prairie Farms name but decided to start out with the Prairie Farms trade name because of its consumer acceptance.

13. August 1, 1964—acquired Colonial Dairy of Wood River, Ill.; a raw milk customer of Prairie Farms; marketed bottled milk; annual sales of \$750,000; distribution in the Alton-Wood River areas.

Comments: At the time of this acquisition, Colonial Dairy was anticipated to continue for some time to bottle its glass requirements (glass one-half pints for schools). For several years before acquisition, the paper bottling requirements had been furnished by the Carlinville plant. This operation was intended to combine with Prairie Farms' distribution center in Alton and operate from there. The two were combined, and a new distribution center was built in 1965.

14. August 1, 1964—acquired New Era Dairy of Carbondale and Marion, Ill.; a raw milk customer of Prairie Farms for 18 million pounds annually; marketed bottled milk; annual sales of \$3 million; distribution in the Carbondale and Marion areas.

Comments: This was Prairie Farms' first purchase of a large noncooperative dairy. For many years, New Era Dairy had been purchasing its milk supply from the Prairie Farms unit at Carbondale. During this period, Prairie Farms leaders thought New Era would eventually become part of the organization. The dairy was owned and operated by the three Parrish brothers (Gordon, William, and Kenneth) and Gordon Parrish's son (Gordon, Jr.) All four stayed on with Prairie Farms, and the plant continued operations much as it had in the past. The sale of the dairy was due to health problems on the part of the brother dominant in the business. The income from this operation in the first 4 years was sufficient to cover the purchase price.

The Marion, Ill., location of the New Era Dairy was the Marion City Dairy. The reason for the purchase was Prairie Farms did not want to lose these New Era milk sales to some other dairy purchasing it. In addition to the purchase price of \$600,000, a covenant not to compete was entered into. Prairie Farms paid a total of \$150,000 in 10 equal installments (the last made June 30, 1975) for this covenant.

15. August 1, 1965—acquired Virden Dairy of Virden, Ill.; milk was purchased from another dairy; marketed bottled milk and other dairy products; small sales volume; distribution in Virden, Ill., just north of Carlinville.

Comments: Virden Dairy was owned and operated by Howard Schien. Several years before the sale, he had discontinued his plant operations and begun purchasing his milk supply from another dairy. This dairy had a small sales volume but was regarded as valuable. In October 1965, Howard Schien was employed by Prairie Farms to manage the newly constructed Prairie Farms distribution center at Alton, Ill.

16. January 1, 1966—merged with Tri-State Dairy of Keokuk, Ia.; milk receipts of 12 million pounds annually from 30 producers; marketed bottled milk; annual sales of \$1 million; procurement in Illinois, Iowa and Missouri; distribution largely in southeastern Iowa and adjoining areas of Illinois and Missouri.

Comments: The Keokuk, Ia., plant was only 45 miles from Prairie Farms' Quincy plant. The manager at Quincy was appointed manager of the Keokuk operations with the Tri-State manager as his assistant. The merger agreement provided for a realignment of directorships to give the Tri-State producers appropriate representation on the Prairie Farms Board. Directors and producers of Tri-State unanimously approved the consolidation. The Keokuk plant had new modern equipment and the plant's acquisition opened a new sales area to Prairie Farms. It also put Prairie Farms on the southern edge of the large northern raw milk supply area, important considering the decrease in Illinois milk production.

17. May 1, 1966—acquired Benld Dairy of Benld, Ill.; data not available on milk receipts, products marketed, sales volume, and procurement area. Distribution in Benld, Ill., just south of Carlinville.

Comments: Benld Dairy was acquired for its sales volume.

18. November 1, 1966—acquired Elliot Dairy of Marion, Ill.; data not available on milk receipts, products marketed, sales volume, and procurement area. Distribution in the Marion, Ill., area.

19. February 1, 1967—acquired Urbana Pure Milk Company; milk receipts of 7 million pounds annually from 18 producers; marketed bottled milk in glass only; annual sales of \$800,000; both distribution and procurement in the Champaign-Urbana area.

Comments: About 95 percent of the business of Urbana Pure Milk Company was home delivery and all sales were in the Champaign-Urbana areas. The company was owned by the three Hopson brothers and Clarence Wilson. They all remained with Prairie Farms, and at least for a time, the operation was continued as it had in the past including the home delivery service. Two horse-drawn wagons owned by Urbana Pure Milk, something of a tradition in the Champaign-Urbana area, were retained and used for promotional purposes.

20. February 1, 1967—acquired Aro Dressel Foods with operations in Granite City, Ill., St. Louis, Mo; and Alton, Ill.; milk receipts of 70 million pounds annually from 150 producers; marketed bottled milk (60 percent), butter (20 percent), and ice cream (20 percent); annual sales of \$7 million; procurement about two-thirds in Illinois and one-third in Missouri; distribution in St. Louis, Granite City, and the east side of the Mississippi river.

Comments: The primary purpose of this acquisition was to acquire sales in the St. Louis metropolitan area. About 60 percent of the bottled milk of this operation was sold in St. Louis, with the remaining 40 percent sold in Granite City and the surrounding area east of the Mississippi River. Owners Jon Dressel and William Guthrie continued with Prairie Farms and remained in charge of the operations. The company included Dressel-Young Dairy, Granite City, Ill.; Aro Dairy, St. Louis, Mo.; Elm Dairy, Alton, Ill.; and Massey Dairy, Granite City, Ill. The company did not have an adequate accounting system upon acquisition. Aro Dairy had good supermarket accounts and a good ice cream mix operation, but the other facilities were poor with poor rolling stock. Almost all of the 180 shippers were members of Square Deal or Sanitary Milk Producers. Prairie Farms continued to accept their milk even without their having Prairie Farms membership, but Prairie Farms' members' milk was received there and to some extent displaced Square Deal and SMP member milk.

21. November 1, 1967—acquired Durst Brothers Dairy of Quincy, Ill.; milk receipts of 11 million pounds annually from 30 producers; marketed bottled milk (about three-fourths) cream (about one-fourth) with some cottage cheese and ice cream mix; annual sales of \$1.3 million; both procurement and distribution in the Quincy area.

Comments: This dairy was operated by the two Durst brothers—George and James, sons of the founder. They continued with Prairie Farms. The operation was intended

to continue basically as it had in the past, with some combining with the Prairie Farms plant at Quincy. The 30 shippers at this plant were all grade A shippers.

22. January 1, 1968—acquired Willow Farms of Atlanta, Ill.; marketed a full line of products supplied by Prairie Farms; distribution in the Atlanta area.

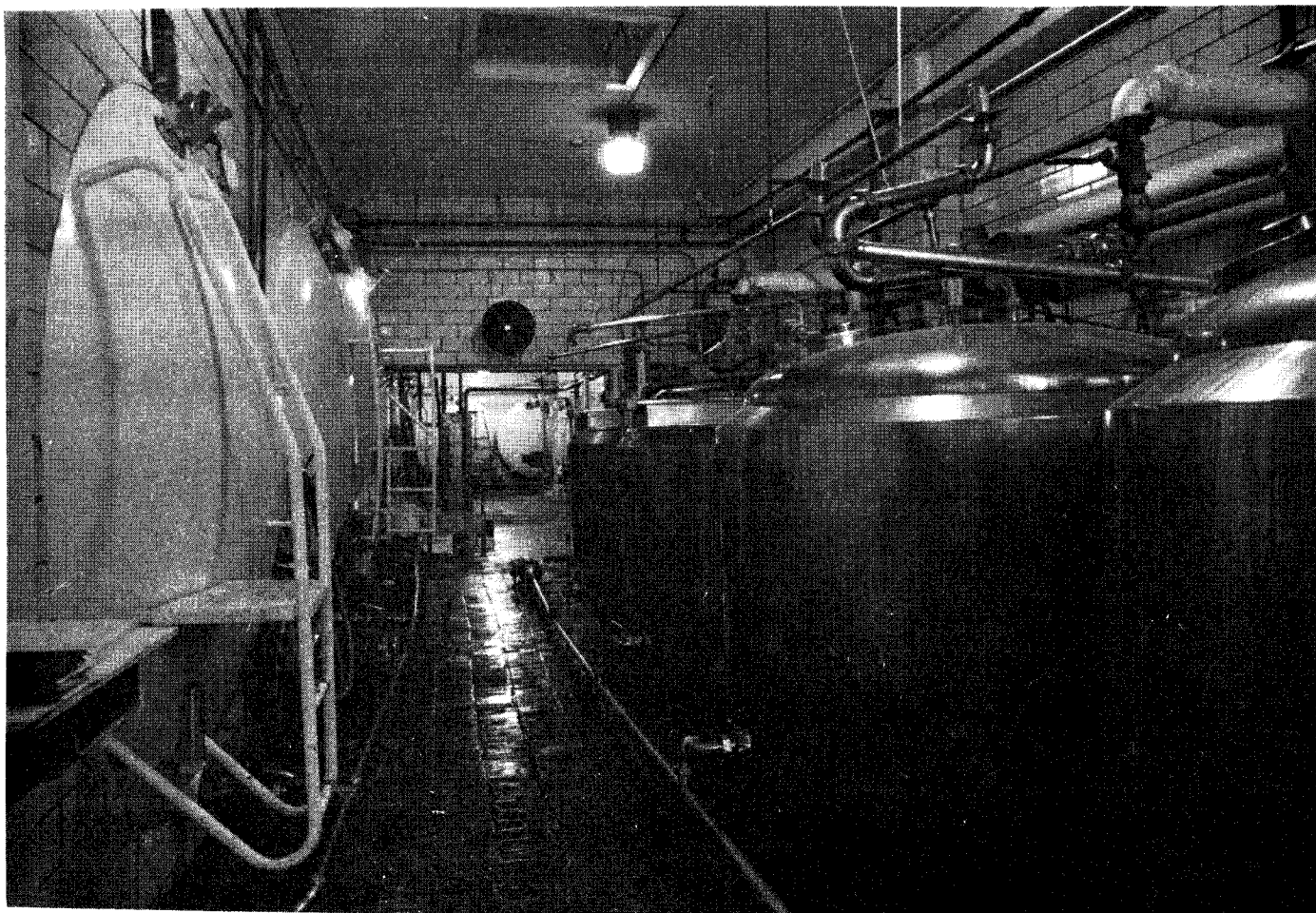
Comments: Arrangements had been made on June 1, 1964, with the Willow Farms owner to distribute only Prairie Farms dairy products on his 10 milk routes. Willow Farms had only retail business and door-to-door delivery.

23. March 1, 1968—acquired O'Fallon Quality Dairy of O'Fallon, Ill.; milk receipts of 40 million pounds from Sanitary Milk Producers; marketed bottled milk, ice cream, and ice cream mix; annual sales of \$4 million; distribution about half in Illinois and half in Missouri in the general area of St. Louis.

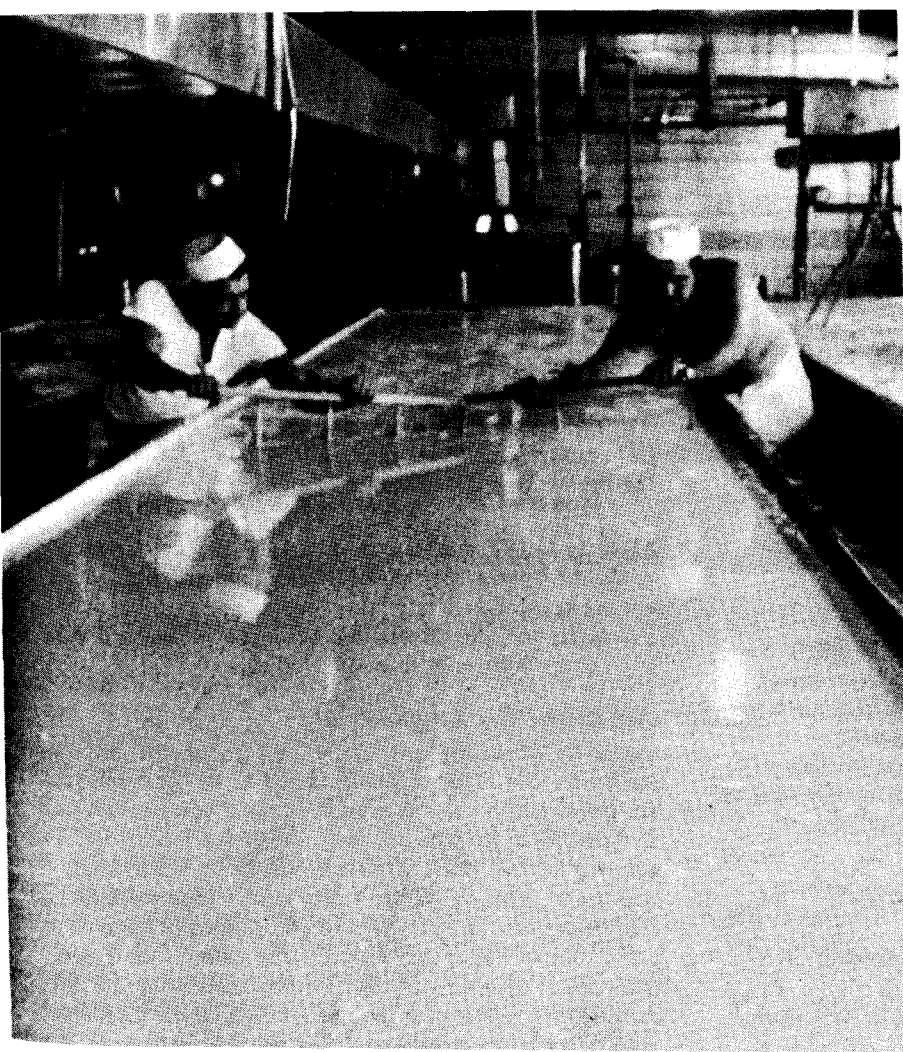
Comments: The O'Fallon Quality Dairy was about 15 miles east of St. Louis and about 20 miles from Prairie Farms' Granite City operation. The O'Fallon operation was combined with the Granite City operation. O'Fallon utilized more than 2 million pounds of milk for bottling monthly and produced about 1 million gallons of ice cream mix and 500,000 gallons of ice cream yearly. The plant was purchased from Sanitary Milk Producers, which had been operating this plant and supplying competing plants with milk, but had found the situation unworkable. All of the milk supply at the O'Fallon plant had been provided by SMP members. Prairie Farms only agreed to accept enough milk from SMP members to fill the O'Fallon plants' Class I needs and did not exclude Prairie Farms' members from supplying milk to the plant. Prairie Farms issued a statement to the effect that it would not solicit membership from SMP shippers supplying the plant.

24. November 1, 1968—acquired Midwest Farms' operations in Centralia and Du Quoin, Ill.; marketed bottled milk and ice cream; annual sales not available; supplied by Midwest plants in Memphis and Paducah; distribution in the Centralia and Du Quoin areas.

Comments: These two distribution centers were purchased from the Southland Corporation of Dallas, Tex. Southland Corporation had been supplying all of the products by its two Midwest Farms distribution centers from its Memphis, Tenn., and Paducah, Ky., plants; but these two production facilities had been closed several months before the Midwest Farms units were sold. The Paducah Class I price had been higher than the Central Illinois price, and Southland had been incurring operating losses as a result. Prairie Farms acquired all operating personnel including the manager, Leon Beaty, and continued to operate the two distribution centers as Southland had, using its New Era-Carbondale plant to supply requirements.



Above, are milk processing holding tanks at Carlinville. Next page, top, is the Durst Brother's cheese plant at Quincy, acquired in 1967 and, bottom, the cheese plant at Carbondale.



25. April 1, 1969—created PFD Supply Company; markets nondairy products to fast food outlets; annual sales of \$3 million; distribution area includes several Midwestern and Southern States.

Comments: Because neither suppliers nor customers were members, Prairie Farms chose to separate the fast food services from its Granite City operation and pursue this activity using a noncooperative firm, PFD Supply. PFD Supply handles almost all of the items used by fast food chains. It supplies McDonald's, Wendy's, Burger King, Dairy Queen, and others, with almost all food products these establishments use and paper supplies. It also supplies these establishments with some dairy supplies. The board of directors and officers of Prairie Farms serve in the same capacity for PFD Supply.

26. August 1-September 30, 1969—acquired Chamberlin Ice Cream Company; Fre-Zert, Inc. and Vix Ice Cream Company; in St. Louis, Mo., and Lafayette Ind.; markets ice cream novelties; annual sales of \$5 million; distribution in 13 States.

Comments: Ice Cream Specialties, Inc., a subsidiary of Prairie Farms, was created August 1, 1969, with the purchase of the above named companies. Between 1971 and 1973, Prairie Farms constructed another novelty plant in Marietta, Ga., and added it to Ice Cream Specialties, Inc. Prairie Farms got into the novelty business because it offered diversification and strong sales in the summer months. At the time of purchase, Prairie Farms leaders thought that it would be able to recoup the \$2 million purchase price in about 10 years. The results were not as favorable as expected. Soon after the purchase, Kroger built an ice cream novelty plant in Indianapolis, which reduced Prairie Farms' sales by about 30 percent. In addition, the Marietta, Ga., plant proved to be too far away from Carlinville for effective control by Prairie Farms' management, and the plant has not been as successful in building sales volume in the South as anticipated. The Marietta plant is dependent upon Sealtest for about 80 percent of its sales, placing it in a vulnerable position.

27. February 16, 1970—acquired Homeier Dairy of Springfield, Ill.; data on milk supplies and sales not available; markets bottled milk and related products; distribution in the Springfield area.

Comments: The dairy was acquired for its sales accounts.

28. May 1, 1970—acquired Flynn Dairy of Des Moines, Ia.; milk receipts of 65 million annually from Mid-America; markets bottled milk; annual sales of \$6 million; distribution in Iowa and eastern Nebraska.

Comments: The Flynn plant at Des Moines was built in 1956. Prairie Farms paid \$714,000 for the operation, and the annual report shows an additional \$227,000, 8 percent note payable to the Flynn Investment Company over a 5-year period for a total acquisition cost of about \$1 million. At the time of acquisition, the plant was supplied totally by Mid-America. In 1978, Mid-America supplied about 50 percent of the requirements, with the remainder coming from Mississippi Valley Milk Producers, Beatrice Food, and one or two small cooperatives. This acquisition was hoped to increase Prairie Farms' membership but did not.

29. September 1, 1970—acquired Schroeder Dairy Service of Altamont, Ill.; data on milk supplies and sales not available; distribution in Altamont and south central Illinois.

Comments: This dairy was a small operation acquired by Prairie Farms to add sales volume in the central Illinois area. Altamont is on Interstate 70 about halfway between St. Louis, Mo., and Terra Haute, Ind.

30. March 1, 1971—acquired Redshaw Distributing Company of St. Peters, Mo.; markets a full line of dairy products in St. Peters, Mo., area.

Comments: Redshaw was a small distributor in St. Peters, Mo., a small town west of St. Louis. The company has since been sold to another organization.

31. May 1, 1971—acquired Midwest Dairy of Quincy, Ill.; data on milk receipts and sales not available; procurement from two producers in the Quincy area; distribution in the Quincy area.

Comments: This dairy was acquired to add sales volume to the Prairie Farms operation at Quincy.

32. July 1, 1971—acquired Illinois Valley Ice Cream Company of Streator, Ill.; markets ice cream and bottled milk; annual sales of \$1.5 million; procures one-third from Prairie Farms bottled; distributes in central and northern Illinois and some counties in Iowa and Indiana.

Comments: This operation has always been owned and controlled by the Damguard family. Ted Damguard, the owner, stayed on as a manager and retained all of his employees. A few years earlier, this operation stopped bottling and only manufactured ice cream at the time of the acquisition. For the past several years, Prairie Farms had been bottling about one-third of Illinois Valley's milk requirements and had been purchasing about 150,000 gallons of ice cream from Illinois Valley per year. Illinois Valley's total sales were about \$1.5 million (\$1 million ice cream and \$500,000 bottled milk). The operation produced about 750,000 gallons of ice cream yearly, and this together with the 1.5 mil-

lion gallons of ice cream produced yearly at the O'Fallon plant brought Prairie Farms' ice cream production to about 2.25 million gallons a year. A retail outlet was acquired with this operation but was later discontinued.

33. June 1, 1972—acquired Nugent Farms of Vincennes, Sullivan, Loogootee and French Lick, Ind.; milk receipts of 12 million pounds annually from 30 producers; markets bottled milk; annual sales of \$2 million; procurement from southwestern Indiana and Prairie Farms at Olney, Ill.; distribution in southwestern Indiana.

Comments: This operation was purchased for its distribution areas. On May 15, 1972, the plant stopped bottling, and Prairie Farms began supplying milk requirements from Olney. This added to efficiency at the Olney plant. The sales areas extended to a radius of about 20 miles around each of the outlets and covered much of the rural area of southern Indiana. Of the 30 shippers connected with this operation, 20 were not associated with any other cooperative and became Prairie Farm members. Owner Maurice Nugent agreed to stay on with Prairie Farms indefinitely but apparently did not stay long. Other employees stayed however.

34. September 1, 1972—acquired Macomb Dairy of Macomb, Ill.; milk receipts of 2 million pounds annually from four producers; markets ice cream and other products; annual sales of \$500,000; both procurement and distribution in Macomb area.

Comments: This operation was purchased to build sales volume. The manufacturing plant was closed on September 1, 1972, and the unit was operated as a distribution point supplied from the Quincy, Streator, and Keokuk Prairie Farms plants.

35. November 1, 1972—merged with Peoria Producers Dairy of Peoria, Ill.; milk receipts of 30 million pounds annually from 100 producers; markets bottled milk; annual sales of \$4 million; procurement from Peoria area; distribution in north central Illinois.

Comments: This was considered a key merger by the Prairie Farms' management. Peoria Producers Dairy was preparing to combine with another cooperative. The merger with Prairie Farms meant Prairie Farms would not have to clash head-on with Mississippi Valley or Land O'Lakes, which were both attempting to bring Peoria Producers Dairy into their own organizations. Prairie Farms overlapped with Peoria Producers Dairy in sales area for the most part, but the merger did add new sales area in northern Illinois to Prairie Farms. Peoria Producers Dairy had about \$1.2 million in allocated margins at the time of the merger, and part of the merger agreement stated \$850,000 of this would be

paid out immediately (45 percent in cash and 55 percent in 5-percent Debenture Notes that could be cashed after 3 years). The other \$350,000 in retained margins were to remain allocated. The immediate cash payments of margins were to be made from capital currently held by Peoria Producers Dairy.

36. April 1, 1973—acquired Willer Dairy of Quincy, Ill.; milk receipts of 2 million pounds annually from 5 producers; markets ice cream and bottled milk; annual sales of \$500,000; both procurement and distribution in the Quincy area.

Comments: When the former owner, Richard Willer, passed away in the fall of 1972, plant operations were carried on by his wife and a few employee-stockholders. After the acquisition, the plant was used to produce ice cream, with the bottled milk for distribution supplied by Prairie Farms' Quincy plant.

37. August 1, 1973—acquired a distribution center at Mayfield, Ky.; distribution of fluid milk products in Mayfield and vicinity.

38. July 1, 1974—acquired a Dairy Queen International mix plant at Springfield, Ill.; markets ice cream mix in south central Illinois.

Comments: Dairy Queen International wanted to get out of the business of producing ice cream mix. It was being supplied in St. Louis and Illinois by Prairie Farms, so it sold its mix plant in Springfield to Prairie Farms at book value. The manager and all employees were kept by Prairie Farms. This acquisition brought the Prairie Farms mix production to about 4 million gallons a year.

39. November 1, 1974—acquired Sunnyhill Dairy of Cape Girardeau, Mo.; milk receipts of 14.5 million pounds annually; markets bottled milk; annual sales of \$2 million; distribution in Memphis, Cape Girardeau, and surrounding areas including parts of Arkansas.

Comments: This operation was purchased to get a new sales area. Of the \$2 million annual sales, about 40 percent were in Memphis, Tenn; 20 percent in the state of Arkansas; and the remaining 40 percent in the Cape Girardeau area. Because of low plant capacity, the plant was not purchased and sales volume was handled by the Carbondale and Olney Prairie Farms plants. The manager and sales staff remained with Prairie Farms and operated the unit as a distribution point.

40. June 1, 1975—acquired Ray's Creamery of Logansport, Ind.; milk receipts of 10 million pounds annually from Prairie Farms; markets bottled milk; annual sales of \$1.5 million; distribution in the Logansport area.

Comments: This unit was acquired to gain a sales area for Prairie Farms. It was used only as a distribution point supplied from the Olney plant.

41. January 1, 1977—acquired Webers Dairy of Joliet, Ill.; milk receipts of 20 million pounds annually from 24 producers plus some AMPI members; markets bottled milk; annual sales of \$3.6 million; both procurement and distribution in the Joliet area.

Comments: This dairy was purchased to get sales volume in northern Illinois, a new sales area for Prairie Farms. Much of its supply was to come from Prairie Farms' Peoria plant. The Weber family had been experiencing operating losses and was unwilling to continue operating the business at a loss. In addition to the 24 local producers unaffiliated with any cooperative, the AMPI shippers were given a chance to become members of Prairie Farms.

42. April 1, 1977—acquired Senn Soldwedel, Inc., of Canton and Pekin, Ill.; milk receipts of 14.5 million pounds annually; markets bottled milk, condensed milk, cottage cheese, ice cream and ice cream mix; annual sales of \$4 million; distribution in the Canton and Pekin areas.

Comments: After the acquisition, the Pekin, Ill., plant was closed. It had produced the ice cream and had also operated a retail store. The Canton plant remained open, with the operating personnel remaining with Prairie Farms (including Jack Soldwedel as manager for Prairie Farms' Soldwedel Division). Products for distribution through this outlet came from the Prairie Farms plants at Quincy and Peoria.

43. June 25, 1977—acquired Swift Ice Cream Company of Decatur, Ill.; milk receipts of 55 million pounds annually; markets ice cream; distribution in central Illinois.

Comments: Swift Company wanted to either sell this plant at book value or close it down. Prairie Farms purchased the plant to add to its ice cream manufacturing capacity.

44. September 7, 1977—acquired All Star Dairy of Omaha, Neb.; markets fluid milk products; distribution in the Omaha area.

Comments: This dairy had experienced bankruptcy and had become a distribution point. Prairie Farms later closed the unit and moved the distribution point to Fremont, Nebr., just northwest of Omaha. It distributed milk packaged in the Des Moines, Ia., plant.

45. October 1, 1977—acquired Hillside Dairy of Fremont, Nebr.; markets fluid milk products; distributes in the Omaha and Fremont areas.

Comments: The dairy had been operated by an individual producer-distributor. It was purchased to gain another sales area. The combination of All Star Dairy and Hillside Dairy was to be operated by Prairie Farms as a distributing point.

46. January 1, 1978—acquired Owensboro Ice Cream and Milk Products Company of Owensboro, Ky.; markets bottled milk and ice cream; annual sales of \$5.3 million; distributes in the Owensboro area.

Comments: The company was acquired to gain another sales area.

47. October 1978—acquired a joint interest with Dairymen, Incorporated, in Ideal-American Dairy of Evansville, Ind.; milk supplied by Dairymen Inc.; markets fluid milk products; annual sales of \$10 million; distributes in Evansville and surrounding areas including parts of Kentucky.

Comments: This operation was started in October of 1978 as a joint venture (Prairie Farms and Dairymen, Inc.). The two cooperatives split the acquisition cost equally. Prairie Farms agreed to supply the management and to combine its Owensboro, Ky., distribution point with this operation on October 1, 1979. In turn Dairymen, Inc., agreed to supply the milk needed. The single operation is the result of the combination of two separate dairies, Ideal Dairy and American Dairy, in Evansville, Ind.

48. October 1979—began joint venture operations of Hiland Dairy in Springfield, Mo.; milk receipts of 180 million pounds annually from Mid-America; markets bottled milk and ice cream; annual sales of \$45 million; distributes in Springfield, Mo., and vicinity.

Comments: Mid-America and Prairie Farms split the acquisition costs equally. Mid-America supplies the milk and other dairy ingredients for the operations. Prairie Farms has the responsibility for management and operation of the business.

To summarize, these acquisitions were outright purchases of assets of firms ranging from \$250,000 to \$7 million in annual sales. A number of assets acquired did not include actual plant operations. Some of these were distribution points with one or more warehouses and distribution facilities such as trucks, while others were bankrupt dairies that had been closed down. Certain bankrupt dairies were acquired for their customer accounts and the sales area in which they were located. Prairie Farms paid between \$20,000 and \$2 million for each acquisition. These acquisitions were paid for in cash and/or deferred payment arrangements with the previous owners, and some included covenants with previous owners not to compete for a given period of time. A monetary value was attached to such a

covenant. With outright purchases, payment was never made in the form of stock. Situations in which payment was made in the form of stock were mergers or consolidations with other cooperatives.

The total payment for these acquisitions over the years was in excess of \$10 million. This, however, represents a simple totalling of the amounts paid over a period of time, as accurately as can be determined. In some cases, these involved the value put on a covenant. There may also have been incidental expenses not specifically made part of the records. Additionally, not all of the acquisitions were simple purchases. In at least one instance, a unit was first leased and later purchased outright. (Of course, the dollars paid during the earlier years of the period had a higher value than those paid during the later years of the period due to inflation.) Generally, Prairie Farms' acquisitions were within or on the fringes of the cooperative's established distribution areas at the time of purchase. Expansion outside of the established distribution areas was accomplished through merger or consolidation with other cooperatives.

The units merged with the Carlinville operation, and subsequent organizations, ranged in sales volume from about \$1 million to about \$4 million annually. The merger agreements usually dealt with some type of exchange of stock (stock in the previously existing organizations being exchanged for stock in the new organization). In other cases, however, there was simple recognition of the previously issued stock in the old organizations as representative of ownership in the surviving organization. Additionally, there was usually an agreement involving the method and time of repayments of retained margins held in the merging organizations.

Carlinville's merger activities began in December 1956 with the consolidation of the Carlinville and Carbondale operations. In April 1957, Olney was merged with this group. The newly formed cooperative was named Prairie Farms of Southern Illinois. The basic reason for this first merger was to release the three organizations involved from the need to maintain duplicate uneconomic manufacturing, bottling, and distribution operations. After the merger, Carlinville was turned almost exclusively into a bottling operation. Carbondale, on the other hand, was made exclusively into a manufacturing operation, producing cottage cheese and other manufactured items for the cooperative's sales line. Olney was not changed to as great a degree as the other two, continuing both bottling and manufacturing operations after the merger. The number of members and sales volume of the newly formed cooperative was about three times the size of any of the previously existing operations. At the time of the merger, the relative sizes of the combining units were:

Carbondale—1,000 patrons, 64 million pounds of milk annually, with annual sales of \$3.3 million; Olney—750

patrons, 50 million pounds of milk annually, with annual sales of \$2.5 million; Carlinville—700 patrons, 70 million pounds of milk annually, with annual sales of \$3 million. The location of these three plants are shown in Figure 3. The Carlinville plant is in Macoupin County, 60 miles northeast of St. Louis. Carbondale is in Jackson County, 40 miles north of Cairo, Illinois. Olney is in Richland County, 25 miles west of the Wabash River, which forms the border between Illinois and Indiana at that point. The location of these three plants describes a triangle of roughly equidistant points, perhaps 120 miles from one another.

The second major consolidation in March 1, 1962, combined Prairie Farms of Southern Illinois with Producers Dairy of Danville and Prairie Farms of Western Illinois. At this time, Prairie Farms of Southern Illinois had 1,500 patrons, with total annual sales of \$12 million and a total milk volume of 110 million pounds annually. Producers Dairy of Danville had about 250 patrons, with an annual milk volume of 60 million pounds and an annual sales volume of \$3 million. Prairie Farms of Western Illinois had about 300 patrons, with an annual milk volume of 60 million pounds and \$3 million in annual sales. Locations of units that comprised this new consolidation are shown in figure 3. The units that made up Prairie Farms of Western Illinois were roughly in a straight line extending from Adair County in northeastern Missouri, eastward to Morgan County in west central Illinois, a distance of about 100 miles. The Keokuk, Ia., location, likewise in this group, was somewhat north of this line.

Producers Dairy of Danville included three units: one in Champaign County, Ill.; one in Vermilion County, Ill., east of Champaign County near the Indiana border; and one at Lafayette, Ind. The distance between the two farthest apart is about 70 miles.

After the second major merger, the newly formed cooperative, renamed Prairie Farms Dairy, Inc., included within its procurement and distribution area the southern two-thirds of Illinois, the Northeastern quarter of Missouri, the southeastern tip of Iowa, and part of west-central Indiana. Later expansions took Prairie Farms further into Missouri, southwestern Kentucky, southern and central Indiana, and northern and western Iowa. The northern three or four tiers of counties in Illinois have been avoided in Prairie Farms' expansion, with the exception of Will County, where Prairie Farms opened a distribution point at Joliet, Ill. The Joliet distribution point is the cooperative's closest contact with the Chicago area.

Growth through merger and outright acquisition of other dairy processing operations has stemmed from the tough competition Prairie Farms experienced from the mid-1950's.

Successful operation required both increased sales and gains in efficiency of operations.

The entrance and growth of supermarket chains with new marketing techniques covering larger retail sales areas tended to shift the balance of market power toward larger purchasers of dairy products. These larger retailers found themselves in the advantageous position of having many small dairies from which to choose in purchasing their dairy products. At the same time, the small dairies found the volume of sales to small independent wholesale outlets was not expanding sufficiently to support them, because a growing percent of the retail dairy sales were becoming concentrated within a smaller group of larger volume supermarket firms. Technological advances of the times, including improved roadways and transportation equipment, improved packaging methods and materials, and new production technologies, aided in the development of both the larger retail sales outlets and larger dairy processors.

Expanding their area of procurement and sales provided individual dairies such as Prairie Farms with wide distribution and efficiency necessary to allow a more balanced relationship with wholesale accounts. In addition, there were considerable cost savings from centralizing the production of specific dairy products at fewer and larger plants for distribution over the expanded sales area. Gains in efficiency of operation were a major goal from the beginning of Prairie Farms' plan for expansion through merger and acquisition. The rapid realization of such gains served to spur it toward further mergers and acquisitions. The following quote from the Prairie Farms house organ in 1968 illustrates this: "When a company can maintain a record of successful acquisitions, it is reasonable to expect that the expanding of the sales volume will be brought about by additional companies joining the group."⁵

Prairie Farms' past growth has been, therefore, the result of internal growth aided to a major extent by mergers with other cooperatives and purchases of other dairy firms. In October 1978, Prairie Farms and Dairymen, Inc., formed a joint venture at Evansville, Indiana. Under their agreement, Dairymen, Inc., supplies the Ideal-American operation at Evansville with its milk supply, while Prairie Farms supplies the managerial expertise and additional sales outlets for the operation. Late in 1979, another joint venture was finalized with Mid-America at Springfield, Mo. This pooling of resources would appear beneficial to the members of both organizations. The joint ventures will be discussed in greater detail later.

Facilities and Operations

Prairie Farms handled 913.5 million pounds of milk in fiscal year 1978, 619.9 million pounds of which was used in Class I, fluid milk products, and the balance in making ice cream, ice cream mix, cottage cheese, specialty products, and butter. These products were valued at \$206.3 million, and Prairie Farms had \$45.5 million in assets.

Prairie Farms is incorporated as a cooperative in Illinois and has elected not to operate as an "exempt" cooperative under section 521 of the Internal Revenue Code.

PFD Supply Company (PFD Supply), a subsidiary of Prairie Farms, was formed March 28, 1969, to handle sales of nondairy products for Prairie Farms. Such products include paper supplies, fruit flavors, and food items for drive-ins that purchase ice cream mix from Prairie Farms. Prairie Farms and PFD Supply have the same board of directors and officers. PFD Supply operates out of the Granite City division of Prairie Farms. It started with sales of dairy products to Dairy Queen in the St. Louis area, then was enlarged to provide Dairy Queen additional food products and other supplies. Gradually PFD Supply began to provide other drive-in fast food type outlets with the same type of services. The other outlets are McDonald's, Wendy's, Burger King, Burger Chef, and possibly others. For these, PFD Supply furnishes almost all requirements including meat, ketchup, onions, potatoes, some dairy products and paper supplies.

Within this arrangement, PFD Supply is told where to acquire the products for, say, McDonald's; and those suppliers are given specifications by McDonald's and told what Prairie Farms will be purchasing. PFD Supply then purchases these products and delivers them to the McDonald's outlet, charging cost plus a handling fee. This is apparently a low-margin operation, profitable because of its high volume. It began when Prairie Farms acquired Aro-Dressel Dairy in St. Louis. At the time of acquisition, Aro-Dressel was supplying a small volume of nondairy products to the many drive-ins in the St. Louis area. PFD Supply was formed to handle such business activity.

From August 2, 1969, to September 30, 1969, Prairie Farms acquired a group of three ice cream novelty companies. These were the Chamberlin Ice Cream Company Incorporated, Fre-Zert Incorporated and Vix Ice Cream Company. Two of these were in St. Louis, Mo., and the other in Lafayette, Ind. A separate corporation was set up for this group named Ice Cream Specialties, Inc. This corporation was expanded in 1971 with the establishment of a novelty ice cream plant in Marietta, Ga., and now distributes over a 13-State area. This expansion of the Prairie

⁵Prairie Farms News, Feb. 1968.

Farms operation was done for further diversification. Ice cream novelties offers strong sales in the summer months when bottled milk sales are low compared to milk production.

The cooperative follows a policy of specializing the production of a particular plant to the maximum extent feasible. From each plant, this product is distributed to other distribution points throughout the Prairie Farms trade area. The section on distribution system and policies discusses this, as well as the principal competitors in greater detail.

The major competitors in procurement are: (1) Mid-America; (2) Mississippi Valley; (3) Kraft at the northern end of the procurement territory; and (4) Associated Milk Producers, Inc. (AMPI), to a minor extent.

Prairie Farms had 700 producers as of September 30, 1978. It expects to procure 60 percent of total milk requirements from these producers and 40 percent in bulk from other cooperatives. These other cooperatives include, in current order of volume: Wisconsin Dairies (including Meadowland Dairy Association), Land O'Lakes, Mid-America, Mississippi Valley, and Dairymen, Inc. About five additional cooperatives currently have a combined volume of sales to Prairie Farms of around 50 million pounds annually.

In 1977, Prairie Farms purchased about 55 percent of its fluid milk supply from its own patrons and 45 percent from others. However, if the milk equivalent volume for other products purchased such as cream, powder, and condensed milk are included, the volume purchased from patrons shrinks to around 50 percent of the total milk bought. (In 1978, direct ship was 45 percent and other cooperatives, 55 percent.)

By virtue of the sale, each cooperative that sells to Prairie Farms becomes a member and participates in patronage dividends. Other firms, such as Kraft, Beatrice, Borden, and Milnot from whom Prairie Farms occasionally buys milk, are not qualified to be members because they are non-cooperative organizations. However, to the extent that milk receipts from an individual producer not a member of another cooperative delivering milk to Prairie Farms can be identified, the producer would be viewed as a member and directly paid patronage refunds.

Products Sold

Table 3 and appendix tables 4 and 5 show both the dollar value of sales and their distribution in percentage terms by product categories for 1938 through 1978. The accompanying figure 4 gives a graphic representation of the distribution of product sales groups in percentage terms.

From 1938 through 1942, Carlinville's operations solely involved the procurement of farm-separated cream for use in the manufacture of butter. This total focus on butter production ended in 1943, when Carlinville acquired milk drying equipment and began purchasing whole milk as well as farm-separated cream from its patrons. Then, butter sales began a rapid decline while total sales continued to increase year to year at a rapid pace.

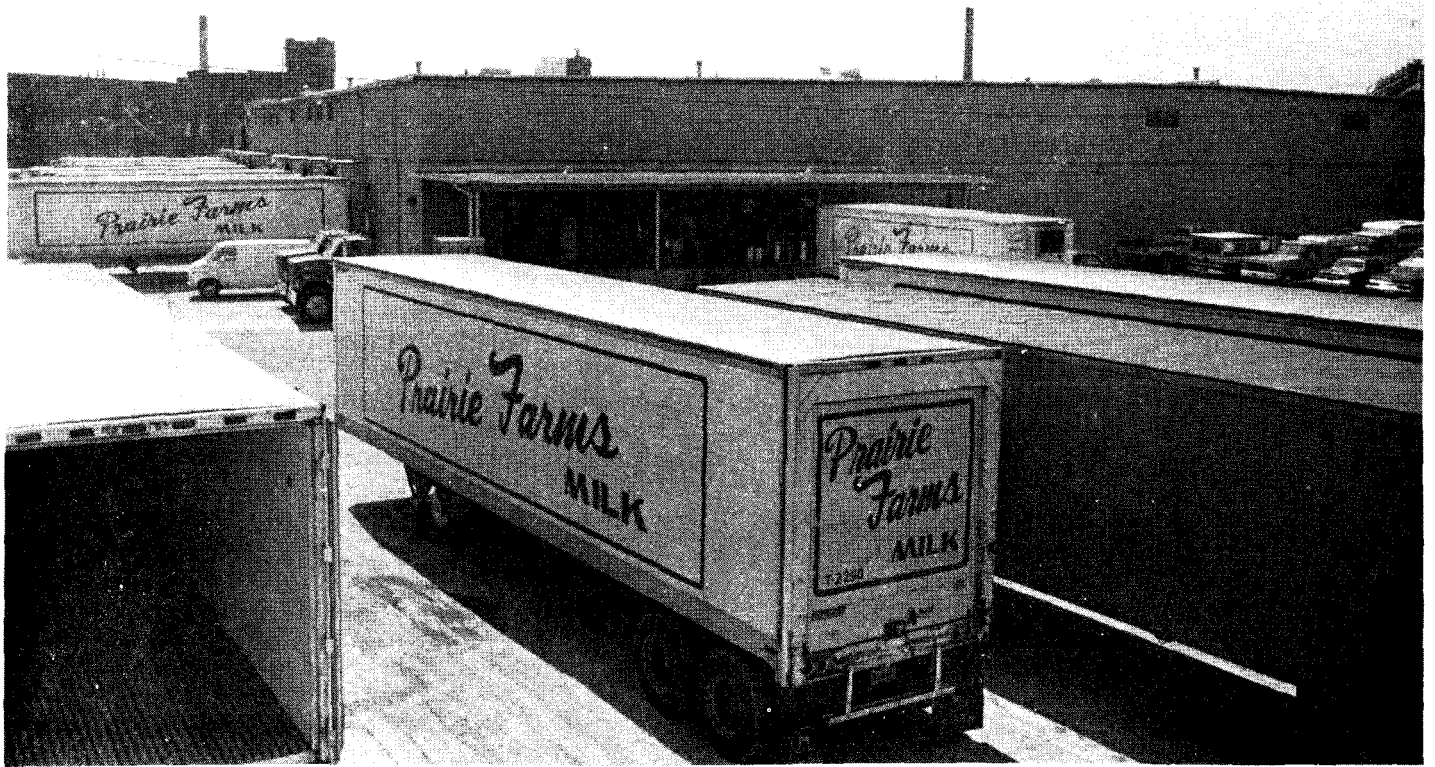
With butter declining in importance in the sales mix, bulk cream, powder, condensed, and bulk whole milk began to take on major roles. The growth in importance of these sales categories was short-lived, however, (with the exception of bulk whole milk), and since 1948, bottled products and, to a lesser extent, bulk whole milk took over as major sales categories.

Bulk whole milk's importance as a sales category in the 1950's and early 1960's is closely tied to Prairie Farms' movement toward emphasis on bottled product sales. Much of this bulk milk was being supplied to other bottling plants, many of which were later assimilated into the Prairie Farms organization. As the assimilation took place, what had been registered as sales of bulk whole milk became internalized to the larger organization and thus changed to bottled milk sales.

Ice cream became a component of Prairie Farms' product mix on a small scale in 1947, while cottage cheese production began late in 1949. By 1950, both products had become somewhat more important and separated from the miscellaneous sales in the listing of product categories. Bottled product sales were also taken out of the miscellaneous category in 1950. The inclusion of these three products in the miscellaneous category from 1947 through 1949 and their emergence as independent product categories in 1950 explains the bulge in the miscellaneous category for those years.

Prairie Farms experienced other sales category shifts in the mid-1960's in addition to the continued upward trend in importance of bottled product sales noted above. By 1964, sales of condensed milk and powder disappeared as sales categories as Prairie Farms continued its move toward the more profitable Class I sales and away from these manufactured products (the large manufacturing facility at Mt. Sterling, Ill., was closed late in 1962).

In 1967, Prairie Farms first began breaking out ice cream novelties as a sales category and began to register sales in a category later labeled PFD Supply. The ice cream novelty sales were quickly expanded in 1969, with the acquisition of a group of three producing plants: one in Lafayette, Ind. and two in St. Louis, Mo. Shortly after the acquisition of these three production facilities, Prairie Farms began con-



Prairie Farms uses various exhibits to promote products. The balloon was rented for a Springfield, Ill., baseball game. The display is for the annual food exhibitors' convention in Indianapolis, Ind. The Exhibit of the "total" picture—the cows, the farm, and the cooperative products—is on the Wendell Armour farm near Carlinville.



Table 3—Dairy products sold by Prairie Farms during selected fiscal year, 1939-78¹

Item	1978	1973	1968	1963	1958	1953	1948	1943	1939
<i>Million pounds</i>									
Bottled products.....	99,882	53,383	25,880	10,000	3,297	1,041	-	-	-
Butter.....	13,859	5,582	2,992	1,048	1,416	357	531	226	84
Whole milk (bulk)	11,872	5,919	2,422	2,061	2,030	71	254	(²)	-
Cottage cheese	7,993	3,659	1,400	833	412	48	-	-	-
Ice cream & milk	17,279	5,818	3,306	656	161	79	(³)	-	-
Cream.....	6,643	2,154	325	1,177	818	246	718	226	-
Novelties	14,006	8,078	321	-	-	-	-	-	-
PFD supply	30,767	9,683	538	-	-	-	-	-	-
Condensed milk.....	-	-	-	599	812	18	144	-	-
Milk powder	-	-	-	376	446	76	138	75	-
Miscellaneous	6,988	3,378	1,065	521	445	60	96	10	5
Discounts	(2,968)	(1,867)	(621)	(289)	-	-	-	-	-
Total ⁴	206,321	95,787	37,628	16,982	9,837	1,996	1,881	537	89
<i>Percent of total</i>									
Bottled products.....	47.7	54.7	67.7	57.9	33.6	52.1	-	-	-
Butter.....	6.6	5.7	7.8	6.1	14.4	17.9	28.2	42.1	94.4
Whole Milk (bulk)	5.7	6.1	6.3	11.9	20.6	3.6	13.5	(²)	-
Cottage Cheese	3.8	3.7	3.7	4.8	4.2	2.4	-	-	-
Ice Cream & Mix	8.3	5.9	8.6	3.8	1.6	4.0	(³)	-	-
Cream.....	3.2	2.2	.9	6.8	8.3	12.3	38.2	42.1	-
Novelties	6.7	8.3	.8	-	-	-	-	-	-
PFD Supply	14.7	9.9	1.4	-	-	-	-	-	-
Condensed Milk	-	-	-	3.5	8.3	.9	7.7	-	-
Milk Powder	-	-	-	2.2	4.5	3.8	7.3	14.0	-
Miscellaneous	3.3	3.5	2.8	3.0	4.5	3.0	5.1	1.8	5.6
Discounts	(1.4)	(1.9)	(1.6)	(1.7)	-	-	-	-	-
Total 4	98.6	98.1	98.4	98.3	100.0	100.0	100.0	100.0	100.0

(-) means "none."

¹ Data fiscal years ending September 30 except for 1963 that ended February 28.

² Amount included in cream sales.

³ Amount included in miscellaneous.

⁴ Net after discounts.

struction of a fourth novelty plant in Marietta, Ga., which completed the organization of Prairie Farms' "Ice Cream Specialties" group. In 1980, this plant was sold (partly because of its distance from the rest of Prairie Farms' sales territory).

The history of the sales category labeled PFD Supply runs back to Prairie Farms' acquisition early in 1967 of the Aro-Dressel Dairy headquartered across the river from St. Louis in Granite City, Ill. In addition to a bottling facility in Granite City and a large butter manufacturing plant in St. Louis, the acquisition brought with it a considerable volume of supply sales to drive-in food establishments such as Dairy Queen. To separate these nondairy sales from the remainder of Prairie Farms' operations, PFD Supply corporation was formed on March 28, 1969, as a subsidiary of Prairie Farms. These supply sales, involving everything from paper products to the various nondairy food items required by such fast-food chains as McDonald's, Burger

King, and Dairy Queen, have expanded steadily and continue to grow in importance to Prairie Farms as a sales category.

In 1978, Prairie Farms' sales categories, in order of their share of total dollar sales were as follows:

Item	Percent of Total
Bottled products	47.7
PFD Supply	14.7
Ice cream and ice cream mix	8.3
Ice cream novelties.....	6.7
Butter	6.6
Bulk whole milk	5.7
Cottage cheese.....	3.8
Bulk cream.....	3.2
Miscellaneous	3.3
Total	100.0

Distribution System and Policies

Because Prairie Farms is a cooperative primarily engaged in processing and distributing bottled milk and fluid milk products, it seems desirable to describe its distribution system and policies in some detail.

Facilities and Plant Specialization

Figure 3 is a map that shows the present distribution points and 18 operating plants of the Prairie Farms organization. Most of the operating plants are also distribution points. Of the 23 distributing points without plants, 12 are in Illinois, 6 in Indiana, 3 in Missouri, 1 in Nebraska, and 1 in Tennessee. In general, all products handled by Prairie Farms are distributed from these distribution points. Major exceptions are the ice cream specialties plants in Marietta, Ga., Lafayette, Ind., and the two novelty plants in St. Louis.

Operating plant locations and production activities follow:

Canton, Ill.	— bottling, condensing, ice cream mix, cottage cheese, and ice cream
Carbondale, Ill. (2)	— one for bottling and one for cottage cheese
Carlinville, Ill.	— bottling
Decatur, Ill.	— ice cream and ice cream novelties
Granite City, Ill.	— bottling and ice cream mix
O'Fallon, Ill.	— ice cream and ice cream mix
Olney, Ill.	— bottling
Peoria, Ill.	— bottling
Quincy, Ill.	— bottling
Quincy, Ill.	— cottage cheese and yogurt
Marietta, Ga.	— ice cream specialties (sold early in 1980)
Lafayette, Ind.	— ice cream specialties
Des Moines, Iowa	— bottling, cottage cheese, ice cream mix, and selected other products

Owensboro, Ky. — bottling and ice cream

Springfield, Ill. — ice cream mix

St. Louis, Mo. — butter (largest butter manufacturing plant in Missouri)

St. Louis, Mo. — ice cream specialties

The processing plants are specialized, usually to one product or a small number of closely related ones. Five plants process only packaged milk, three process only milk and ice cream mix or ice cream, and three confine production to ice cream specialties. There is one butter plant, and similar specialization on cottage cheese and related products. Only the Des Moines plant makes several products. There are, of course, advantages to specializing production, such as economies of volume and making best use of facilities and personnel that existed when an operation was acquired.

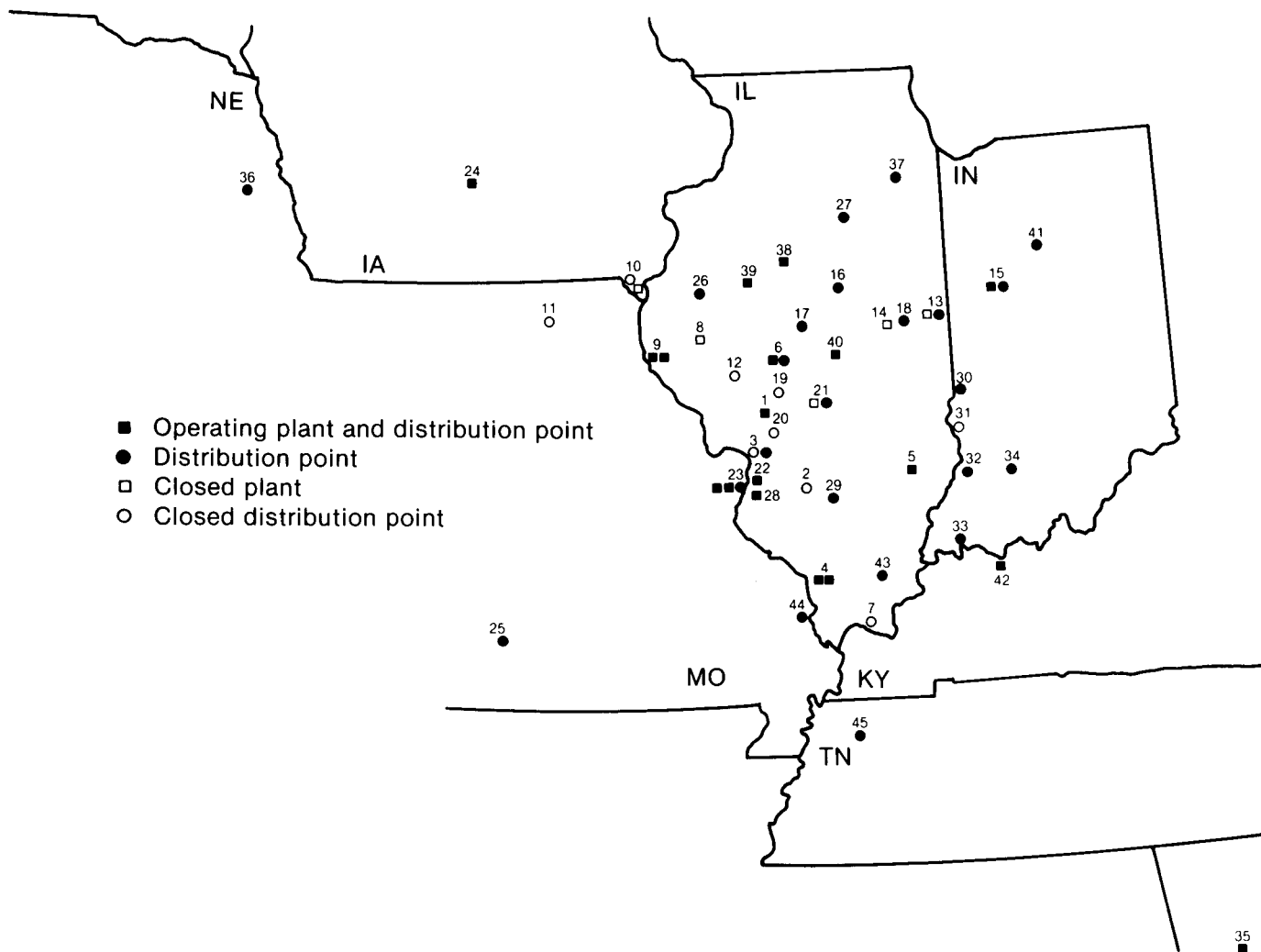
While the operating plants are specialized, they are clustered around Prairie Farms' trade area to readily supply all distribution points with whatever line of product they require. Possible savings in transportation cost from producing finished products at an increased number of locations with perhaps less specialization at each operating plant would likely be offset by a combination of (1) increased per-unit costs of each product resulting from the lower volume of production at each of the expanded number of plants, (2) an increase in the number of production specialists required to manage a large number of plant operations, and (3) a possible increase in capital expenditure requirements to set up smaller but more numerous production facilities.

Decentralized Pricing Policy

Pricing bottled milk and other processed products essentially is decentralized at Prairie Farms, with a few exceptions. Within rather broad guidelines laid down by the general sales manager, the specific prices for each product are issued by the local manager of the plant or distribution point. These managers are delegated both authority and responsibility to decide prices. When there is a change in the price paid for raw milk, the general sales manager issues a memorandum recommending what this raw milk price change should mean per gallon or other unit of product. The local manager has his previous price list and is committed to make adjustments to meet competition, although Prairie Farms may refuse to meet an extreme cut. For example, recently Prairie Farms refused to cut prices 20 cents per gallon in southern Illinois to meet competition of

Figure 3

Facilities Operated by Prairie Farms by Type and Location, 1938-78*



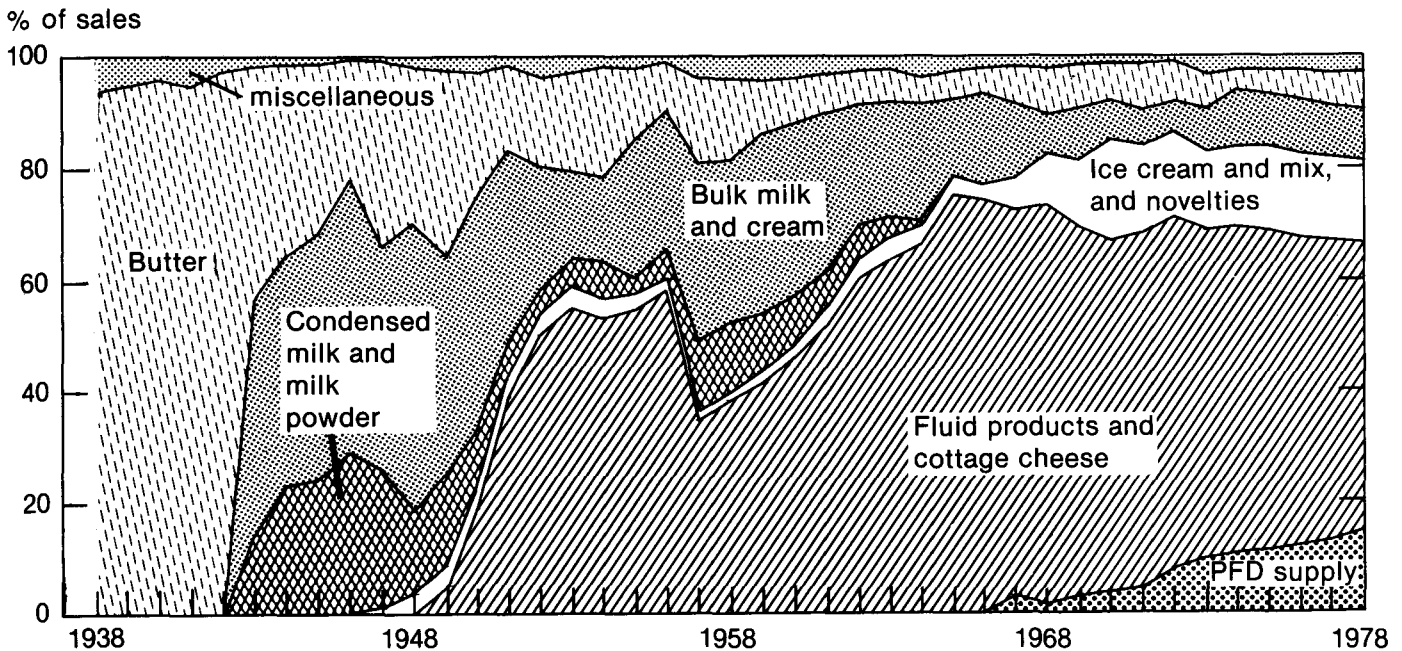
*May not include some facilities operated for a short time.

Identification and date acquired

1. Carlinville, IL 1938	13. Danville, IL 1962	24. Des Moines, IA 1970	35. Marietta, GA 1971
2. Carlyle, IL 1954	14. Champaign, IL 1962	25. Springfield, MO 1970	36. Fremont, NE 1977
3. Alton, IL 1954 & 1960	15. Lafayette, IN 1962, 1969	26. Macomb, IL 1972	37. Joliet, IL 1977
4. Carbondale, IL 1956 & 1964	16. Bloomington, IL 1964	27. Streator, IL 1971	38. Peoria, IL 1972
5. Olney, IL 1957	17. Lincoln, IL 1964	28. O'Fallon, IL 1968	39. Canton, IL 1977
6. Springfield, IL 1960 & 1974	18. Urbana, IL 1967	29. Centralia, IL 1968	40. Decatur, IL 1977
7. Metropolis, IL 1960	19. Virden, IL 1965	30. Terra Haute, IN 1972	41. Logansport, IN 1975
8. Mt. Sterling, IL 1962	20. Gillespie, IL 1964	31. Sullivan, IN 1972	42. Owensboro, KY 1978
9. Quincy, IL 1962, 1967, 1973	21. Pana, IL 1964	32. Vincennes, IN 1972	43. Harrisburg, IL 1973
10. Keokuk, IA 1962, 1966	22. Granite City, IL 1968	33. Evansville, IN 1972	44. Cape Girardeau, MO 1974
11. Kirksville, MO 1962	23. St. Louis, MO 1967, 1969	34. Loogootee, IN 1972	45. So. Fulton, TN 1973
12. Jacksonville, IL 1962			

Figure 4

Prairie Farms' Sales by Product Category, 1938-78



a large competitor, and lost five supermarket accounts. However, these markets came back later at the Prairie Farms price.

As in the 1950's, Prairie Farms holds a major share of the market in many of the small towns in southern and central Illinois. This means Prairie Farms is vulnerable to the threat of price cutting by many other dairies who seek a larger share in these markets.

An exception to decentralized pricing is that on some accounts General Manager Gourley will make the final pricing decision.

Uniform Pricing Areas

Figure 5 is intended to show roughly the pricing areas, or areas surrounding a plant or distribution point over which a uniform set of prices may be expected to prevail at any time. There are 21 areas, smaller than the number of plants and distribution points combined. The general sales manager is furnished a copy of the price schedule for each by the local manager.

In Prairie Farms' trade area, the lowest prices are usually in the St. Louis and the northern Illinois and Joliet areas. Carlinville tends to have prices above the average of all areas.

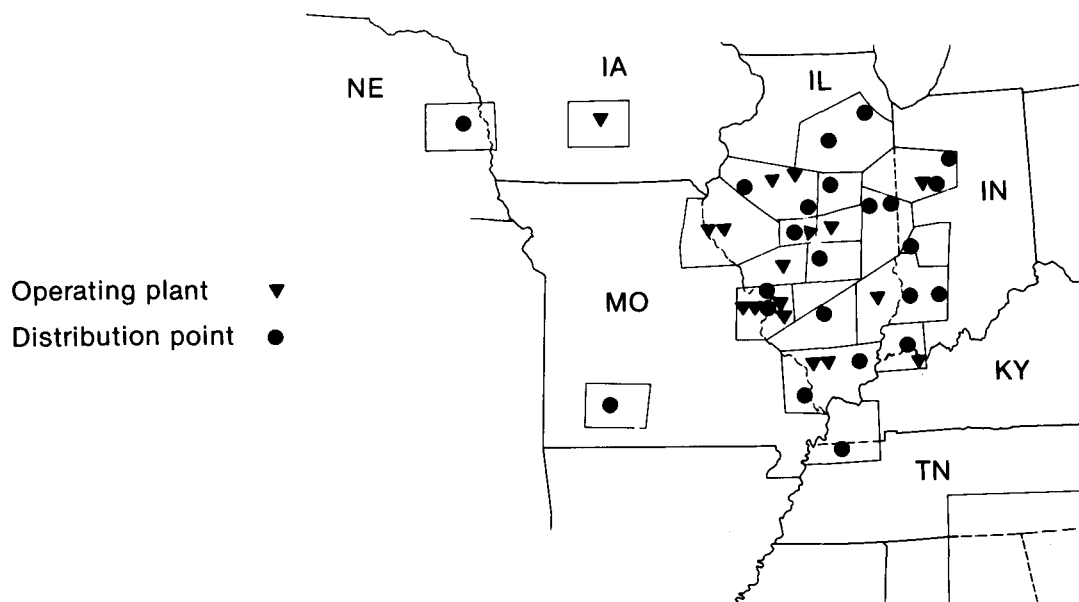
Prices do not vary much over the entire Prairie Farms trade area. Differences reflect different costs of the various delivery systems and unusually competitive situations that may develop.

Prairie Farms has a distribution point at Joliet and competes with a full line of fluid milk products in all Illinois areas south of there, but does not compete in Chicago, except for distributing ice cream in the Chicago suburbs. The closest Prairie Farms bottling plant is at Peoria, about 150 miles southwest of Chicago. In the experience of Prairie Farms, conditions are more favorable for developing markets in going from north to south than working in the reverse direction. Furthermore, Chicago is viewed as an unusually difficult market. Borden left the market; Bowman, once the largest and most profitable dealer, was forced into liquidation; and the attrition rate among Chicago dealers has been quite high. Also Jewel Tea Co. and Dominic's have their own processing facilities. Other extenuating circumstances could be cited, so Prairie Farms appears unlikely to move further toward Chicago in the foreseeable future.

Some observers suggest that the Prairie Farms' decision not to go into Chicago with packaged milk may have been one of management's wiser decisions.

Figure 5

Prairie Farms' Uniform Pricing Areas for Product Sales, 1978



Major Competitors

The principal Prairie Farms competitors by major trade areas are listed below. Most of them compete all over the designated trade area.

In Illinois and Missouri:

1. Dean Foods Co. (south to Interstate 70, competing especially for the filling station business)
2. Beatrice Foods Co. (Meadow Gold)
3. Borden, Inc.
4. Kraft, Inc. (Sealtest)
5. Holland Dairy, Inc.
6. Pevely Dairy Co. (up to Springfield, Ill., from St. Louis)
7. Hawthorn Melody

In southern Illinois:

1. Beatrice Foods Co.
2. Turner Dairy, Inc. (out of Kentucky)

3. Foremost Dairies

4. Packet Dairy

In Iowa:

1. Beatrice Foods Co.
2. Anderson-Erickson Dairy Co.
3. Mid-America Dairymen, Inc.
4. Mississippi Valley Milk Producers Association
5. Wells Dairy, Inc.
6. Marigold Foods, Inc. (out of Rochester, Minnesota)

There are also the chains that package their own private label products, which are usually not in direct competition. These include:

1. Kroger Dairy
2. Jewel Tea Co.
3. Safeway Stores, Inc. (in northern Missouri)
4. Southland Corp. (in Kentucky)

Sales Discounts

Prairie Farms has quantity discounts schedules in some areas. These discounts may be in four categories based on volume per stop. These may be 0 to 49 cases, 50 to 99, 100 to 149, and 150 or more cases. The difference between the lowest and the highest discount may be 7.5 cents a gallon for regular or 2 percent milk. In St. Louis, the categories are 10 to 24, 25 to 49, and 50 or more cases per stop. There is also a schedule of drop-ship prices for the big chains serviced by the hourly wage routedriver. On the private labels, the large chains are given the choice of two levels of service: (1) delivery to the cooler 3 days a week and preordering for the next delivery with no returns accepted; and (2) delivery to the cooler 3 days a week, all returns accepted for credit, the driver making customer's order for the next delivery. The latter is 3 cents higher per gallon. Prairie Farms will provide dispensers to restaurants, but the restaurant gets a 10 cents per gallon discount, if it furnishes its own.

Methods of Wholesale Delivery

Prairie Farms uses three different methods for wholesale delivery of its milk and fluid products. They are:

(1) **To distributors.** The distributor takes title to the milk at the dock of the plant, although, occasionally, Prairie Farms may deliver a trailerload to a distributor's cold storage facility. From there, the milk is the property of the distributor (with the exception of private labels, which will be explained later), and Prairie Farms has neither responsibility for the pricing of the milk and other products nor responsibility for competitive practices. Prairie Farms does not encourage additional distributors because of problems in checking their credit and other background. These distributors handle about 5 percent of the total dairy products sold by Prairie Farms.⁶ Prairie Farms does the pricing for its private label milk. Private label packaging is arranged under contract directly with Prairie Farms.

(2) **To vendors.** A vendor, as defined by Prairie Farms, is an individual that Prairie Farms pays so much per unit for delivering milk. Vendors may be union or nonunion. They own the equipment, have title to their own routes, turn in money received in payment for milk each day, and get paid weekly by Prairie Farms. If they seek to sell the route, the sale must be approved by Prairie Farms. Some of these vendors were once distributors, and others may have owned dairies. However vendors may get the route, they are responsible for building up the route and developing customers. Vendors account for 15 percent of total gross sales.

⁶Prairie Farms has also found that taking distributors from other processor-wholesalers can lead to problems if the distributor has outstanding bills with the previous supplier. In many cases, distributors have not been able to pay their bills, and Prairie Farms has been forced to buy them out or hire them as company routedrivers to work off the money owed.

(3) **To company-owned routes.** There are two kinds of routedrivers: (a) those paid on an hourly basis, who account for about 40 percent of the total company-owned routes, and (b) those paid on a commission basis. These account for about 60 percent of all routes. Commissions may be paid with or without base pay. The commission is either a percentage of sales or based on the number of units. The commission route drivers paid on the basis of units generally receive a higher base pay than those receiving a percent of sales plus base pay. Since inflation has been in full stride, some of the route drivers paid on a percentage basis have found their percentages adjusted downward, because the total sales volume has been increasing with inflation. At Alton and Granite City, all the route drivers are paid on an hourly basis. Some at Des Moines are paid on an hourly basis, and occasionally one is paid on an hourly basis at other points out in the country. The commission drivers work longer hours than route drivers paid on an hourly basis. The commission drivers are usually used for the full-service accounts. The hourly paid drivers are most likely to be used for the large supermarket chains receiving drop deliveries (at the stores' receiving docks). Eighty percent of total sales is over the company-owned routes.

Prairie Farms has about 25 distributors, 75 vendors, and about 500 company-paid route drivers. In addition, 40 or 50 individuals operate tractors that pull semitrailers hauling the product from the processing plant to the distribution point or from plant to plant. The semitrailers are owned by Prairie Farms.

Sales staff, supervisors, and distribution point managers who do selling are about 65 in number. Of this, 17 are distribution point managers. About 25 percent of the total business done by Prairie Farms is through distribution points.

In addition to the Prairie Farms' semitrailer fleet used to haul the product to wholesale accounts, between plants, or between plants and distribution points, a separate fleet is used by PFD Supply. There is some degree of trading between the two fleets of semitrailers.

Types of Accounts Sought

Prairie Farms competes for all kinds of accounts. It has, for example, a Kroger account to which Prairie Farms is the "second supplier." Kroger supplies its own private label products from the St. Louis plant but buys the Prairie Farms brand for distribution to its Illinois and St. Louis stores. In addition to Kroger, Prairie Farms supplies the Schnuck grocery chain, the biggest grocery chain in St. Louis, and some Jewel stores. Prairie Farms has a considerable number of IGA accounts for both the private label and the Prairie Farms brand. IGA usually stocks five or six Prairie Farms products. Prairie Farms also has several

accounts in the Consolidated Grocers chain, and a small, almost negligible home delivery business. It likewise caters to grocery stores of all sizes, supermarkets, and others. It has institutional accounts with hospitals, schools, restaurants, hotels, and such large institutional accounts as Saga Foods, which sells to Western Illinois University. Prairie Farms also sells to the 7-11 Stores, owned by the Southland Corporation, in all of southern Illinois and some of St. Louis. Prairie Farms buys some creamers from the Bancroft branch of Southland in Madison, Wis., though it buys most from Ryan Milk.

Generally the small stores pay in cash to the driver for products delivered. Schools pay monthly while chain stores, hospitals and other institutional buyers with larger accounts pay weekly.

Quality

As a method of assuring quality, Prairie Farms prints a "pull date" on all its products but gives special care to pull dates on milk. The pull date is in code and set 12 to 14 days after the packaging date. Prairie Farms expects the refrigerated cases in stores to be held at 45 degrees Fahrenheit or lower. Under such circumstances, the product is said to keep in the home refrigerator for at least a week. All sales staff and route drivers are expected to carry thermometers and to call defective cases (above 45 degrees Fahrenheit) promptly to the attention of management.

The present goal of management on route returns is a maximum of 0.5 percent, and a drive is on to achieve this. Recently, before the drive, the cooperative averaged 0.7 percent on returns.

Margins

The company aims for a gross margin of 25 percent above the cost of the finished product at the distribution point. One example showed a distribution point with a gross margin above the finished product cost of about 24 percent and sales and distribution expenses of about 17 percent of gross sales, leading to a net margin for that distribution point of about 7 percent of gross sales. Distribution points with low gross sales had good net margin figures because of high gross markups. High gross sales distribution points generally might be expected to have lower gross markups, with similar sales and distribution expenses resulting in lower net margins in percentage terms. These high gross sales distribution points, however, might also be expected to have lower unit sales and distribution expenses; because they may service larger accounts.

Intra-Company Transfer Prices

In charging out the product to distribution points, the cost per hundredweight at Carlinville is uniformly used

throughout the operation. A large part of the processing costs is accounted for by what is called the "cooler costs," meaning loadout costs.

The company does not have any form of computerized load scheduling, because it does not have sufficient buyers in any one place to justify it. Loadout costs are quite high in many of the operations. They range from a low of around 22 cents per hundredweight of milk converted into finished product to a high of about 59 cents. There seems to be no particular factor on which this level of costs tends to vary. However, where the cooler was extremely small, semi-trailers were apparently loaded directly from the processing line, greatly reducing loadout costs. This may not be practical at all plants.

Advertising

Prairie Farms spends 0.3 percent of gross sales of fluid milk products on advertising, apparently lower than noncooperative distributors of the same sales volume spend. Dean Foods Co. and H. P. Hood, Inc., for example, spend about 2 percent of gross sales for advertising. However, sales may be promoted in several ways besides advertising. Heavy use of sales staff instead of reliance on route drivers to promote sales and extraordinary efforts to maintain high levels of quality and service are examples. Each way incurs costs, and judging effectiveness of expenditures in promotional efforts by the size of advertising expenses in the profit and loss accounts may be misleading.

Principal features of the Prairie Farms sales promotion program include:

- (a) Direct advertising
- (b) Coupons
- (c) Heavy use of sales and supervisory personnel
- (d) Unusual efforts to keep semitrailers used for distribution clean, freshly painted, and attractive
- (e) Maintenance of the horse teams "Mushy" and "Wishbone" with milk wagons and making them available for parades and other local events
- (f) Unusual emphasis on quality of products and on service to accounts.

The advertising uses television, radio, newspapers, and point of sale material. The television ads emphasize byproducts, ice cream, and low-fat milks, with 30-second spots that may appear on the evening news. The radio ads aim for noon and evening airings. The point of sale material is distributed to the supermarkets by sales and supervisory personnel. Newspaper ads are used mostly to introduce and promote newly introduced products. Supermarkets are given an advance sheet of Prairie Farms "slicks." Coupons are offered in the newspaper, for example, giving 25 cents off

on a gallon of Prairie Farms ice cream sold in supermarkets. Products pushed most vigorously in the ads will vary by season, for example, heavy ice cream promotion runs from April through September. Certainly, growth of sales volume has been little short of dramatic.

One young large-scale Prairie Farms member said he personally thought many younger members would prefer to see more direct expenditure on advertising; however, most members were content with the present level.

Summary of Sales Policies

Major sales policies may be summarized as follows:

- (1) Within general guidelines, most pricing is decentralized to local plant or distribution point managers to maintain maximum flexibility and local initiative among personnel.
- (2) Although there is a balanced advertising program, advertising expenditures are relatively low, and other features are used for promotion.
- (3) Service and product quality are greatly emphasized.
- (4) As a policy, competition is met, but not predatory price cuts during price wars.
- (5) Predatory pricing will not be started by Prairie Farms.
- (6) For deliveries, distributors, vendors, and company-owned routes are used, but by far, company-owned routes are most emphasized.
- (7) Heavy use is made of sales staff rather than depending on route drivers for selling.
- (8) Quantity discounts are given.
- (9) All kinds of outlets are sought, including corporate and voluntary chains, supermarkets, restaurants, schools, and other institutional accounts, and home delivery accounts.
- (10) Prairie Farms aims for a gross of 25 percent above the cost of finished products at the distribution point. Sales and distribution expenses of 17 percent of the gross should net 8 percent of the gross, a figure that varies but is not atypical.

Marketing Operations Analyzed

Accounting System

Each separate plant or distribution point has a daily sales sheet, and totals are sent to Carlinville at the end of the month. The local unit keeps an accounts receivable ledger, and aged accounts receivable are likewise sent to Carlinville

at the end of the month. Any bills for service, supplies or other expense, are sent to a plant or distribution point, checked, approved, and sent to Carlinville. An income and expense statement is made up monthly at Carlinville.

The cooperative keeps no system of cost accounting that develops costs for individual products or processes. However, because specialized plants keep records for each of the major products, their costs can be used as a basis for setting sales prices and prices for charging products out from one plant to another or from a plant to a distribution point. When several plants specialize in one product, the lowest-cost plant will determine the charge-out cost for moving products among units. Among various minor products, cost estimates are made by the general manager on the basis of milk prices and general price levels for various cost elements experienced in production.

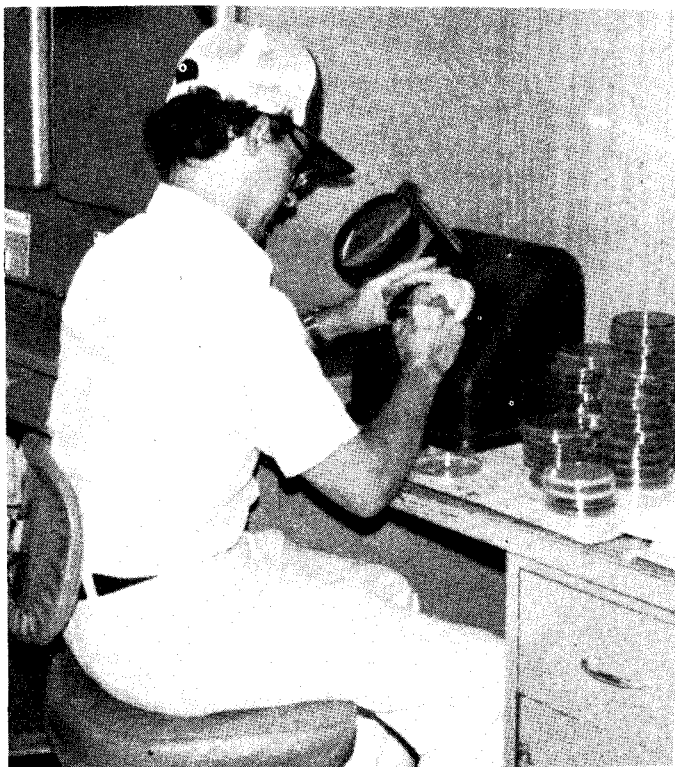
Aside from cost accounting, the usual accounting records are kept. Annually an audit is made by a firm of certified public accountants. The annual reports for the October through September fiscal year show highlights from the audited reports in terms of sales, net income, dividends, volume handled, net worth, value of outstanding stock and certificates, and sales in each major product category. Reports show consolidated balance sheets, statements of income, retained margins, and changes in financial position. Comparisons are made of recent years for financial data sales summaries and sources of milk marketed.

Reasons for Time Periods

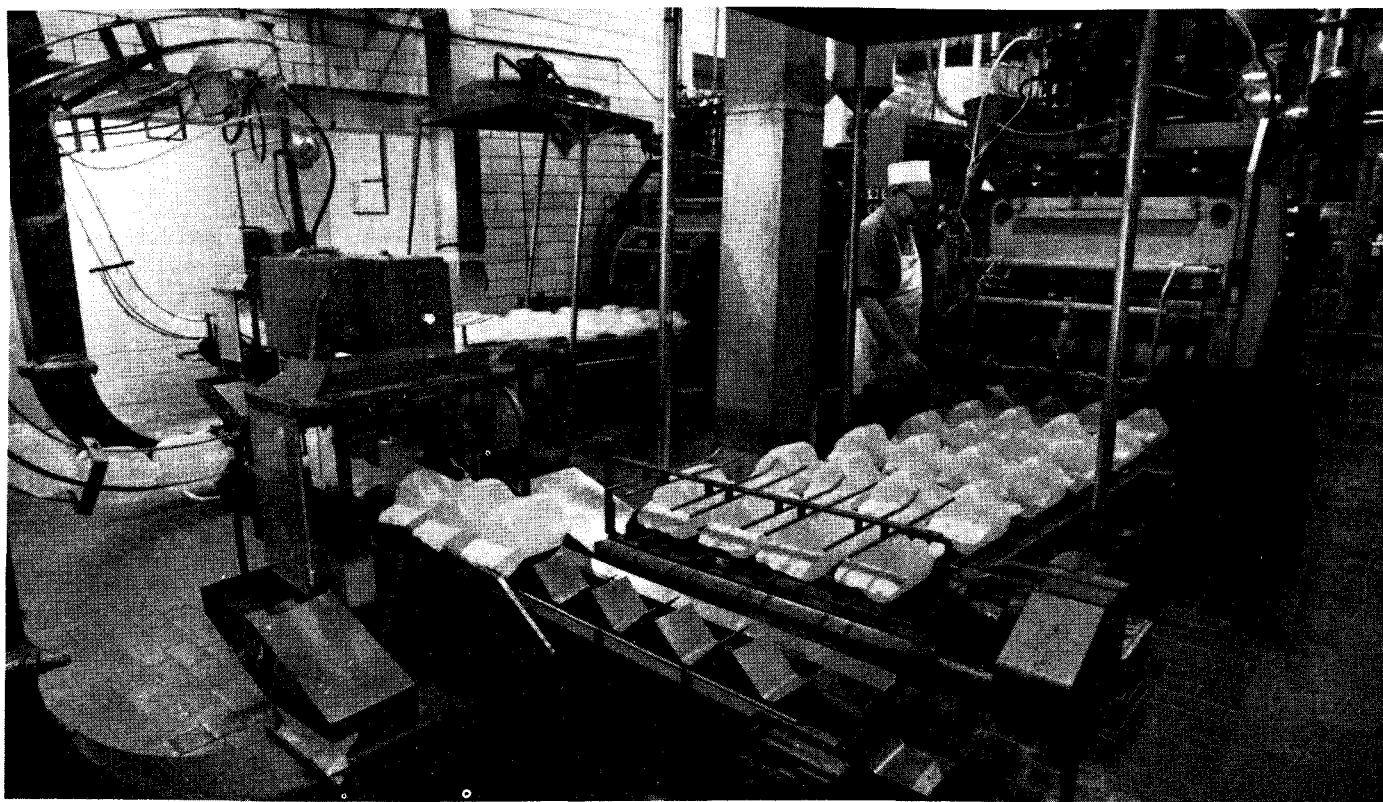
Complete data for every year since Producers Creamery of Carlinville was organized in 1938 has been assembled to the maximum extent possible. However, for comparison and analysis, particular years during the 40-year life span of the organization were selected to reduce the number of years shown on tables.

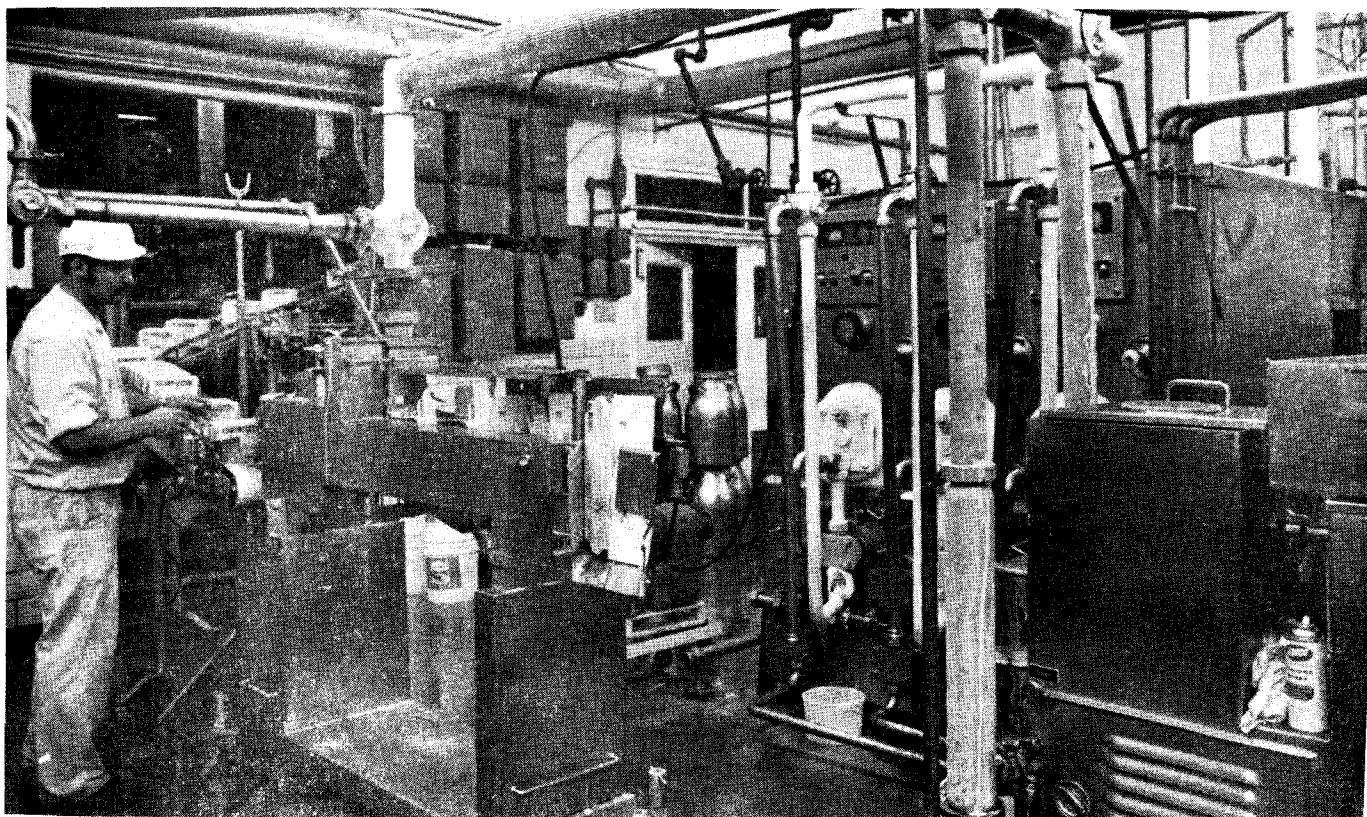
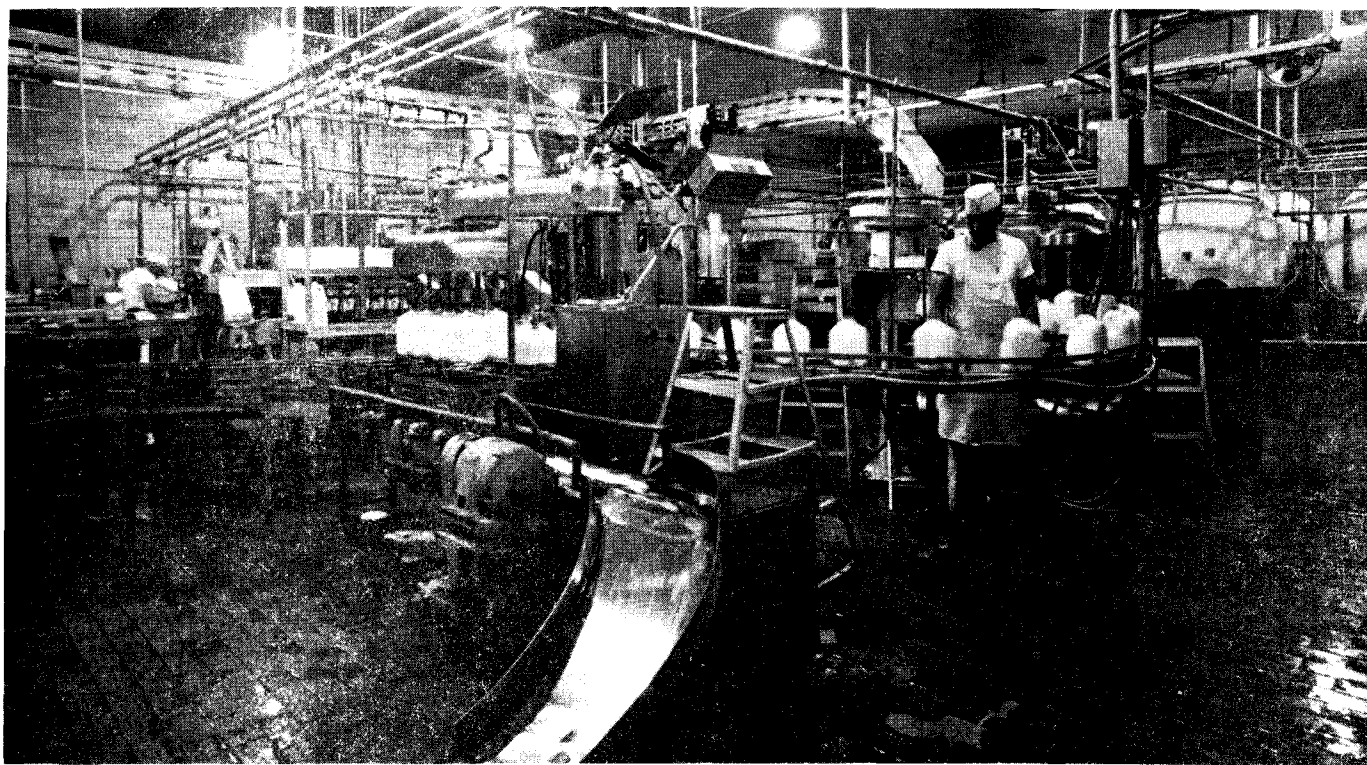
Particular years selected were 1939, 1941, 1946, 1950, 1954, 1957, 1963, 1967, 1972, and 1978. In general, the intention was to select periods of 4-year intervals, but whenever an unusual event or set of circumstances occurred in nearby years, a departure was made from the 4-year interval. The primary reasons for years selected in addition to the 4-year interval are as follows:

- 1939 - The first complete year after Producers Creamery of Carlinville was organized in 1938.
- 1941 - The last year Carlinville operated only as a butter factory. Also, the last year before U.S. entry into World War II.
- 1946 - The first year after World War II and construction of a new plant at Carlinville.



These Prairie Farms facilities are:
 a laboratory at the Carbondale plant where a technician is checking bacteria plates;
 bottom, the Carlinville ice cream plant; next
 page, top, Carlinville fluid milk bottling plant
 and, bottom, plastic bottles being
 manufactured for fluid milk.





- 1950 - The first year after Carlinville began to bottle milk.
- 1954 - The first year with Community Dairy at Alton, and the leased Carlyle receiving station.
- 1957 - The first year after the consolidation that formed Prairie Farms of Southern Illinois.
- 1963 - The first year after the consolidation that formed Prairie Farms Dairy, Inc.
- 1967 - The year when Aro-Dressel Foods, was bought.
- 1972 - The last year before major inflationary forces hit the dairy industry in 1973.
- 1978 - The last complete year that data were available when study was being made.

Balance Sheets

Table 4 displays in condensed form the consolidated balance sheets for Prairie Farms for 10 selected years. As noted earlier, these particular years were selected because of their importance as turning points in the cooperative's development and in an effort to break down the cooperative's history into manageable timeframes for discussion purposes. The balance sheet accounts are organized in the following manner: (1) both assets and liabilities are organized into their respective current and other components; and (2) net worth is organized into stock in terms of the various categories outstanding, and retained margins.

Below each balance sheet column in table 4 are listed two ratios: (1) the ratio of current assets to current liabilities, and (2) the ratio of net worth to total assets for the year indicated in the corresponding column. For purposes of comparison, the same ratios for the dairy product manufacturing and wholesaling industry as a whole for the same years are listed below the Prairie Farms ratios. These industry median ratios are published annually by Robert Morris Associates, Philadelphia, Pa. The industry ratios employed represent the median of the sample of firms surveyed by Robert Morris Associates. These industry median ratios are not available for the first 2 years selected but are shown for years selected from 1946 through 1978.

As seen in table 4, total assets of the cooperative expanded fairly rapidly from its beginnings in the late 1930's to the mid-1950's. This was for the most part a result of the cooperative's success in generating internal growth through margins and member participation in capital expansion programs. On the other hand, merger and acquisition activity

appears to a major extent responsible for the extremely rapid growth in total assets from the mid-1950's to the present.

Using the ratio of current assets to current liabilities (current ratio) as a measure, it is apparent from table 4 that Prairie Farms' financial liquidity has grown in relation to the industry median during this later period of growth by merger, consolidation, and acquisition. This is not to assume that such growth led to increased liquidity, but neither would it appear that Prairie Farms suffered loss of liquidity.

Prairie Farms' preferred stock outstanding expanded steadily through the mid-1950's, providing much of the capital necessary for the cooperative's expansion. Large increases in preferred stock outstanding that appear in 1957 and 1963 resulted largely from major consolidations. In late 1956 and early 1957, Prairie Farms Creamery of Carlinville combined with the Prairie Farms Creameries at Carbondale and Olney, pooling their preferred stock with Carlinville's in forming the new Prairie Farms of Southern Illinois. In 1962, this enlarged unit combined with Prairie Farms of Western Illinois and Danville Producers Creamery to form Prairie Farms Dairy, Inc., again pooling equity in the form of preferred stock. Since 1963, there have been some additions to the preferred stock resulting from mergers with other cooperatives (for example, Peoria Producers Dairy in November 1972); but, for the most part, increases in the stock outstanding have been the result of distributions of retained margins in the form of preferred stock and outright purchases of newly issued preferred stock by members.

Prairie Farms' retained margins have experienced much the same type of growth outlined above for the preferred stock, that is to say, steady with greater than usual spurts accompanying the two major consolidations noted above. Additionally, retained margins have been boosted in recent years as a result of greatly increased sales volume accompanied by fairly steady margins.

The "other equity" included with retained margins in the balance sheets for the years 1963 through 1967 was a result of the 1962 consolidation. It represents a revolving capital account maintained by Prairie Farms of Western Illinois before the consolidation. The amount held in this account was converted to "participation certificates" and paid out over time to the certificate holders.

In summary, the net worth position of Prairie Farms has consistently been strong. Using the ratio of net worth to total assets as another measure of Prairie Farms' financial strength, table 4 provides a comparison between Prairie

Farms and dairy processing and wholesaling industry median ratios published by Robert Morris Associates. With the exception of 1972, Prairie Farms has consistently registered a ratio of net worth to total assets in excess of the median for its industry. The implications of this higher than median level net worth to total asset ratio are not immediately obvious, however. While it shows that Prairie Farms was able to provide much of the capital required for its operations and growth through equity channels, which

could be viewed positively, it could also be an indication of lower than optimal use of borrowed capital for purposes of expansion and for its operations in general. It would appear, however, that from the mid-1950's through 1978, Prairie Farms expanded at a rapid enough pace. Further acceleration of the growth rate through greater use of borrowed capital might well have resulted in less effective expansion than this more conservative method that employed a larger than average measure of equity capital.

Table 4—Consolidated balance sheet summaries for Prairie Farms with comparative financial ratios, selected years, 1939-78¹

Item	1978	1972	1967	1963	1957	1954	1950	1946	1941	1939
<i>Thousand dollars</i>										
Assets:										
Current.....	28,244	9,520	4,778	2,359	1,242	321	140	244	22	9
Other.....	17,282	10,520	4,806	2,825	1,805	488	447	206	28	27
Total	45,526	20,040	9,584	5,184	3,047	809	587	450	50	36
Liabilities:										
Current.....	17,556	7,241	3,204	1,133	991	177	123	167	12	9
Other.....	7,056	4,525	1,532	150	284	67	52	-	-	4
Total	24,612	11,766	4,736	1,283	1,275	244	175	167	16	13
Net Worth:										
Preferred Stock-										
Class A.....	4,176	1,520	936	1,051	456	289	284	122	22	19
Class B.....	114	54	-	54	32	-	-	-	-	-
Class C.....	450	738	1,032	778	522	34	-	-	-	-
Class D.....	125	180	220	277	344	-	-	-	-	-
Fractional Share Amts	102	96	152	96	136	43	12	2	1	2
Total	4,967	2,588	2,340	2,256	1,490	366	296	124	23	21
Retained Margins ²	15,947	5,686	2,508	1,645	282	199	116	159	11	2
Total	20,914	8,274	4,848	3,901	1,772	565	412	283	34	23
Total liabilities and net worth.....	45,526	20,040	9,584	5,184	3,047	809	587	450	50	36
<i>selected financial ratios³</i>										
Current Ratio Prairie Farms Dairy	1.61	1.31	1.49	2.08	1.25	1.81	1.14	1.46	1.89	1.06
Current Ratio, Industry Median	1.40	1.20	1.30	1.45	1.49	1.95	2.00	1.92	-	-
Net Worth/Total Assets, Prairie Farms Dairy46	.41	.51	.75	.58	.70	.70	.63	.68	.63
Net Worth/Total Assets, Industry Median42	.55	.42	.46	.58	.60	.58	.55	-	-

(-) means "none."

¹ Data for fiscal years ending September 30 except for 1963 that ended February 28.

² Includes other equity of \$140,000 in 1967 and \$321,000 in 1963.

³ Prairie Farms financial ratios computed from unrounded data.

Sources: The Prairie Farms Dairy, Inc. figures from the cooperative's annual reports. The industry median ratios *Annual Statement Studies*, Robert Morris Associates, Philadelphia, Pa.

Margins

Table 5 provides an historical overview of Prairie Farms in terms of its operating statements. The statements shown are for the same operating years selected for the table dealing with the balance sheets. Three financial ratios have been prepared for use as indicators of the success of Prairie Farms' operations over the years. For purposes of comparison, these same ratios, taken at the median as calculated by Robert Morris Associates for the dairy manufacturing and wholesaling industry as a whole, are shown beneath their counterparts for Prairie Farms. These industry median ratios are not available for the first 2 years selected but appear for the years 1946 through 1978.

Total sales figures in table 5 and appendix table 4 show the strong growth in sales Prairie Farms has been able to maintain over the years. The cooperative has experienced only two short sales slumps in its history. The first such sales slump came in fiscal year 1949, when sales for the year ended September 30, 1949, were about 15 percent below the level obtained in the prior year. Sales for the year ended September 30, 1950, were another 5.5 percent below the 1949 level. From the year begun October 1, 1950, Prairie Farms' sales made a rapid recovery from this short slump, and in only one other year did they fall back, and then only slightly. Sales for the year ended September 30, 1959 were about 3.5 percent below the 1958 level. Prairie Farms resumed its upward trend in sales in 1960 and has maintained that trend.

Both of these short slumps in sales were the result of Prairie Farms' successful efforts to transform itself from a firm heavily dependent on manufactured dairy products to one with major emphasis on bottled milk and fluid related products. This transformation would appear to have been well timed, considering the accelerating decline in manufacturing grade milk production in Illinois and Prairie Farms' procurement area in general that began shortly after World War II.

Since 1950, the cooperative has gained steadily in terms of dollar sales per dollar total assets, table 5. During this same time period, the industry median dollar sales per dollar total assets has fallen from a point far above Prairie Farms' level in the immediate post-war years to a position significantly below the level Prairie Farms has been able to attain.

Much of this gain on the cooperative's part has been, as was noted earlier, due to merger, consolidation, and acquisition activity. Since the time Prairie Farms entered the bottled milk market in 1948, a major objective had been sales expansion, a significant shift from its previous emphasis on building up membership numbers and procurement volume. Coupled with a policy of product specialization at each plant to as great an extent as possible and shut-

downs of unnecessary production facilities where feasible, Prairie Farms was able to build its sales while reducing, in relative terms, the assets required to generate those sales.

In general, the cooperative has been able to maintain, over the years, a growth in net margin or net income for members. Here, however, the impact of the slowdown in sales in the late 1940's and early 1950's appears as a deeper slump, because the cooperative experienced rapid increases in operating expenses when its sales were somewhat depressed.

Expansion of sales areas and increases in production and distribution efficiency brought about by numerous mergers and acquisitions were, for the most part, responsible for larger scale increases in net income figures since the mid-1950's. This expansion of sales was, however, accompanied by a reduction in the cooperative's net margin on sales from a relatively high level to that comparable with the median level for the dairy processing industry. Table 5 shows the cooperative's decline in net margins or net income as a percent of total sales and comparisons with the net margins for the dairy manufacturing and wholesaling industry calculated at the median level.

Another measure of Prairie Farms' net margin level relative to the industry median is net margin as a percentage of total net worth or rate of return on total equity. These ratios also appear in table 5, and the cooperative's rate of return on equity is compared with the industry median. A comparison between Prairie Farms' rate of return on equity and the industry median is quite similar to the comparison discussed above based on rate of return on sales. Again, after the high erratic levels experienced during the war years, the cooperative's rate of return on net worth fell into the range registered at the industry median and has remained in that range since the early 1950's.

Thus, Prairie Farms' historical sales, income, and rate of return figures appear to compare favorably with the available dairy processing industry median figures.

Member Equity

From Prairie Farms' beginning in 1938 through 1970, the revolving period for retained patronage varied from 3 to 6 years. Decisions both to revolve member equity and pay out part of current margins in cash were made on a year-to-year basis. In the absence of a specific revolving plan, the cooperative obtained sufficient investment capital through a combination of stock sales and retaining its increasing margins. By the end of 1970, Prairie Farms was revolving retained patronage on a 5-year basis; but as a result of increased capital expenditures, it was becoming increasingly difficult to revolve the retained patronage at such a rapid rate. For the next 3 years, the cooperative's board did not

pay out any of the previously retained patronage. By the end of 1973, Prairie Farms had extended its revolving plan to 8 years. The cooperative has been able to maintain this 8-year revolving plan through the fiscal year ended September 30, 1978.

The following quotes from 1973 issues of the cooperative's house organ explain why the revolving period was extended. In addition to explaining the need for added capital, the explanation stressed that Prairie Farms' previous payout rate was considerably more rapid than the rate considered acceptable by other cooperatives.

"For several years we maintained a 5-year revolving plan on our allocated earnings; however, due to the heavy capital expenditures it has been impossible to maintain the 5-year payment. We are now back 7 years on allocated earnings. The payment of the 1965 allocations will not be made in 1972 and we may have to go on the 10-year revolving plan. Very few cooperatives, if any, revolve their patronage in less than 10 years."⁷

⁷Prairie Farms News, May 1972.

Table 5—Operating statement summaries, Prairie Farms, with comparative financial ratios, selected fiscal years 1939-1978¹

Item	1978	1972	1967	1963	1957	1954	1950	1946	1941	1939
<i>Thousand Dollars</i>										
Total sales	206,320	78,213	32,931	17,271	8,300	2,189	1,512	1,625	202	84
Cost of sales	177,617	63,420	25,966	13,793	7,373	1,831	1,394	1,431	183	73
Gross margin on sales	28,703	14,793	6,965	3,478	927	358	118	194	19	11
Operating expenses:										
Distribution/selling	20,296	9,962	4,070	2,420	539	203	77	33	5	3
Gen. and administrative	5,328	2,745	1,628	811	204	69	29	28	5	4
Total	25,624	12,707	5,698	3,231	743	272	106	61	10	7
Margin from operations	3,079	2,086	1,267	247	184	86	12	133	9	4
Other income	107	98	110	33	32	7	7	10	4	1
Other expenses	438	423	122	32	31	6	5	2	1	1
Income before taxes	2,748	1,761	1,255	248	185	87	14	141	12	4
Tax on income	407	240	330	-	-	-	-	-	-	-
Net margin	2,341	1,521	925	248	185	87	14	141	12	3
<i>Selected financial ratios²</i>										
Net margin as a percent of sales, Prairie Farms Dairy	1.13	1.94	2.81	1.44	2.23	3.99	.93	8.69	5.89	4.04
Net margin as a percent of sales, industry median ...	2.80	4.70	1.20	1.30	2.33	1.14	1.71	1.22	-	-
Total sales/total assets Prairie Farms dairy	4.53	3.90	3.44	3.33	2.72	2.71	2.58	3.61	4.09	2.34
Total sales/total assets industry median	3.43	2.30	3.88	5.19	4.34	7.50	6.80	7.45	-	-
Net margin as a percent of Total net worth, Prairie Farms Dairy	11.19	18.38	19.07	6.36	10.46	15.46	3.41	49.88	35.32	15.01
Net margin as a percent of total net worth, industry median	18.60	18.20	8.80	7.46	10.05	8.43	19.96	16.67	-	-

(-) means "none."

¹Data for fiscal years ending September 30 except for 1963 that ended February 28.

²Prairie Farms financial ratios computed from unrounded data.

"I am sure you realize that with the tremendous growth in sales, acquisition, and the remodeling of obsolete plants, the tremendous amount of capital that has been involved. We have secured most of our funds by the retaining of earnings. We have sold about \$800,000 in stock since 1962, however we have cashed in about a like amount."⁸

Throughout the history of Prairie Farms, a large part of each year's margins has been paid to patrons in cash. In percentage terms, this payout has amounted to 20 to 50 percent of the year's margins. To qualify distributions of margins for Federal income tax deductions, cooperatives were not required to pay out *any* of current margins in *cash* until 1962. Prairie Farms, however, has paid out at least 20 percent of each year's margins in cash throughout its years of operation. In addition to the cash payout, the remainder of the margins, usually distributed in the form of stock, is redeemable in cash on demand. While stock ownership by active members has been encouraged, patronage paid in the form of stock in the cooperative has been readily convertible to cash, if the member so wished. Thus, payouts in the form of stock could be viewed by members as equivalent to cash payments.

At present, Prairie Farms has no per-unit capital retain deduction although some of the predecessor cooperatives had such accounts at the time of unification, as Prairie Farms of Western Illinois. Capital retain accounts acquired as a result of mergers were repaid as promptly as practical to the patrons involved, usually under terms set down in the relevant merger or consolidation agreement. Thus, while Prairie Farms has never made capital retain deductions, its present capital needs could lead it to such a program in the future. It could make use of such funds for both its capital expenditure needs and for retirement of the stock held by former patrons.

Prairie Farms' other internal investment capital is unallocated retained margins. The unallocated retained margins account came into being as a result of Prairie Farms' merger activities. A number of units that merged into the Prairie Farms organization had unallocated retained margins accounts before the mergers. Because of the difficulties involved in allocating such funds, they were left unallocated. The unallocated retained margins were first reported separately in 1964. The amount in this account remained fairly steady until 1970, when retained margins from the Prairie Farms operations were retained unallocated to increase the cooperative's permanent capital. Two other large additions were made to this account from the margins in 1975 and 1976. At the end of the fiscal year ended

September 30, 1978, unallocated retained margins had grown to about \$2,565,000 or about 12 percent of the total member equity.

Basically, three types of additions have been made to unallocated retained margins over the years. These are listed below, along with an approximation, made by Prairie Farms management, of the percentage each type represents of the total additions to the unallocated retained margin account.

1. Entry into Prairie Farms of units that had unallocated retained margins (about 20 percent).
2. Reserves for income taxes made periodically by the Prairie Farms Board (about 20 percent).
3. Margins on which income taxes were paid, the balance being added to unallocated retained margins (about 60 percent).

The equity capital available to Prairie Farms over the years is detailed in appendix table 6. Included are the four types of preferred stock, a breakdown between allocated and unallocated retained margins, and other equity that could not be classified either as stock or as retained margins. Each of these three equity capital classifications will be discussed briefly below.

At present, Prairie Farms has four classifications of preferred stock. Classes A, C, and D are held by present and past patrons; while the Class B preferred stock is held by the Illinois Agricultural Association. Unlike preferred stock issues in organizations in some States, these preferred shares carry voting rights.

The C and D classifications of preferred stock were created as a result of Prairie Farms' merger and consolidation activities. As units were added that had preferred stockholding carrying less than the 7 percent dividend rate for preferred A stock, such shares were added to Prairie Farms' stock list as Preferred C or Preferred D with the lower dividend rate. The lower dividend return classifications were also used at times for payment of patronage, where payment was made partly in cash and partly in the form of stock. Payments of patronage in the form of stock did not greatly increase the stock outstanding as a result of the cooperative's policy of redeeming stock for cash upon demand.

Since the mid-to-late 1960's, the majority of Prairie Farms' capital has been supplied by retained margins, with two-thirds to seven-eighths of this fund being allocated and revolved at a fairly rapid pace. The cooperative has there-

⁸Prairie Farms News, July 1972.

fore been quite dependent on recent years' margins for its working capital needs.

Except for two instances, the equity capital of Prairie Farms has come totally from the sale of stock and retained margins. In 1963, the cooperative acquired a revolving capital account through merger and paid these funds out to the members involved within 6 months. In 1966, it acquired, again through merger, delayed participation certificates totaling around \$175,000. These certificates were paid off over the next 4 years.

Note on the Fiscal 1979 Annual Report

The report for October 1978 - September 1979 was issued after this study was completed, but a few highlights merit comment. They are:

1. Prairie Farms had one of its more outstanding years. Sales were \$232,715,803, an increase over fiscal 1978 of 12.8 percent.
2. Gross margin reached \$34,439,200, an increase of 18.2 percent.
3. The average producer pay price was \$11.54, up 15 percent.
4. Net margin nearly doubled over fiscal 1978.
5. Thirty percent or \$1,000,000 of margins will be paid to patrons in cash.
6. The thirteenth check amounts to 50 cents per hundredweight.
7. Stockholder equity increased more than \$2 million.
8. Allocated patronage for 1971 amounting to \$726,000 was paid.

Prairie Farms' Impact on Region Served

Impact on Farmer Patrons

Prairie Farms has had an impact on its producer patrons in several ways. These include: (1) pay prices and returns; (2) programs to improve milk and cream quality and other field programs to help farmers become better producers; (3) milk hauling program; (4) representation of producer interests in legislative matters.

This study did not find data to show that Prairie Farms' gross pay prices have been higher than those of competitors. It did find substantial evidence that net pay prices have been better in recent years than those of other dairy cooperatives in the same procurement areas. Though gross pay prices have usually been competitive, Prairie Farms has been able to keep its checkoff to support part of the operating expenses at only 8 to 10 cents per hundredweight, whereas some of its competing cooperatives have deducted 25 to 40 cents per hundredweight at times. Also, Prairie Farms has never had a per-unit capital retain deduction,

whereas some of its co-op competitors have found such capital deductions necessary. Instead, Prairie Farms has only retained margins, which it has revolved on an 8-year schedule, although it revolved retained margins on a 3- or 4-year schedule in the early years of the cooperative. At times, up to 40 percent of net margins has been paid out in cash.

The cooperative has managed to maintain a strong capital position through its growth period, growing from total assets of \$36,000 and sales of 6.9 million pounds of milk in 1938 to total assets of \$45,526,000 and annual sales of 914 million pounds in fiscal year 1978.

Going back historically to the time when the cooperative creameries were organized, estimates were made by supporters of the creameries that pay prices for farm-separated cream were substantially improved compared with prices paid by the centralizers. Doubtless, there was improvement. Although the amount is difficult to document, it does seem clear that major improvements in the welfare of producers came from the quality programs of the cooperative. These programs include picking up cream more often, cooling it down on farms so it would yield a higher scoring butter, and subsequently, bringing cold whole milk into plants where it could be made into a variety of quality products. Also, producer equity in the co-op facilities increased, which would not have occurred from sales to a noncooperatively owned plant.

As to the thirteenth check, Prairie Farms has an outstanding record. A summary from the *Prairie Farms News* shows the following total patronage dividends (both retained and paid out) per hundredweight for the past 4 decades:

Decade	Range
1940's	8 - 10 cents
1950's	15 - 25 cents
1960's	18 - 38 cents
1970's	20 - 55 cents

This, of course, has not increased at a constant rate, because milk prices have gone up sharply over this period. They were twice as high in fiscal 1978 as in fiscal 1969. However, members had more milk to sell. Before 1962, Prairie Farms paid out up to 65 percent of the dividends in cash and since has seldom paid out as little in cash as 20 percent.

On improving quality and otherwise helping farmers to be better producers, Prairie Farms carried on a number of programs. Some of these were: (1) assuring farmers that if they came in with a farm improvement plan that called for borrowed capital, the cooperative would help them find a source of funds through one of several credit associations;

and (2) beginning with the mid-1940's, paying a milk house premium of 10 cents per hundredweight to encourage building milk houses and to ensure continued patronage of larger producers. By the early 1950's, Prairie Farms was paying a bulk tank premium.

Major steps to improve and maintain milk quality at farm and plant level are summarized, together with some of the rationale:

1. The house organ has been used continuously as a means of communicating information on milk quality control and improved production methods to member patrons. While Prairie Farms did not have any requirements concerning milk production practices at the farm level, it did, of course, have quality requirements for the milk and cream on arrival at the plant.
2. In addition to the production practices suggested by Prairie Farms field representatives on their periodic farm inspections, Prairie Farms in 1946, began offering a premium (10 cents per hundredweight) for farms equipped with electric milk coolers or properly equipped milk houses as an incentive for increasing milk quality.
3. In 1950, the cooperative implemented a policy of twice a week pickup for cream to increase cream quality. Any cream picked up less than twice a week could only be purchased as grade 2 cream at the resulting lower price.
4. In the late 1940's, Prairie Farms started supporting and promoting a fly eradication campaign, using DDT spray. This campaign was supported by the Illinois Agricultural Association, the Extension Service of the University of Illinois, and the Country Farm Advisors.
5. In the early 1950's, the cooperative at Carlinville operated a quality program for manufacturing grade milk, using methylene blue and sediment tests to assure high quality for its manufacturing grade milk. Some localities permitted this milk to be used for bottling until the Illinois grade A law became effective in July 1957.
6. In 1962, Prairie Farms announced new milk quality standards for its patrons. The standards included a maximum plate count of 50,000 per millileter, while the Illinois State plate count requirements for grade A were still 200,000 per millileter, a standard the State set before bulk tanks came into general use.

Quality, both of the raw milk supply and of final products, has always been held up as being of primary importance to Prairie Farms. The following quote from an article in the *Prairie Farms News*, April 1971, spotlights the rationale for assigning such a high priority to matters concerning quality:

"Without a doubt the high quality of our products has been the main reason why we have been a successful company. Seldom can you purchase milk products carrying the Prairie Farms name at bargain prices. Prairie Farms is extremely proud that consumers are willing to pay a premium for our products. In fact our earnings in the company result from the extra price that we receive. If it were necessary for us to sell Prairie Farms' products at the same price that many of our competitors sell for, we definitely would not have earnings for the company."

This apparently refers to product quality as a reason for declining to make deep price cuts.

As far as farm level quality control is concerned, the following quote, again from the *Prairie Farms News* (April 1971), gives a good indication of the seriousness with which Prairie Farms' management viewed quality control:

"Prairie Farms' producers that refuse to cooperate in giving us the quality that we must have will be dropped from our member list. If a Prairie Farms member should adulterate his milk with the intent of deceiving his milk hauler and the milk receiving personnel at a processing plant, such shipper will definitely be informed that his milk cannot be accepted at a Prairie Farms' plant. It is nice to report that we have never taken such action because it has not been necessary."

The shelf life of its products and quality control measures to increase shelf life and assure product uniformity among the various plants was especially important after the 1962 consolidation that produced the new Prairie Farms Dairy, Inc. The former manager of Prairie Farms of Western Illinois, was placed in charge of production and quality control for the new organization and was responsible for assuring uniformly high quality products from all plants.

On procurement policies and programs, Prairie Farms appears never to have subsidized farm-to-plant milk hauling and has moved away from any hauling done by the cooperative to the point where (as of August 1979) Prairie Farms operated only two routes with its own trucks and direct-hire haulers. For these two routes, producers were charged the "going hauling rate" charged by the contract haulers as described below.

Except for the two Prairie Farms owned routes, farm-to-plant milk hauling was done by independent haulers who own their own equipment. There are 22 such independent haulers, one with 9 trucks, and several operating more than one route. The rate charged to farmers on the two company trucks was 43 cents per hundredweight and \$2.50 per stop. As a general matter, haulers have about the same provisions in their contracts with each producer. In general, the

hauler works out the arrangements individually with producers. In some cases, a committee of farmers chosen by the hauler represents the interests of the farmers in the negotiations with the hauler, but the point to be stressed is that the cooperative itself does not enter into these negotiations in any way nor does it subsidize any of the hauling costs.

Prairie Farms does, however, pay the hauler for the producer. The producer will sign a card presented by the hauler, specifying the provisions of the hauling agreement. This signed card is brought in by the hauler and turned over to the Carlinville office. The clerical personnel then proceed to calculate the amount due to the hauler from the record of amounts of milk delivered during the specified time period for this particular patron. This is deducted from the farmer's pay check and remitted to the hauler.

Hauling contracts contained up to six provisions: (1) a flat rate per hundredweight, which will be affected by various other features, usually applying to every other day pickup; (2) a minimum amount that will be picked up at that rate; (3) an additional charge that will be made for everyday pickup; (4) a schedule of rates that will be charged for various quantities per month or per day; (5) a minimum stop charge; (6) a feature called a fuel adjustment that assumes fuel will be 85 cents per gallon and will adjust the rate upward or downward 0.5 cent for each 5-cent increase or decrease per gallon of fuel costs; and (7) a flat monthly charge plus a charge per hundredweight. The one example of this was a charge of \$262.50 a month plus 5 cents a hundredweight. The most frequent of the rates seems to be about 40-45 cents a hundredweight with every other day (EOD) pickup of 5,000 pounds.

Prairie Farms has a written milk marketing agreement with each of its members that can be terminated by either party on 30 days' notice in writing, but is otherwise automatically renewed. The agreement contains provisions essentially standard for cooperative marketing associations, especially those on Federal order markets. *The Prairie Farms News* in March 1960, shortly after the agreement was mailed out, explained the agreement was required for producer voting purposes under Federal orders. It said the association "would never enforce any provisions of the agreement that might work hardship on the producer." In March 1974, the *Prairie Farms News* said "this company under no circumstances would ever consider refusing to cancel a member's contract if such was the wish of the member." It also reported that no more than seven shippers had left the organization in the past 5 years. There is virtually no barrier to leaving the cooperative.

In representing the producer's interest in legislative matters, Prairie Farms belongs to the National Milk Pro-

ducers Federation, which expresses the producer's interest to Congress and to executive agencies such as the U.S. Department of Agriculture in Washington, D.C. On State legislation involving common interest, the Prairie Farms interest is usually represented by the IAA, though on some matters Prairie Farms may take an individual position. For some years, the cooperative did not favor a compulsory grade A inspection law for bottled milk, taking the position that accurate labeling of bottled milk as to whether grade A or ungraded would be adequate. However, in 1955, when a law was introduced in the Illinois legislature to establish a grade A inspection system on the State level, Prairie Farms supported the law. It likewise has supported the reciprocity of Interstate Milk Shippers and has received an above average rating on most of its plants and milk supply for several years, as can be seen from comparing its U.S. Public Health ratings as published by the Department of Health and Human Services.

The cooperative actively sought producers until about 1963. By that time, it had built up its grade A supply to the point where any more volume would have required facilities for supply balancing (surplus manufacturing). Bringing in other source milk also helped keep up Class I utilization in nearby Federal order markets, as explained in *Prairie Farms News*, January 1961. The cooperative arranged to procure additional supplies as needed from cooperatives to the north. By 1978, Prairie Farms was again seeking to increase the number of direct-ship patrons; because the demand for cheese milk in Wisconsin and surrounding areas had increased the cost of milk from cooperatives to the north. Significantly, producer numbers in Illinois during the 1963-78 period were declining at an extremely rapid pace. The few remaining had good alternative buyers, if they had quality milk in enough quantity for efficient hauling to the plant. Smaller ones simply left dairying and began to specialize in corn, soybeans, beef, and hogs.

A small number of Prairie Farms patrons were interviewed on their farms to get some indication of their experience with the cooperative. Those interviewed had been Prairie Farms patrons for at least 10 years. The several questions concerned their approval of and loyalty to policies and programs of the cooperative, inviting suggestions for further improvement. Major points follow:

1. In general, they believed their prices had been as good or better than could have been obtained elsewhere and the thirteenth check was in addition to competitive prices.
2. They approved of Prairie Farms' expansion geographically and growth policy in general.
3. They strongly praised the field staff and hauler services, especially as an aid to quality.

4. They believed individual complaints on weights and tests had always received attention and been dealt with fairly.
5. They saw no need for further services from Prairie Farms, such as more farm supplies, because such needs already were being ably filled.
6. They had warm praise for the general manager. Problems they took up with key plant staff had received prompt and effective attention.
7. They would not change to another dairy, even if Prairie Farms paid less than the Federal order blend for a reasonable period of time unless they had reason to believe they were "getting chopped up."
8. They thought Prairie Farms products were advertised and promoted adequately, quality reaching consumers was high, and the image of Prairie Farms products was outstanding in their own communities.

The praise and loyalty for the cooperative was strong and positive. Minor suggestions for improvement from patrons were:

1. Failure to cut wholesale prices during price wars often makes it hard on the commission sales staff to keep wholesale customers.
2. Some of the younger patrons might approve spending a higher sales percent on advertising and promotion.
3. Perhaps retained margins could be revolved sooner or a larger percent of margins paid out. They said it now looks like patrons are financing the processing and other operations of the cooperative.
4. Perhaps the annual district meeting could be made less "cut and dried," so patrons would feel they have more voice in nominating board members and freer to report problems and to make policy decisions.
5. It would be good to have more complete insurance on milk losses, for example, coverage of losses due to power shortages caused by ice storms.
6. Although the mergers and acquisitions have been good for Prairie Farms, it might be better for competition at the farm level to have several dairies in an area instead of only one.
7. Perhaps the cooperative might do better in maintaining a continuous information flow to its members.
8. Patrons cannot help but wonder how the strong successful leadership of the general manager will be replaced when he retires.

Reseachers did not interview more patrons, as comments from this small group failed to indicate further interviews would generate information different from that coming from the alternative lines of inquiry already pursued.

Interviews encouraged suggestions for improvement as well as comments of support and loyalty. On the face of it, some of the suggested changes are not workable; and patrons could readily be shown why. For example, as to suggestion number 3, co-op patrons must always finance co-op operations. As owners of any business, they must finance operations (from margins, investments or borrowed capital) to receive its margins. Prairie Farms' record for paying out margins and revolving retained margins is outstanding. However, it is not part of the purpose of this study to refute the usefulness of invited suggestions from these patrons.

Impact on Employees

The impact of Prairie Farms on its employees is reflected in working conditions, wage levels, bonuses, incentive plans, provisions for retirement, tenure, etc. Loyalty to the cooperative and productivity are expressions of the effect its rewards have on employees.

For the year 1978, Prairie Farms had 1,300 employees, with total wages and salaries of \$22,343,000. Twenty-five of the employees were salaried, and most of the others were organized as members of labor unions. Milk distributors, vendors, and farm-to-plant haulers are not included as employees, nor are those driving tractors that pull semi-trailers between plants or from plants to distribution points included as employees.

Nonsalaried employees of Prairie Farms' plants and distribution points are organized under three unions: The Teamsters, the Steel Workers, and the Packinghouse Workers, mostly Teamsters. The Teamsters were able to unionize the Prairie Farms' workers by virtue of their pension plan. Most unionization activity took place in the 1950's or early 1960's (with the Pana plant being organized in 1964 or 1965). In that time period, it was difficult for private industry to match the Teamsters' pension plan. Under this plan, the worker after being employed in a Teamsters' unionized activity for 20 years can retire at age 57 on \$300 a month. An employer had to pay into the fund for at least 80 weeks. Some of Prairie Farms' major competitors were unionized in the 1940's and may have put considerable pressure on the Teamsters union to unionize Prairie Farms, as a result of their belief that Prairie Farms had a competitive advantage in not being unionized and not having to pay union wages.

In 1965, all the Illinois plants went on "The Illinois Addendum," an arrangement between Prairie Farms and the Teamsters Union to group five or six teamsters locals to

settle contract disputes for the group as a whole. As Prairie Farms added other plants in Illinois by merger, consolidation, and outright acquisition, some plants came in with higher and others lower wage scales. In general, the Teamsters Union wanted those coming in with lower wage scales and Prairie Farms those with higher wage scales to be added to the Illinois Addendum. Obviously, each had its particular interests in mind. However, none was added to the original five or six that made up the Illinois Addendum in 1965. Since then, all new plants have signed their own contracts, making it possible for Prairie Farms to settle disputes at each plant at a different time. At this time, Prairie Farms has, in fact, 17 different contracts. Most likely, one reason management decided not to create a single centralized plant for the Prairie Farms organization was that several units allowed more flexibility in labor contract negotiations than a single plant with all processing operations and all employees under a single contract.

Key employees are those reporting directly to the general manager. The general manager said some of them have been on a bonus system since 1962. The bonus is said to depend on the margins of the operations for which the manager is responsible. However, for heads of departments performing staff functions, the bonus would have to depend on more general performance.

The manager said, "A company will go as far as its employees will take it." He states, "Whenever the cooperative does well, it does not hesitate to reward the employees." He acknowledged salaries are good and probably competitive with larger noncooperative competitors, and this is a factor in the loyalty obvious among Prairie Farms employees. He also named three competitors he thought had better fringe benefit packages than Prairie Farms. These were Borden, Beatrice, and Southland. They carry fringe benefit packages that include such things as automobiles, country club dues, income tax work by professionals, vacation spots for employees' use, and more generous expense accounts. He said Prairie Farms would work on fringe benefits, partly because they are not directly taxable to employees as salary and bonuses.

Three basic retirement plans offered by Prairie Farms are: (1) the Thrift Incentive Plan offered to nonunion employees and some others, (2) the Thrift Incentive Plan for Ice Cream Specialties Personnel, and (3) the Massachusetts Mutual Plan. All those included in the first plan are also included under the third plan. It offers \$3.33 per month on retirement for each year worked, up to a maximum of 30 years, yielding a maximum of \$100 a month on retirement.

The Thrift Incentive Plan, which is for building up an employee retirement fund, applies to all nonunion employees, all Carbondale employees at the New Era location, and

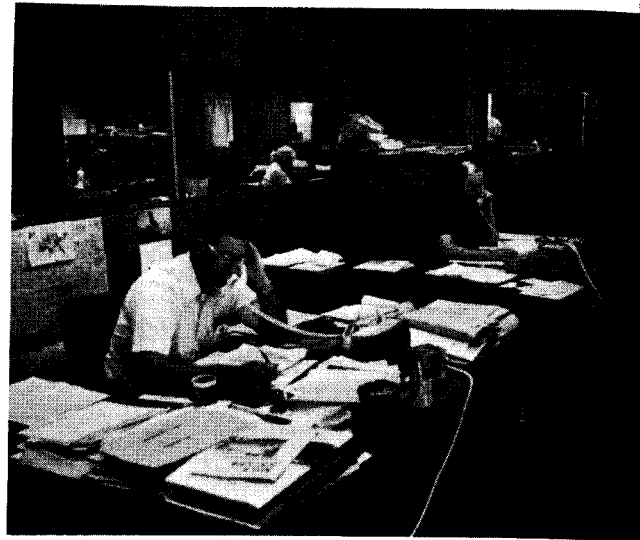
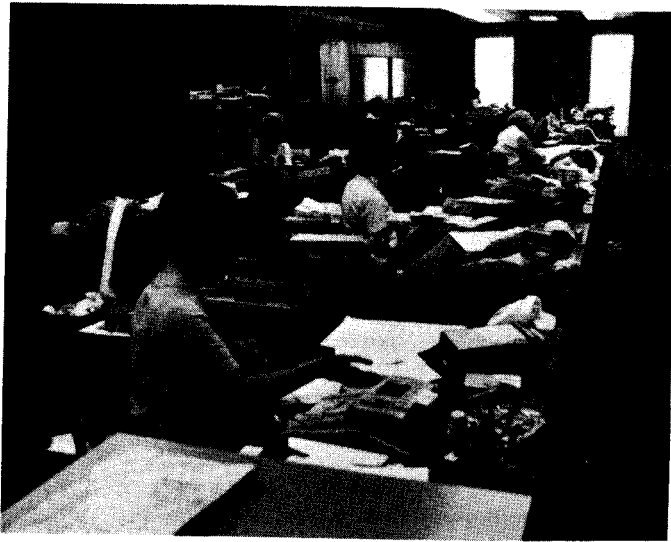
all PFD Supply employees. When Carbondale was acquired, although the employees were unionized, they had no union retirement plan.

Under the Thrift Incentive Plan, employees contribute as they choose from a minimum of 2 percent of their salaries to a maximum of 10 percent. Prairie Farms contributes an amount, which has ranged from a minimum of 8 percent to 17 percent of the total payroll. Each year, the Board of Directors determines a percentage of the year's margins before taxes to be contributed to the plan. This total amount contributed by the cooperative divided by the cooperative's total payroll for employees included in the plan gives the percentage of total salary that employees covered under the plan will receive. The total contributions of the employees and the cooperative are sent to the IAA Trust Company, which invests it. Like other retirement plans, an employee's share can be drawn out in a number of different ways on retirement.

Allocation of monies out of margins toward the Thrift Incentive Plan for Ice Cream Specialties Personnel is made by a separate decision of the board. Ice Cream Specialties has never been as profitable as the rest of the Prairie Farms; therefore, the cooperative's range of contribution from year to year to this particular thrift incentive plan has been 3 percent to 7.5 percent (usually ranging from 4 percent to 5 percent) per year as opposed to the 8 percent to 17 percent per year into the Thrift Incentive Plan for the rest of the Prairie Farms nonunion employees.

Apparently, in all acquisitions or mergers, the managers of the acquired facility continued with Prairie Farms for as long as they wanted to remain. The new management was made subordinate to a designated level of management within the Prairie Farms organization. This may be the general manager (Gourley) or some other plant manager, where the newly acquired facilities are basically used as distribution points or as part of a centralized production scheme. In any case, top managers were always given the opportunity to be kept on to perform whatever tasks would be expected of their acquired units.

Prairie Farms appears to have held basically the same general attitude toward employees at an acquired facility. The notable difference was in many facilities taken over for use as distribution points, which would not need all the employees formerly working at the facilities in production capacities. The savings in labor costs resulting from expansion of sales areas serviced by large central plants operating near capacity was a major factor in the decision to expand in the first place. Thus, Prairie Farms did contribute to overall reduction in use of production personnel per unit of dairy products sold in its expanding sales areas. While personnel



These pages show Prairie Farms' headquarters and management. Left page, bottom, Fletcher Gourley, general manager, discusses a report with Leonard Southwell, assistant general manager. Bottom left, next page, Melvin Schweizer, left, board president, visits with Wendell Armour.



Newest Prairie Farms facility is subsidiary PF Supply at Granite City, which batches a variety of dairy products for one-stop delivery to fast-food and other types of businesses.

numbers might be cut at an acquired unit, depending on use made of the facilities, the personnel were retained to as great an extent as possible and employed either in the operation of the acquired facility or, in some cases, elsewhere within the Prairie Farms organization.

Worthy of special note, these researchers observed a degree of loyalty to the cooperative among the employees of Prairie Farms, probably unsurpassed by any other cooperative dairy concern. Such loyalty is not only seen in extraordinary devotion to the general manager, but to each other and to the cooperative, including members as well as the business. This loyalty, no doubt, was demanded, observed, and rewarded over the years by the general manager, and was likely a significant factor in the cooperative's success.

Impact on Other Cooperatives

Prairie Farms has had an impact on other cooperatives in at least five ways: (1) Purchases of raw whole milk; (2) through joint ventures; (3) participation in the same Federal order markets; (4) through its competitive pay prices; and (5) from its participation in programs to improve the general level of producer pay prices (such as the political education programs of Mid-America, Associated Milk Producers, Inc. and Dairymen, Inc., and advertising) and general services to markets, such as balancing operations. These will be discussed below.

As mentioned elsewhere, Prairie Farms buys bulk milk from several other cooperatives and pays the Class I price of the market where the milk is pooled, while the shipping cooperative pays farm-to-plant transportation. These other cooperatives become members of Prairie Farms and participate in dividends.

At district meetings, one member has one vote. The cooperative that has shipped bulk milk has one vote, which it may use by sending in a proxy if preferred. In a Federal order referendum, the shipping cooperative may vote its members specified by the market administrator as eligible. Those whose milk was attached to the order during a specified period would be included.

Certificates for retained patronage dividends issued to direct-ship members are likewise issued to the cooperative whose milk was shipped to Prairie Farms. Any method of payment revolving these certificates is used uniformly for all holders. Any Prairie Farms services to members would be available to all.

Prairie Farms management adopted the objective of procuring 40 percent of its total milk supply from other cooperatives and 60 percent from its own producers. Through September 30, 1968, Prairie Farms derived almost 100 percent of its manufacturing grade milk from its direct-ship patrons.

During the transition years 1969 and 1970, manufacturing grade milk procured from direct-ship patrons fell from 100 percent in 1968 to 31.8 percent in 1969 and to 5 percent by 1970. By 1971, Prairie Farms had no direct-ship patrons selling manufacturing grade milk. Since 1970, all manufacturing grade milk has been procured from other sources. Also in 1971, other source grade A milk receipts became more than 50 percent of the total grade A procured each year. With the grade A supply being about 50 percent from other cooperatives and all of the manufacturing grade milk coming from other cooperatives, the percentage of Prairie Farms' total milk received from other cooperatives has been greater than 50 percent since 1971.

In the early 1970's, Prairie Farms considered a merger with Wisconsin Dairies, which could readily have furnished milk and balancing facilities. The merger was not carried out primarily as a result of problems encountered concerning voting and representation on the board.

The impact of Prairie Farms on the three larger regional cooperatives in its vicinity, Mid-America, AMPI, and Mississippi Valley, would be partly in terms of competing for producers buying milk from the regional cooperatives in bulk form and the position each might take in the various Federal milk order hearings in the markets where one or more of the regional cooperatives and Prairie Farms marketed milk. Of the three, Mid-America seems to be the only one with any substantial number of producers in the same procurement area as Prairie Farms.

Prairie Farms developed a joint venture with Dairymen, Inc., in October 1978, largely to obtain the milk supply of a bottling plant. This venture may be described as follows: Dairymen, Inc., bought into the facilities of the Ideal-American Dairy Company of Evansville, Ind., which previously has acquired Ideal Pure Milk Company. This furnished the basis for the joint venture between DI and Prairie Farms. There were apparently five basic points within the agreement: (1) Dairymen, Inc., and Prairie Farms would share equally the expenses of the renovation of the Ideal-American plant; (2) Dairymen, Inc., would supply milk to the plant; (3) Prairie Farms would provide an on-the-spot manager and managerial help from its Carlinville offices; (4) Prairie Farms would combine its Evansville distribution point with the Ideal-American operation as of January 1, 1979, and bring in the distribution from its Owensboro, Kentucky, facility within a short time; and (5) Dairymen, Inc., would provide the producer milk, while Prairie Farms would manage the processing, pricing, and distribution of the products, and the two would share margins equally from the operation.

Late in 1979, a joint venture was formalized between Prairie Farms and Mid-America for the ownership and operation of Hiland Dairy in Springfield, Mo. The two

divided equally the acquisition cost. Mid-America is furnishing the milk supply. Prairie Farms is responsible for plant management and distribution. Margins will be shared equally. This is an operation of substantial size, handling about 15 million pounds of milk per month in Springfield, Mo., and through six distribution points in various parts of Missouri. This modern facility will continue to be managed by its former principal owner.

As mentioned above, another respect in which Prairie Farms has an impact on other cooperatives is in terms of the positions taken by the various cooperatives in the Federal orders where they pool milk. Prairie Farms now pools milk under the St. Louis-Ozarks, the Southern Illinois, and the Central Illinois orders. For many years, the principal cooperatives pooling milk under the St. Louis-Ozarks order were Sanitary Milk and Square Deal. Both were combined into Mid-America when that cooperative was formed in 1968.

The relationship between Prairie Farms and Sanitary Milk began in the late 1940's, with an agreement between the Carlinville cooperative and Sanitary Milk, whereby Sanitary Milk would provide Carlinville with a market for its bulk grade A milk in St. Louis. Shortly after this agreement was made, Sanitary Milk informed Carlinville they would not, in fact, be able to provide a year-round market. Carlinville had already begun its grade A program and needed a market for the milk. Carlinville informed Sanitary Milk that it would find a market in St. Louis with or without the help of Sanitary Milk. Subsequently, Prairie Farms and Sanitary Milk were most often in disagreement, particularly with respect to Federal orders. Sanitary Milk, with an eye toward increased membership, favored bringing in milk year round from the northern markets through its membership. The Carlinville cooperative, backing an individual handler pool in the Federal order, favored keeping the northern milk out except in slack periods.

In the hearings under the St. Louis order, two issues on which Prairie Farms differed sharply from Sanitary Milk and Square Deal were (1) whether there would be an individual handler pool as opposed to a marketwide pool, and (2) the level of class prices. The other two cooperatives, and perhaps any others that may have been on the market, favored a marketwide pool, whereas Prairie Farms, as expected, favored an individual handler pool. Because Prairie Farms was selling the majority of its milk as Class I in bottled form, one would expect it to prefer an individual handler pool, as opposed to being required to pay into the producers' settlement fund all receipts over and above the blend. Sanitary Milk and Square Deal were constantly pressing for higher Class I prices at the hearings. On the other hand, Prairie Farms usually pressed for somewhat lower Class I prices, because they had to reflect their Class

I prices directly in their prices for bottled milk. They were aware of consumer resistance to higher prices, when Class I prices are pushed up too sharply.

Superpool Participation

Prairie Farms participates in three superpools composed of bargained prices over and above the Federal order prices. They are bargained and administered completely outside the Federal order system. In some superpools, Prairie Farms pays in, because it functions as a dealer, processing milk that is regulated under the Federal order. If Prairie Farms has producers under the order, it will also draw out from the superpool.

The superpools in which Prairie Farms qualifies its own direct-ship producers and the other cooperatives on those markets follow:

Southern Illinois - Prairie Farms, AMPI, Mid-America, and Mississippi Valley.

Central Illinois - Prairie Farms, Mississippi Valley, and AMPI.

St. Louis-Ozarks - Mid-America and Prairie Farms. National Farmers Organization (NFO) is on this market (about 4 million lbs a month) but does not participate in the superpool. Ozark Dairymen, Inc., has 21 producers on the market. It is in the superpool, because it sells to Prairie Farms.

Prairie Farms has no producers on the Iowa or Louisville markets. Prairie Farms does sell processed products in Iowa and Louisville but procures this milk from other cooperatives. Prairie Farms, therefore, pays into those superpools but does not draw out. In each of the first three named, Prairie Farms both pays in and draws out.

The administrator of these three superpools is the Belleville National Bank vice president. He is paid only about \$200 a month as direct pay for performing this service. In the St. Louis-Ozarks Superpool, Mid-America announces the price, and all the others follow. In Southern Illinois, the price is announced by AMPI and Mississippi Valley and Prairie Farms follows. In Central Illinois, Prairie Farms may announce the price.

All competing dealers pay superpool premiums. The superpool gives credits for long-term contracts with schools and military establishments, because these contracts are negotiated a year in advance and price adjustments other than Federal order price changes cannot be made on short notice. The market administrator of St. Louis is authorized in writing by the cooperatives and the bottling plants to furnish to the managing bank any information necessary for

calculations under the superpool. Because Prairie Farms pays into the superpools as a dealer and draws out as a producer cooperative, it benefits financially only on its producer milk supply. In addition, Prairie Farms is assured that all competing dealers pay the same minimum prices for milk.

As to producer prices, a spokesman for Mid-America reported Prairie Farms held the pay price in the procurement area where both competed at a somewhat higher level than Mid-America would have held them had it not been for the competition. The reasons why this might occur are obvious. Mid-America was in financial difficulty (actually suffering a loss for 2 years) partly because of legal fees to defend itself in certain law suits that dragged on, and also unusual competitive behavior in some parts of its territory. In addition, Mid-America received less in operating margins because it did not take its milk as near to the consumer. Furthermore, Mid-America performed more milk supply services for the market and incurred greater costs than Prairie Farms. In contrast, Prairie Farms was in strong financial condition, had no unusual expenses, operated over a relatively small procurement area, and maintained no balancing plants. Therefore, Prairie Farms could afford a higher payout.

Mid-America and Prairie Farms appear to enjoy excellent relationships notwithstanding their competition. Their joint venture and Prairie Farms' purchase of bulk milk from Mid-America attest to that. Mid-America gets about 6 producers per year from Prairie Farms; Prairie Farms gets about 10-12 from Mid-America.

It seems reasonable to say the effect of Prairie Farms on other cooperatives has been positive and helpful; the competition where it exists is considered "hard but fair." However, Prairie Farms does get charged by some competing cooperatives with lack of concern for dairy farmers and the general welfare of dairy cooperatives. More specifically, the question is raised, "What does Prairie Farms contribute toward defraying the expense of political education or other programs to keep up the general level of milk prices, or fighting the attacks on cooperatives, Federal orders, on milk prices and such?" In reply, it could be pointed out that "Prairie Farms pays dues to the National Milk Producers Federation and pays a small percent for advertising. That's about it.

It should be pointed out that as of 1979 Prairie Farms became a member of the National Council of Farmer Cooperatives.

Impact on Noncooperative Competition

The impact of Prairie Farms on noncooperative competition would be evidenced in competition for patrons and sales

outlets. Through the 1930's, the cream pools first and then 10 cooperative creameries competed with the noncooperative butter factories such as centralizers for the farm-separated cream supply. The cooperatives are said to have paid higher prices for farm-separated cream than the competition. However, actual prices paid dating back to the earlier years are not available. Whether or not pay prices are documented, other benefits are established such as the thirteenth check, the building of equity in cooperatives, and the improvement of cream and milk quality. There was not much direct competition for butter outlets, because most of the butter found ready wholesale buyers in Chicago during those years. It seems likely that the central butter handling cooperative for these 10 creameries in Chicago, Illinois Producers Creameries, was in a position to obtain some premiums in wholesale markets as cream quality gradually improved, and likely performed some grading, printing, and branding functions with some private labeling. All of this meant somewhat higher returns to patrons of the local cooperative creameries. Also there were some local printing and sales throughout the general manufacturing area of these creameries. However, essentially unlimited supplies of butter could be sold through wholesale markets national in scope, and competing for butter outlets is not at all similar to competing for supermarket accounts in a local trade territory.

When in early 1942, Carlinville as well as some of the other creameries installed driers at the instigation of the central organization, Illinois Producers Creameries, Carlinville competed for whole milk supplies that were becoming increasingly available for manufacture. Carlinville competed with private plants (such as Sugar Creek and Kraft) and cooperatives alike for whole milk patrons, but here again little competition for wholesale buyers was necessary especially in view of wartime demand.

The keenest competition with private processors was for sales accounts and sales territories for bottled milk and fluid milk products, which came after the Carlinville cooperative began to sell bottled milk in 1948. Initially, it obtained this bottled milk from Dressel-Young Dairy, later Aro-Dressel in Granite City, Ill., but began its own bottling operations in 1949.

Noncooperative processors of bottled milk and fluid products usually obtain their raw milk supplies from cooperative bargaining associations with some exceptions. Prairie Farms faced keen competition from bargaining associations for patrons to furnish these supplies, but this was competition with other cooperatives.

Examples of the severe competition faced by Prairie Farms are the price wars carried on by the largest two St. Louis dairies during the 1950's. These price wars in several small Illinois towns are documented in Federal Trade Commission

reports and Congressional committee reports. Sometimes the price wars were primarily directed at Prairie Farms, though many small dairies in Southern Illinois feeling the brunt of the wars were forced out of business. It should be stressed, however, that many factors brought pressure on these small dairies in addition to price wars. At times, the low wholesale prices coupled with coupons offered by these two large dairies, Adams and Pevely, amounted virtually to giving the milk away. Prairie Farms managed to hold onto a substantial part of its business without dropping prices to the most extreme lows offered by competition, based on its consumer acceptance and service.

It was also necessary for Prairie Farms to compete for accounts with several small dairies in various parts of Illinois. In general, Prairie Farms agreed to supply either bulk milk or the final bottled product to them. If the bottled products were furnished, the dairy would become a distributor for Prairie Farms products. In the final outcome, Prairie Farms acquired several of these small dairies, as discussed earlier in the section on the history of merger and acquisition activity.

It is apparent from data on sales volume of milk bottling firms acquired that with about three exceptions, all were far below the minimum size for a successful packaging plant. Parker placed that minimum at 60,000, to 80,000 quarts per day in 1971.⁹ Two of the exceptions were completely outside of Illinois (Aro-Dressel and Flynn). Most of the others inevitably would have had to close soon, because of a number of economic forces at work.

Usually, the cooperative acquired the sales accounts and territories and most often kept the owners or principal sales personnel as Prairie Farms employees or distributors. The worst of the squeeze from the price wars was over when Prairie Farms acquired Aro-Dressel in Granite City and St. Louis in 1967, gaining access to the St. Louis market. The last two dairies acquired were through joint ventures with Dairymen, Inc., and Mid-America. These joint ventures could be viewed as a new method of competition.

After about 1962, Prairie Farms appears to have slacked off on its efforts to build up a larger number of patrons, partly because the number of dairy producers was decreasing so rapidly, while milk deliveries per producer were increasing at a fast pace and partly because balancing plants would have become necessary if more direct-ship patrons were acquired. Instead, Prairie Farms followed the policy of procuring tank-loads of milk from cooperatives chiefly in Wisconsin and Minnesota. This is discussed elsewhere. In

1979, there remain only a small number of fluid milk processors in the St. Louis-Ozarks market and in Illinois, outside the Chicago market area where Prairie Farms has never competed.

To sum up, it may be said that Prairie Farms has (1) furnished a market for the assets of many small Illinois dairies that went out of business and employed a number of their personnel, (2) weathered the competition from the larger dealers, and (3) sustained a steady rate of growth since its entry into the bottled milk business.

In addition, a basic management policy of great consequence to the growth of Prairie Farms was to recognize the set of economic forces at work and to acquire these small processors at reasonable cost as they become available. The economic forces included the paper package, the shift to supermarket sales of milk, the Federal Trade Commission's restraint of large dairies from buying small dairies, the quantity container, and many others.

Impact on Community and Economy of Trade Area

There are several dimensions to the impact on the economy of an organization such as Prairie Farms. For one thing, there is its role in sponsoring local organizations of one kind or another, civic, educational, athletic, and such. For another, there is the impact on such economic performance in the area as employment, incomes, and output, a complex task for research to measure.

The following list suggests the nature of sponsorship of community activities and local organizations, which is promotional in part:

1. An annual \$1,000 scholarship for the Illinois State Fair Queen.
2. Promotional use of the miniature train at county fairs.
3. Sponsorship of bowling teams.
4. Sponsorship of Little Babe Ruth League baseball teams.
5. Promotional use of a horse drawn milk wagon that came with the acquisition of another dairy.
6. Sponsorship of softball teams for employees.
7. Participation in the activities, as much as possible, of clubs and churches.

In the organizational chart, the last section on management policies, points out membership dues in Lions Clubs and other such organizations will be paid by Prairie Farms, but

⁹Russell W. Parker, "Economic Report on the Dairy Industry," Federal Trade Commission, Washington D.C., 1973.

not the cost of food consumed at such clubs. This would, of course, be intended to encourage club membership among salaried employees.

Prairie Farms also furnishes facilities for use by the Illinois Dairy Council, as explained in the 1978 Annual Report.

It is known that the impact on employment will be greater than the actual numbers employed by Prairie Farms. Similarly, as far as income is concerned, the impact will be greater than simply the wages and salaries paid to Prairie Farms employees. The impact on output will be greater than simply Prairie Farms' gross sales. In other words, there is a multiplier effect.

Properly measuring a multiplier effect is an expensive and time consuming research task, for which neither the time nor other resources were available for this study. However, it seems reasonable that multiplier data from studies done elsewhere will have at least some relevance. In a search for useful multipliers, a substantial number of studies done in various parts of the United States were considered. Of the three studies chosen for use here, the first was done in Humboldt County, California, the second in the Star Valley region in Wyoming, and the third in the Texas economy as a whole.¹⁰

Each of the three study areas chosen here has a dairy sector of some importance within the area's economic system. In each case, however, dairying and dairy processing are not the major economic activity in the area, nor are they in Illinois. The magnitude of the multiplier effect depends directly on the extent of local linkages. When a firm buys inputs outside an area, those purchases have no multiplier effect within that particular area (no secondary impacts). Similarly when the firm sells output outside that area, there is no multiplier effect within that specified area. Therefore, in general terms, more nearly self-sufficient areas will tend to display higher multipliers, because the economic activity generated as a result of a particular firm's doing business within the area will tend to take place in that area.

¹⁰Dean, Gerald W., Harold O. Carter, Eric A. Nickerson, and Richard M. Adams, "Structure and Projections of the Humboldt County Economy: Economic Growth Versus Environmental Quality," California Agricultural Experiment Station, Davis, July 1973.

Clark, Richard T., Robert R. Fletcher, Harley J. McKinney, "The Star Valley Economy-An Interindustry Analysis," University of Wyoming, Agricultural Experiment Station, Laramie, November 1974.

Jones, Lonnie L. and Gholam Mustafa, "Structure of the Texas Economy—Emphasis on Agriculture," Texas A&M University, The Texas Agricultural Experiment Station, College Station, May 1972.

The area within which Prairie Farms operates would most likely fall within the range of self-sufficiency bounded by Humboldt County, California, and Wyoming's Star Valley on the one hand, and the State of Texas on the other. Because the dairy industry in Humboldt County, California, and Wyoming's Star Valley are relatively small, some of the purchasing and/or selling is likely to have been done outside, furnishing no multiplier effect on that part. Because Texas as a whole, however, is so large and has a relatively diverse economy, most of the buying and selling by the dairy firms would have most likely been within the State.

It seems reasonable, therefore, that the employment, income, and output multipliers drawn from these three studies should contain, within their respective ranges, a good approximation of employment, income, and output multipliers for the trade area within which Prairie Farms operates. The actual values of the multipliers from the studies referred to appear in table 6. Also shown in table 6 is the range of the calculated values and the average which will be the value employed in this study. The estimations of the impact of Prairie Farms refer to the firm's impact within these defined areas. The area outlined for 1968 includes substantially all of the cooperative's area of operation for that year. The area outlined for 1978, however, does not include all of the cooperative's area of operation in 1978.

Conservatively, three geographical areas of operations have been excluded in 1978, so estimations of the impact of Prairie Farms in that year will refer to more nearly the same general area affected in 1968. Employment, wages and salaries, and gross sales for these three areas have likewise been excluded in calculating the cooperative's impact in 1978. The three areas excluded in 1978 were: (1) the area around the cooperative's Des Moines, Iowa, plant; (2) the trade area of the Marietta, Georgia, ice cream novelties plant; and (3) the cooperative's area of operation in western Indiana and northwestern Kentucky. Figure 6 is a map showing the Prairie Farms trade area used in estimating impact on employment, incomes, and output.

Table 6—Employment income and output multipliers for dairy processing and manufacturing from selected studies, 1972-74

Multipliers	California	Texas	Wyoming	Range	Average
Employment.....	(¹)	3.77	2.14	1.63	2.96
Income	3.68	2.76	3.36	.92	3.27
Output.....	2.61	1.85	2.10	.76	2.19

¹ Employment multiplier was unavailable in the Humboldt County, California study.

Employment is measured in terms of the number of staff-years. Income is measured in terms of the total wages and salaries paid. Output is measured in terms of total sales. In 1978, the total Prairie Farms organization had 1,100 employees plus 200 that were employed by PFD Supply Corporation and the Ice Cream Specialties Subsidiaries. The 1,300 employed figure includes employees in sales but not those who are distributors or vendors. In 1968, the total number employed was 760. These figures do not include those driving tractors that pull semitrailers between plants or from plant to distribution point. Those in sales include the company employed route-persons. Data are summarized as follows:

Item	1968	1978
	<i>Number</i>	
Number of employees:		
Illinois trade area.....	740	800
Other trade areas.....	20	500
Total.....	760	1300
	<i>Thousand Dollars</i>	
Salaries and wages:		
Illinois trade area.....	*	14,970
Other trade areas.....	*	7,373
Total.....	4,876	22,343
Total sales.....	37,628	206,321

*In 1968, essentially all of Prairie Farms' salaries and wages went to employees in the Illinois trade area, defined to include the St. Louis area.

As the estimates are shown in table 7, the impact of Prairie Farms in 1968 was around 2,000 jobs, \$16 million in income, and \$79 million in output. By 1978, this had grown to around 2,300 jobs, \$48 million in income, and \$433 million in output. It may be repeated that, though analysts in general would agree that the employment, income, and output generated by Prairie Farms was greater than figures shown by accounting records, the exact increments are not known. It is believed by the authors that these estimates are reasonable.

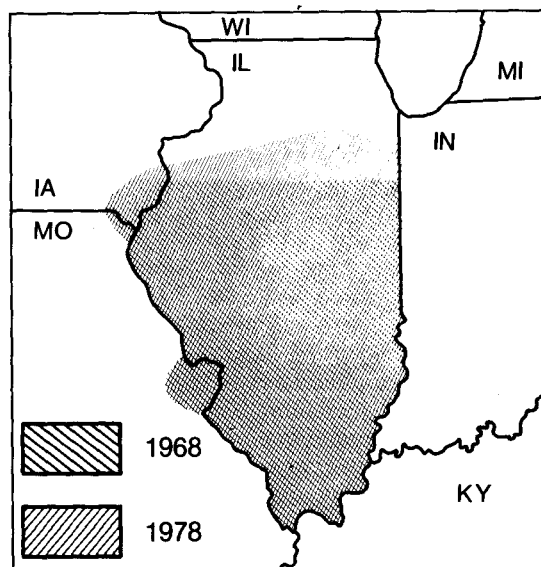
Table 7—Estimated impact of the processing operations of Prairie Farms on total employment, income, and output within its trade area

Multiplier	Estimated multiplier value	Prairie Farms value ¹		Estimated impact of Prairie	
		1968	1978	1968	1978
Employment.....	2.9	740	800	2,146	2,320
Income	3.2	4,876	14,970	15,603	47,904
Output.....	2.1	37,628	206,321	79,019	433,274

¹ The values listed in this column represent the following:
Employment: the total number of people directly employed by Prairie Farms (i.e., total staff-years) within the defined trade area.
Income: total wages and salaries paid to Prairie-Farms employees within the defined trade area in thousand dollars.
Output: gross sales by Prairie Farms at all of its locations, in thousand dollars.

Figure 6

Trade Area Used in Estimating Prairie Farms' Impact on Employment, Income, and Output, 1968-78



The area outlined for 1968 includes substantially all of the co-op's area of operation for that year. The area outlined for 1978, however, does not include all of the co-op's area of operation in 1978.

To say that milk procurement, processing, and distribution carried on by Prairie Farms had an economic impact on its procurement and trade area is not to say this activity might not have been carried on by some other firm. Of course, any other large firm that used the same inputs, followed the same policies and programs, and furnished the same products and services might have had a similar impact.

Summary of Basic Management Policies

Prairie Farms is one of the very few cooperatives to attain success in fluid milk bottling and distribution as a principal line of activity, grow to a substantial size, show increasing financial strength, and provide outstanding returns to members.

It seems relevant to ask whether management policies that made for this relatively unique accomplishment can be identified. Several especially of note follow, with no attempt to list them in importance:

1. Prairie Farms was alert to major developments and made decisions appropriate to the impact they could be expected to have. Prairie Farms developed over a period of 4 decades, and its predecessor organizations that were substantially absorbed into it had roots that began several years before. It would not be too much overdrawn to say that all these span the major evolutionary period of the dairy industry in Illinois and St. Louis.

During this period, many economic, legal, and institutional events were taking place that shaped development of some types of production and marketing arrangements, changed farms, changed plants, and later changed them again. Farms in Illinois were getting larger, turning more to specialization in dairying by the late 1930's. By the early war years, the larger volume producers were ready to begin whole milk deliveries to plants, turning away from delivering sour farm-separated cream. Prairie Farms rapidly moved into manufacture of whole milk.

A number of developments began to have a noticeable impact after World War II. The paper package, adopted in the late 1940's, greatly extended distribution areas of companies with the capital to adapt it and the other innovations that clustered around it. Others included pasteurization and homogenization. Usually the paper package meant heavy emphasis on chain store sales. The erosion of restrictive local health ordinances, especially after the Dean Milk case of the early 1950's, improved four-lane highways including the Interstate systems, mechanically cooled semi-trailers, and palletized loading increased the feasibility of expanding distribution areas.

The merger restraining orders issued in 1962 against the eight national dairy concerns (Kraft, Borden, Beatrice and such) forbade them for a period of years from acquiring another dairy firm without express permission of the Federal Trade Commission (FTC). These restrictions were intended to dampen growth by merger of the larger dairy firms and foster the growth of middle-tier firms.

The restraining orders produced some of the effect desired by the FTC, in that they probably expedited the acquisitions

by Prairie Farms and furthered its growth. Kraft, Borden, Beatrice, and Foremost in the Prairie Farms trade area made little or no attempt to acquire several smaller dairies being forced out of business by technological and other developments described. The market for assets of the smaller dairies was largely dried up.

Prairie Farms provided a market for some of the assets, including management and some physical plants. Being alert to all these developments, Prairie Farms grew by acquiring noncooperative firms, as these developments impacted upon them and by merging and consolidating with other cooperatives, where there was mutual advantage.

2. One close observer of acquisitions made by Prairie Farms characterized the bargaining philosophy of the general manager as "Never buy anything you want." Whether or not this is a satisfactory wording, it does appear to describe a method of operation. The buyer maintains a casual posture and allows the seller to seek him out and give his own reasons for selling. At leisure, the buyer may decide to help the seller by furnishing a market for his assets and a continued opportunity for the seller to take part in the business that he sells. But this is on the grounds of *helping* the seller with, of course, an understanding that there is some benefit to the buyer as well (because the buyer is gracious about it).

Low overhead for facilities resulted from the policies followed in acquiring plants and distribution facilities. To date, expenditures for "brick and mortar" have been held to a minimum. Equipment is said to be modern for efficiency and quality, though not necessarily the most sophisticated, and buildings are not intended as show places. Low overhead gives an advantageous position in pricing, assets are more liquid, and margins are relatively high.

3. Decentralization of operations to the greatest extent feasible gives maximum flexibility to meet differing competitive or cost conditions in each area. In general, each plant or distribution center manager is charged with pricing products within his distribution area, subject to broad guidelines from top management. Bonuses to local managers are based on their particular revenues. Seventeen separate labor union contracts are in force. (It appears axiomatic that labor unions prefer companywide bargaining when they can get this advantage.)

Large national concerns with whom Prairie Farms competes can seldom manage such local autonomy to achieve maximum flexibility.

4. Prairie Farms has developed the reputation for avoiding being "the price leader," in setting producer pay prices and those of finished products. According to this reputation, Prairie Farms tends to follow the sales prices of the large

national firms where they compete. Such firms have high overhead and perhaps even higher selling costs. Prairie Farms follows the policy of meeting competition unless that means predatory price cuts, but such cuts are seldom if ever made by large national concerns.

There may be some exceptions to the policy of not being the price leader. If it is reported correctly, Prairie Farms may have been the leader on patron pay prices at times.

5. By procuring only 50 to 60 percent of its milk from direct-ship patrons, Prairie Farms has avoided the need to maintain balancing plants. The surplus is kept in the country plants of the cooperatives that are members of Prairie Farms, Land O'Lakes, Mid-America, Wisconsin Dairies, and such. Balancing has often been a high-cost function for a cooperative.

6. Prairie Farms based its program on quality from the early years, both in procurement and in processed products and distribution. Though not unique to Prairie Farms, this is a policy of strategic value. On the farms, for a plant manager to say, "We want the producers with highest quality milk," usually means he wants the largest producers as well. To pay a milk house premium or a bulk tank premium, as Prairie Farms did, usually brings in or holds the large-volume producers whose milk is the cheapest to assemble and handle. Once in the plant, such milk can be used for any outlet the plant can develop.

Sales policy appears usually to make a quality appeal, de-emphasizing prices. This can be given as the reason to both wholesale accounts and, in turn, to consumers for refusing to meet sharp price cuts. However, to establish and maintain the quality appeal may be expensive. It will demand constant vigilance.

7. Prairie Farms has followed a policy of retaining managers and some of the other employees of acquired and consolidated firms in their positions as long as they wanted to remain.

8. Prairie Farms has demanded, observed, and rewarded employee loyalty, and appears to receive loyalty excelled by no other cooperative. It has good bonus and retirement plans. Salaries for key employees appear competitive with large national firms.

9. Prairie Farms is in no way involved in contracts for hauling milk from farms to plants, and therefore does no subsidizing of hauling rates. Only two of the procurement routes are operated by Prairie Farms.

10. Prairie Farms' financial policies have been basically conservative. It began early to revolve its retained margins. It

has never made a per-unit capital retain deduction. Its checkoff for expenses does not exceed 8 cents per hundred-weight. It repurchases any outstanding stock on demand.

11. During critical decision periods, the management shows a relaxed, leisurely attitude, inspiring trust.

12. The cooperative has retained one manager during its entire 40-year life, given him authority, and supported his decisions.

Bibliography

Annual Report, Prairie Farms Dairy, Inc., (various fiscal years).

Babb, Emerson M. and J. Robert Strain, "Economic Feasibility of Consolidating Prairie Farms Dairy and Wisconsin Dairies Cooperative," A Preliminary Report, unpublished, June 1971.

Clark, Richard T., Robert R. Fletcher, and Harley J. McKinney, "The Star Valley Economy—An Interindustry Analysis," University of Wyoming, Agricultural Experiment Station, Laramie, November 1974.

Dean, Gerald W., Harold O. Carter, Eric A. Nickerson, and Richard M. Adams, "Structure and Projections of the Humboldt County Economy: Economic Growth Versus Environmental Quality," California Agricultural Experiment Station, Davis, July 1973.

Federal State Crop and Livestock Reporting Service, "Illinois Agricultural Statistics," 1945-76.

Jones, Lonnie L. and Gholam Mustafa, "Structure of the Texas Economy—Emphasis on Agriculture," Texas A&M University, The Texas Agricultural Experiment Station, College Station, May 1972.

"Milk Marketing Agreement," Prairie Farms Dairy, Inc., Carlinville, Illinois, 1974.

"Minutes of Meetings Board of Directors," Prairie Farms Dairy, Inc., Carlinville, Illinois, various issues.

Mueller, Willard F., Larry G. Hamm and Hugh L. Cook, "Public Policy Toward Mergers in the Dairy Processing Industry," NC Project 117 Monograph 3, U. of Wisconsin-Madison, December 1976.

Prairie Farms Dairy, Inc., "Prairie Farms News," monthly, various issues.

Prairie Farms Dairy, Inc., "Annual Audits," various years.

Robert Morris Associates, "Annual Statement Studies," Philadelphia, Pa., 1946-1978.

"Service Agreement," Illinois Agricultural Service Co., Bloomington, Illinois, and Prairie Farms Dairy, Inc., Carlinville, Illinois.

"Small Business Problems in the Dairy Industry," Hearings before Special Subcommittee of Select Committee on Small Business, House of Representatives, Eighty-sixth Congress, Second Session, Washington, D.C., April 6 and 7, 1960.

U.S. Dept. of Agri., Agricultural Marketing Service, Federal Milk Order Statistics, Annual Summaries (various years).

United States Dept. of Agriculture, "Milk Production, Disposition and Income," Statistical Reporting Service (various years).

U.S. Department of Commerce, Bureau of the Census, "U.S. Census of Agriculture," Statistics by Counties, Illinois, 1945 and each five years to date.

Appendix I

Policy Resolution No. 8¹

Policy Resolution on Class "B" Preferred Stock

RESOLVED, (a) That it be the policy of the Illinois Agricultural Association and of the County Farm Bureaus in Illinois to include Class "B" Preferred Stock in the capital structure of all cooperative companies heretofore or hereafter organized and sponsored by them, respectively.

(b) The purpose and objectives of Class "B" Preferred Stock shall be: (1) to assure the continuing affiliation of Farm Bureau sponsored marketing, supply and service organizations with Farm Bureau, (2) to assure that such Farm Bureau sponsored organizations will provide supplies, marketing and other services or cause supplies, marketing and other services to be provided to the farmer members of Farm Bureau, and (3) to assure that such Farm Bureau sponsored organizations are responsive, on an economically sound basis consistent with service to farmers, to the needs of their member-producers or their member cooperative associations composed of member-producers. It is recognized that Class "B" Preferred Stock ownership by the Illinois Agricultural Association and various affiliated cooperative associations is beneficial to the member-producers and member cooperative associations composed of member-producers of such affiliated cooperatives which seek and need the continuing sponsorship and support of Farm Bureau.

(c) The number of shares of Class "B" Preferred Stock of any such company issued and outstanding at any time shall be an amount sufficient to accomplish the purposes of Class "B" Preferred Stock as may be determined from time to time by the Board of Directors of the Illinois Agricultural Association and such other companies which are holders of shares of Class "B" Preferred Stock.

(d) Subject to the approval of the voting delegates of the Illinois Agricultural Association and the shareholders or members of any other company or association which is the holder of shares of Class "B" Preferred Stock, and Board of Directors of the Illinois Agricultural Association and any other such company or association, which is the holder of shares of Class "B" Preferred Stock shall have the authority to transfer or assign legal ownership of Class "B" Preferred Stock in consultation with the boards of directors of the respective affiliated companies which have issued such stock. Subject to this provisions, Class "B" Preferred Stock shall be issued and held as follows:

(1) In statewide companies affiliated with the Illinois Agricultural Association, the Class "B" Preferred Stock shall be issued to and held by the Illinois Agricultural Association.

(2) In companies affiliated with the Illinois Agricultural Association and operating in Illinois and in one or more other states, the Class "B" Preferred Stock shall be issued to and held only by the Illinois Agricultural Association except that the Board of Directors of the Illinois Agricultural Association may determine in the case of such a company that the Class "B" Preferred Stock thereof shall be held by the Illinois Agricultural Association and the statewide Farm Bureau in the state or states other than Illinois in which such company operates.

(3) The Class "B" Preferred Stock in any company which operates in one or more counties but not statewide and is affiliated with a statewide company shall be issued to and held by the statewide company with which such single or multi-county company is affiliated or by the Illinois Agricultural Association. If any such single or multi-county company is affiliated with more than one such statewide company, then such Class "B" Preferred Stock shall be issued to and held by the statewide company with which the major portion of the single or multi-county company's business is transacted or by the Illinois Agricultural Association.

(4) The Class "B" Preferred Stock in single county companies affiliated with a County Farm Bureau and not affiliated with or holding membership in any such statewide company, shall be issued to and held by the County Farm Bureau.

FURTHER RESOLVED, (a) That the Class "B" Preferred Stock of a statewide company held by the Illinois Agricultural Association, or a company operating in Illinois and in

¹Policy Resolution No. 8, as published in articles of incorporation, bylaws and policy resolutions, Illinois Agricultural Association, as amended, effective December 13, 1978.

one or more other states, shall be used and voted only in accordance with the authority and instructions given by the Board of Directors of the Illinois Agricultural Association and such other companies which are holders of Class "B" Preferred Stock and for the purposes for which such stock is held; provided, that if in the election of directors in any such company there are two or more nominees for the same office, the Class "B" Preferred Stock held by the Illinois Agricultural Association shall be voted only (1) in support of the nominee favored by the holders of a majority of the other shares of stock voting upon such nominees; or (2) to adjourn the meeting at which such election of directors is held for a period of not to exceed ninety (90) days during which period the Board of Directors of Illinois Agricultural Association shall consult with the County Farm Bureaus and other interests in the area or district involved (or in the State in case of a director elected from a State at large); shall determine the facts and issues involved and after making such investigation and determination, shall then authorize and instruct its proxy or representative as to the manner in which such Class "B" Preferred Stock shall be voted or used in the adjourned meeting.

(b) That the final authority and responsibility for all matters involving the use of any Class "B" Preferred Stock held by the Illinois Agricultural Association is vested in the Board of Directors of the Illinois Agricultural Association.

(c) That Class "B" Preferred Stock of any company which operates in one or more counties but not statewide held by the Illinois Agricultural Association or by a statewide company or by a company operating in Illinois and in one or more other states shall be used for quorum purposes only and shall not be voted upon matters coming before a shareholders' meeting unless:

(1) The County Farm Bureau in the county served by the single county company involved has requested that the Class "B" Preferred Stock be voted and has made recommendations as to the manner in which such stock shall be voted, or in case of a company serving more than one county, a majority of the County Farm Bureaus in the counties served by such company have requested that such Class "B" Preferred Stock be voted and have made recommendations as to the manner in which such stock shall be voted; and

(2) The voting of such Class "B" Preferred Stock has been approved and authorized by the Board of Directors of Illinois Agricultural Association. Such Class "B" Preferred Stock shall be voted only in accordance with instructions and authority given by the Board of Directors of Illinois Agricultural Association, and (i) to assure the continuing affiliation of Farm Bureau sponsored marketing, supply and service organizations with Farm Bureau, (ii) to assure that such Farm Bureau sponsored organizations will provide ser-

vices or cause services to be provided to the farmer-members of Farm Bureau, and (iii) to assure that such Farm Bureau sponsored organizations are responsive, on an economically sound basis consistent with service to farmers, to the needs of their member-producers or their member cooperative associations composed of member-producers.

(d) The request of any County Farm Bureau that Class "B" Preferred Stock be voted and the recommendation of such Farm Bureau as to the manner in which such stock shall be voted, shall be pursuant to official action taken by the Board of Directors of the Farm Bureau involved and shall be set forth in writing signed by one of the officers of such Farm Bureau. The Illinois Agricultural Association may require the County Farm Bureau to furnish a certified copy of the resolution adopted, or a certified copy of an excerpt from the minutes of the meeting of the Board of Directors of the Farm Bureau setting forth the action taken, by the Board of Directors of the Farm Bureau making such request and recommendation.

(e) Class "B" Preferred Stock held by a County Farm Bureau shall be used only for quorum purposes and shall not be voted unless such Class "B" Preferred Stock is voted in accordance with instructions and authority given by the Board of Directors of such Farm Bureau and for the purposes for which such stock is held.

(f) However, if a matter is presented at any meeting of shareholders upon which it is necessary that the Class "B" Preferred Stock be voted and if the holder of the proxy for such Class "B" Preferred Stock has no instructions or authority to vote the Class "B" Preferred Stock upon such matter, then such Class "B" Preferred Stock may be voted to adjourn the meeting at which such matter is presented to a later date, without prior or other authorization.

The foregoing is a statement of Policy by the voting delegates of the Illinois Agricultural Association to the Board of Directors of the Illinois Agricultural Association and may be subject to limitation on voting rights of Class "B" Preferred Stock contained in statutes, articles of incorporation, bylaws or other legal instruments applicable to the company issuing Class "B" Preferred Stock.

Appendix table 1—Volume of raw milk by grade and farm-separated cream marketed by Illinois producers, 1939-78.

Fiscal Year	Grade A milk	Non-grade A milk	Farm-separated cream	Total milk production	Grade A milk	Non-grade A milk	Farm-separated cream	Total milk production
	<i>Million pounds</i>				<i>Percent</i>			
1978.....	1,916	449	0	2,365	81.0	19.0	0.0	100.0
1977.....	2,005	470	0	2,475	81.0	19.0	0.0	100.0
1976.....	1,994	488	1	2,483	80.3	19.7	0.0	100.0
1975.....	1,972	467	1	2,440	80.8	19.1	0.1	100.0
1974.....	2,022	493	7	2,522	80.2	19.5	0.3	100.0
1973.....	1,977	688	8	2,673	74.0	25.7	0.3	100.0
1972.....	2,134	694	10	2,838	75.2	24.5	0.3	100.0
1971.....	2,107	697	10	2,814	74.9	24.8	0.3	100.0
1970.....	2,034	804	12	2,850	71.4	28.2	0.4	100.0
1969.....	2,115	873	11	2,999	70.5	29.1	0.4	100.0
1968.....	2,132	964	13	3,109	68.6	31.0	0.4	100.0
1967.....	2,142	1,119	16	3,277	65.4	34.1	0.5	100.0
1966.....	2,313	1,191	20	3,524	65.6	33.8	0.6	100.0
1965.....	2,522	1,292	30	3,844	65.6	33.6	0.8	100.0
1964.....	2,599	1,360	40	3,999	65.0	34.0	1.0	100.0
1963.....	2,701	1,405	50	4,156	65.0	33.8	1.2	100.0
1962.....	2,738	1,457	50	4,245	64.5	34.3	1.2	100.0
1961.....	2,760	1,482	70	4,312	64.0	34.4	1.6	100.0
1960.....	2,707	1,412	110	4,229	64.0	33.4	2.6	100.0
1959.....	2,728	1,462	140	4,330	63.0	33.8	3.2	100.0
1958.....	2,892	1,513	260	4,665	62.0	32.4	5.6	100.0
1957.....	3,090	1,645	290	5,025	61.5	32.7	5.8	100.0
1956.....	3,134	1,644	360	5,138	61.0	32.0	7.0	100.0
1955.....	3,016	1,592	419	5,027	60.0	31.7	8.3	100.0
1954.....	3,089	1,622	480	5,191	59.5	31.2	9.3	100.0
1953.....	3,046	1,606	510	5,162	59.0	31.1	9.9	100.0
1952.....	2,877	1,544	540	4,961	58.0	31.3	10.9	100.0
1951.....	2,849	1,459	690	4,998	57.0	29.2	13.8	100.0
1950.....	2,916	1,502	790	5,208	56.0	28.8	15.2	100.0
1949.....	2,939	1,507	897	5,343	55.0	28.2	16.8	100.0
1948.....	2,842	1,493	833	5,168	55.0	28.9	16.1	100.0
1947.....	2,951	1,490	925	5,366	55.0	27.8	17.2	100.0
1946.....	3,069	1,608	903	5,580	55.0	28.8	16.2	100.0
1945.....	3,177	1,694	906	5,777	55.0	29.3	15.7	100.0
1944.....	2,752	1,828	923	5,503	50.0	33.2	16.8	100.0
1943.....	2,676	1,621	1,055	5,352	50.0	30.3	19.7	100.0
1942.....	2,809	1,691	1,117	5,617	50.0	30.1	19.9	100.0
1941.....	2,727	1,406	1,320	5,453	50.0	25.8	24.2	100.0
1940.....	2,678	1,380	1,297	5,355	50.0	25.8	24.2	100.0
1939.....	2,614	1,197	1,416	5,227	50.0	22.9	27.1	100.0
1938.....	2,553	1,125	1,428	5,106	50.0	22.0	28.0	100.0

Sources of data used are as follows (1) Grade A milk, 1977-78 from "Milk Production, Disposition and Income," 1965-76 from "Federal Milk Order Statistics," 1945-64 from estimates by Dairy Division of USDA, 1938-44 computed using 50 percent of total production; (2) Nongrade A milk computed as the residual supply; (3) Farm-separated cream, based on milk equivalent volume sold from "Milk Production, Disposition and Income"; and (4) Total milk, 1938-44 and 1977-78 from "Milk Production, Disposition and income," 1945-76 from Illinois Agricultural Statistics.

Appendix table 2—Volume of milk and farm-separated cream received by Prairie Farms, 1938-78

Fiscal year ¹	Grade A milk			Nongrade A milk			Farm- separated cream	Total receipts
	Direct- ship	Other Co-op	Total	Direct- ship	Other co-op ²	Total		
	<i>Million pounds</i>							
1978.....	403	441	844	-	70	70	-	914
1977.....	414	359	773	-	59	59	-	832
1976.....	371	374	745	-	54	54	-	799
1975.....	343	383	726	-	52	52	-	778
1974.....	326	327	653	-	52	52	-	705
1973.....	319	336	655	-	48	48	-	703
1972.....	276	295	571	-	41	41	-	612
1971.....	253	264	517	-	42	42	-	559
1970.....	235	200	435	2	36	38	-	473
1969.....	231	150	381	15	33	48	-	429
1968.....	220	144	364	25	-	25	-	389
1967.....	210	115	325	29	-	29	-	354
1966.....	215	52	267	32	-	32	-	299
1965.....	197	24	221	39	-	39	-	260
1964.....	150	11	161	36	-	36	-	197
1963.....	148	6	154	39	(³)	39	-	193
1963.....	173	4	177	53	(³)	53	(³)	230
1962.....	45	2	47	15	(³)	15	(³)	63
1961.....	118	9	127	47	(³)	47	(³)	174
1960.....	101	5	106	49	(³)	49	(³)	156
1959.....	95	4	99	50	1	51	1	151
1958.....	91	3	94	65	(³)	65	1	160
1957.....	57	2	59	31	(³)	31	1	91
1956.....	31	(³)	31	13	(³)	13	1	45
1955.....	22	(³)	22	15	(³)	15	1	38
1954.....	13	(³)	13	19	(³)	19	1	33
1953.....	9	(³)	9	17	(³)	17	1	27
1952.....	7	(³)	7	15	(³)	15	1	23
1951.....	6	1	7	17	(³)	17	1	35
1950.....	5	2	7	19	(³)	19	1	27
1949.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	26	10	36
1948.....	(⁴)	(⁴)	(⁴)	(⁴)	(⁴)	27	9	36
1947.....	-	-	-	(⁴)	(⁴)	32	9	41
1946.....	-	-	-	(⁴)	(⁴)	29	9	38
1945.....	-	-	-	(⁴)	(⁴)	24	9	33
1944.....	-	-	-	(⁴)	(⁴)	16	8	24
1943.....	-	-	-	(⁴)	(⁴)	(⁴)	(⁴)	10
1942.....	-	-	-	(⁴)	(⁴)	(⁴)	(⁴)	11
1941.....	-	-	-	-	-	-	-	12
1940.....	-	-	-	-	-	-	9	9
1939.....	-	-	-	-	-	-	7	7
1938.....	-	-	-	-	-	-	3	3

(-) means "none."

¹ Volume for each fiscal year or accounting periods, generally, ending on September 30.-Fiscal year 1964 was for 9 months, the later 1963 was for 10 months ending December 31, 1963, the initial 1963 was for 12 months ending February 28, 1963, 1962 was for 5 months.

² Includes cream, powder and condensed milk in terms of milk equivalent.

³ Less than 500,000 pounds.

⁴ Breakdown on volume was not available.

Appendix table 3—Share of milk and farm-separated cream receipts by type, Prairie Farms, 1938-78

Fiscal year ¹	Grade A milk			Nongrade A milk			Farm- separated cream	Total receipts
	Direct- ship	Other Co-op	Total	Direct- ship	Other co-op ²	Total		
	<i>Percent</i>							
1978.....	47.8	52.2	92.4	-	100.0	7.6	-	100.0
1977.....	53.6	46.4	92.9	-	100.0	7.1	-	100.0
1976.....	49.8	50.2	93.2	-	100.0	6.8	-	100.0
1975.....	47.3	52.7	93.3	-	100.0	6.7	-	100.0
1974.....	49.9	50.1	92.6	-	100.0	7.4	-	100.0
1973.....	48.8	51.2	93.2	-	100.0	6.8	-	100.0
1972.....	48.4	51.6	93.3	-	100.0	6.7	-	100.0
1971.....	48.9	51.1	92.5	-	100.0	7.5	-	100.0
1970.....	54.0	46.0	92.0	5.0	95.0	8.0	-	100.0
1969.....	60.5	39.5	88.7	31.8	68.2	11.3	-	100.0
1968.....	60.3	39.7	93.6	100.0	-	6.4	-	100.0
1967.....	64.6	35.4	91.9	100.0	-	8.1	-	100.0
1966.....	80.4	19.6	89.4	100.0	-	10.6	-	100.0
1965.....	89.0	11.0	85.0	100.0	-	15.0	-	100.0
1964.....	93.2	6.8	81.9	100.0	-	18.1	-	100.0
1963.....	95.7	4.3	80.0	99.5	0.5	20.0	-	100.0
1963.....	98.0	2.0	77.0	99.6	0.4	22.9	0.1	100.0
1962.....	94.7	5.3	75.6	99.3	0.7	24.2	0.2	100.0
1961.....	93.3	6.7	72.7	99.6	0.4	27.1	0.2	100.0
1960.....	95.7	4.3	68.1	99.4	0.6	31.6	0.3	100.0
1959.....	95.5	4.5	66.2	98.8	1.2	33.4	0.4	100.0
1958.....	96.9	3.1	59.0	99.5	0.5	40.6	0.4	100.0
1957.....	96.8	3.2	64.4	98.7	1.3	34.8	0.8	100.0
1956.....	99.0	1.0	69.2	98.5	1.5	29.5	1.3	100.0
1955.....	99.1	0.9	58.7	99.3	0.7	39.7	1.6	100.0
1954.....	97.7	2.3	40.0	99.5	0.5	58.2	1.8	100.0
1953.....	97.8	2.2	33.6	98.8	1.2	64.1	2.3	100.0
1952.....	94.1	5.9	30.2	98.0	2.0	67.1	2.7	100.0
1951.....	88.0	12.0	29.9	98.2	1.8	66.9	3.2	100.0
1950.....	65.8	34.2	27.3	99.5	0.5	69.7	3.0	100.0
1949.....	(³)	(³)	(³)	(³)	(³)	72.7	27.3	100.0
1948.....	(³)	(³)	(³)	(³)	(³)	74.2	25.8	100.0
1947.....	-	-	-	(³)	(³)	77.8	22.2	100.0
1946.....	-	-	-	(³)	(³)	77.4	22.6	100.0
1945.....	-	-	-	(³)	(³)	73.1	26.9	100.0
1944.....	-	-	-	(³)	(³)	66.7	33.3	100.0
1943.....	-	-	-	(³)	(³)	(³)	(³)	100.0
1942.....	-	-	-	(³)	(³)	(³)	(³)	100.0
1941.....	-	-	-	-	-	-	100.0	100.0
1940.....	-	-	-	-	-	-	100.0	100.0
1939.....	-	-	-	-	-	-	100.0	100.0
1938.....	-	-	-	-	-	-	100.0	100.0

(-) means "none."

¹ Percentage of total milk received by type of receipts for fiscal years of accounting periods generally ending September 30.—Fiscal year 1964 was for 9 months, the later 1963 was for 10 months ending December 31, 1963, the initial 1963 was for 12 months ending February 28, 1962 was for 5 months ending February 28, 1962, and 1938 was for 5 months.

² Includes cream, powder, and condensed milk in terms of milk equivalent.

³ Breakdown on volume by type was not available.

Appendix table 4—Dairy products sold by Prairie Farms, 1939-1978

Fiscal year ¹	Milk		Butter	Cottage cheese	Ice cream and mix	Cream	Novel- ties	PFD supply	Con- densed milk	Milk powder	Misc.	Dis- counts	Total sales ²
	Packaged	Bulk											
Thousand dollars													
1978.....	99,882	11,872	13,859	7,993	17,279	6,643	14,006	30,767	-	-	6,988	(2,968)	206,321
1977.....	88,590	9,634	10,812	7,270	14,175	5,901	12,660	22,790	-	-	6,116	(2,842)	175,106
1976.....	84,232	10,052	8,854	6,329	12,084	5,223	12,535	18,613	-	-	4,868	(3,039)	159,751
1975.....	74,400	8,111	5,773	5,013	10,506	4,115	10,951	15,273	-	-	4,311	(2,733)	135,720
1974.....	66,306	8,171	4,588	4,704	7,481	3,383	10,737	12,643	-	-	3,738	(2,303)	119,448
1973.....	53,383	5,919	5,582	3,659	5,818	2,154	8,078	9,683	-	-	3,378	(1,867)	95,787
1972.....	47,277	2,746	5,682	2,758	5,295	1,578	7,020	6,312	-	-	1,245	(1,699)	78,214
1971.....	42,319	2,505	5,290	2,430	4,413	1,740	6,722	2,874	-	-	1,919	(1,361)	68,851
1970.....	33,153	2,638	3,399	1,892	3,602	1,112	6,539	2,056	-	-	1,385	(895)	54,881
1969.....	27,677	3,471	3,131	1,458	3,967	563	1,536	1,174	-	-	1,230	(675)	43,532
1968.....	25,880	2,422	2,992	1,400	3,306	325	321	538	-	-	1,065	(621)	37,628
1967.....	21,991	3,704	2,019	1,276	1,743	838	175	825	-	-	890	(530)	32,931
1966.....	17,311	3,094	1,070	1,067	813	973	-	-	-	-	726	(422)	24,632
1965.....	15,318	1,958	1,030	984	760	1,090	-	-	-	-	751	(384)	21,507
1964.....	9,395	2,101	699	721	511	1,118	-	-	-	-	668	(234)	14,979
1963.....	7,548	1,632	629	616	444	1,252	-	-	153	226	406	(197)	12,709
1963.....	10,000	2,061	1,048	833	656	1,177	-	-	599	376	521	(289)	16,982
1962.....	2,478	936	252	245	137	334	-	-	202	142	160	-	4,886
1961.....	5,773	2,484	807	622	418	1,014	-	-	510	319	501	-	12,448
1960.....	3,955	2,173	821	613	223	888	-	-	534	373	449	-	10,029
1959.....	3,364	2,164	902	505	202	937	-	-	567	411	434	-	9,486
1958.....	3,297	2,030	1,416	412	161	818	-	-	812	446	445	-	9,837
1957.....	2,544	1,746	1,263	289	106	910	-	-	558	517	367	-	8,300
1956.....	1,663	521	255	81	61	235	-	-	110	55	47	-	3,028
1955.....	1,281	404	323	66	66	210	-	-	11	62	58	-	2,481
1954.....	1,097	132	434	59	75	198	-	-	25	121	49	-	2,190
1953.....	1,041	71	357	48	79	246	-	-	18	76	60	-	1,996
1952.....	913	76	310	37	72	338	-	-	39	48	72	-	1,905
1951.....	665	161	276	21	61	440	-	-	69	56	36	-	1,785
1950.....	266	179	345	13	43	452	-	-	95	73	46	-	1,512
1949.....	(³)	76	532	(³)	(³)	551	-	-	159	113	169	-	1,600
1948.....	-	254	431	-	(³)	718	-	-	144	138	96	-	1,881
1947.....	-	103	644	-	(³)	646	-	-	278	159	28	-	1,858
1946.....	-	58	354	-	-	731	-	-	275	194	13	-	1,625
1945.....	-	(⁴)	322	-	-	461	-	-	23	226	13	-	1,045
1944.....	-	(⁴)	274	-	-	319	-	-	-	179	11	-	783
1943.....	-	(⁴)	226	-	-	226	-	-	-	75	10	-	537
1942.....	-	-	203	-	-	-	-	-	-	-	6	-	209
1941.....	-	-	130	-	-	-	-	-	-	-	8	-	138
1940.....	-	-	130	-	-	-	-	-	-	-	6	-	136
1939.....	-	-	84	-	-	-	-	-	-	-	5	-	89
1938.....	-	-	31	-	-	-	-	-	-	-	2	-	33

(-) means "none."

¹ Dollar sales by products for each fiscal year or accounting period generally ending on September 30. Fiscal year 1964 was for 9 months, the later 1963 was for 10 months ending December 31, 1963, the initial 1963 was for 12 months ending February 28, 1963, 1962 was for 5 months ending February 28, 1962, and 1938 was for 5 months.

² Net after deduction of discounts.

³ Sales volume included in miscellaneous.

⁴ Sales volume included in cream sales.

Appendix table 5—Share of dairy product sales by product, Prairie Farms, 1939

Fiscal year ¹	Milk			Cottage cheese	Ice cream and mix	Cream	Novel- ties	PFD supply	Con- densed milk	Milk powder	Misc.	Dis- counts	Total sales ²
	Packaged	Bulk	Butter										
Percent													
1978.....	47.7	5.7	6.6	3.8	8.3	3.2	6.7	14.7	-	-	3.3	(1.4)	98.6
1977.....	49.8	5.4	6.1	4.1	8.0	3.3	7.1	12.8	-	-	3.4	(1.6)	98.4
1976.....	51.8	6.2	5.4	3.9	7.4	3.2	7.7	11.4	-	-	3.0	(1.9)	98.1
1975.....	53.7	5.9	4.2	3.6	7.6	3.0	7.9	11.0	-	-	3.1	(2.0)	98.0
1974.....	54.4	6.7	3.8	3.9	6.1	2.8	8.8	10.4	-	-	3.1	(1.9)	98.1
1973.....	54.7	6.1	5.7	3.7	5.9	2.2	8.3	9.9	-	-	3.5	(1.9)	98.1
1972.....	59.2	3.4	7.1	3.4	6.6	2.0	8.8	7.9	-	-	1.6	(2.1)	97.9
1971.....	60.3	3.6	7.5	3.4	6.3	2.5	9.6	4.1	-	-	2.7	(1.9)	98.1
1970.....	59.4	4.7	6.1	3.4	6.5	2.0	11.7	3.7	-	-	2.5	(1.6)	98.4
1969.....	62.6	7.9	7.1	3.3	9.0	1.3	3.5	2.7	-	-	2.8	(1.5)	98.5
1968.....	67.7	6.3	7.8	3.7	8.6	0.9	0.8	1.4	-	-	2.8	(1.6)	98.4
1967.....	65.7	11.1	6.0	3.8	5.2	2.5	0.5	2.5	-	-	2.7	(1.6)	98.4
1966.....	69.1	12.3	4.3	4.3	3.2	3.9	-	-	-	-	2.9	(1.7)	98.3
1965.....	70.0	8.9	4.7	4.5	3.5	5.0	-	-	-	-	3.4	(1.8)	98.2
1964.....	61.8	13.8	4.6	4.7	3.4	7.3	-	-	-	-	4.4	(1.5)	98.5
1963.....	58.5	12.6	4.9	4.8	3.4	9.7	-	-	1.2	1.8	3.1	(1.5)	98.5
1963.....	57.9	11.9	6.1	4.8	3.8	6.8	-	-	3.5	2.2	3.0	(1.7)	98.3
1962.....	50.7	19.2	5.2	5.0	2.8	6.8	-	-	4.1	2.9	3.3	-	100.0
1961.....	46.4	19.9	6.5	5.0	3.4	8.1	-	-	4.1	2.6	4.0	-	100.0
1960.....	39.4	21.7	8.2	6.1	2.2	8.9	-	-	5.3	3.7	4.5	-	100.0
1959.....	35.5	22.8	9.5	5.3	2.1	9.9	-	-	6.0	4.3	4.6	-	100.0
1958.....	33.5	20.7	14.4	4.2	1.6	8.3	-	-	8.3	4.5	4.5	-	100.0
1957.....	30.7	21.0	15.2	3.5	1.3	11.0	-	-	6.7	6.2	4.4	-	100.0
1956.....	54.9	17.2	8.4	2.7	2.0	7.8	-	-	3.6	1.8	1.6	-	100.0
1955.....	51.6	16.3	13.0	2.7	2.7	8.5	-	-	0.4	2.5	2.3	-	100.0
1954.....	50.1	6.0	19.8	2.7	3.4	9.1	-	-	1.2	5.5	2.2	-	100.0
1953.....	52.1	3.6	17.9	2.4	4.0	12.3	-	-	0.9	3.8	3.0	-	100.0
1952.....	47.9	4.0	16.3	1.9	3.8	17.7	-	-	2.1	2.5	3.8	-	100.0
1951.....	37.2	9.0	15.5	1.2	3.4	24.7	-	-	3.9	3.1	2.0	-	100.0
1950.....	17.6	11.8	22.8	0.9	2.9	29.9	-	-	6.3	4.8	3.0	-	100.0
1949.....	(³)	4.7	33.3	(³)	(³)	34.4	-	-	9.9	7.1	10.6	-	100.0
1948.....	-	13.5	28.2	-	(³)	38.1	-	-	7.7	7.3	5.1	-	100.0
1947.....	-	5.5	34.7	-	(³)	34.8	-	-	15.0	8.5	1.5	-	100.0
1946.....	-	3.6	21.8	-	-	45.0	-	-	16.9	11.9	0.8	-	100.0
1945.....	-	(⁴)	30.8	-	-	44.1	-	-	2.2	21.6	1.3	-	100.0
1944.....	-	(⁴)	35.0	-	-	40.7	-	-	-	22.9	1.4	-	100.0
1943.....	-	(⁴)	42.1	-	-	42.1	-	-	-	14.0	1.8	-	100.0
1942.....	-	-	97.1	-	-	-	-	-	-	-	2.9	-	100.0
1941.....	-	-	94.2	-	-	-	-	-	-	-	5.8	-	100.0
1940.....	-	-	95.6	-	-	-	-	-	-	-	4.4	-	100.0
1939.....	-	-	94.4	-	-	-	-	-	-	-	5.6	-	100.0
1938.....	-	-	93.9	-	-	-	-	-	-	-	6.1	-	100.0

(-) means "none."

¹ Sales of each product as a percentage of total sales by Prairie Farms for fiscal years or accounting periods generally ending on September 30. Fiscal year 1964 was for 9 months, the later 1963 was for 10 months ending December 31, 1963, the initial 1963 was for 12 months ending February 28, 1962 was for 5 months ending February 28, and 1938 was for five months.

² Net after deduction of discounts.

³ Sales volume included in miscellaneous.

⁴ Sales volume included in cream sales.

Appendix table 6—Preferred stock and other patron equity, Prairie Farms, 1938-78

Fiscal year ¹	Preferred stock					Retained earnings					
	Class A	Class B	Class C	Class D	Frac- tional shares	Total	Allocated	Unallocated	Total	Other equity	Total equity
<i>Thousand dollars</i>											
1978.....	4,176	114	450	125	102	4,967	13,382	2,565	15,947	-	20,914
1977.....	3,872	107	480	133	102	4,694	12,194	2,649	14,843	-	19,537
1976.....	3,585	107	508	142	101	4,443	9,625	2,504	12,129	-	16,572
1975.....	3,222	128	555	150	104	4,159	9,222	1,782	11,004	-	15,163
1974.....	2,759	128	610	166	104	3,767	7,331	852	8,183	-	11,950
1973.....	2,360	54	644	173	95	3,326	5,847	732	6,579	-	9,905
1972.....	1,520	54	738	180	96	2,588	4,554	1,132	5,686	-	8,274
1971.....	864	54	851	189	98	2,056	3,464	1,104	4,568	-	6,624
1970.....	884	-	902	198	99	2,083	2,673	905	3,578	-	5,661
1969.....	904	-	962	207	100	2,173	2,762	347	3,109	49	5,331
1968.....	917	-	996	216	151	2,280	2,515	215	2,730	94	5,104
1967.....	936	-	1,032	220	152	2,340	2,153	215	2,368	140	4,848
1966.....	947	-	1,069	227	154	2,397	2,028	274	2,302	176	4,875
1965.....	966	-	1,092	236	155	2,449	2,129	324	2,453	-	4,902
1964.....	985	54	1,161	248	158	2,606	1,874	325	2,199	-	4,805
1963.....	1,007	54	911	261	107	2,340	1,324	-	1,324	-	3,664
1963.....	1,051	54	778	277	96	2,256	1,324	-	1,324	321	3,901
1962.....	790	54	624	254	73	1,795	829	-	829	-	2,624
1961.....	819	54	578	263	134	1,848	781	-	781	-	2,629
1960.....	425	54	588	296	76	1,429	416	-	461	-	1,855
1959.....	435	54	563	335	151	1,538	285	-	285	-	1,823
1958.....	444	54	538	341	125	1,502	280	-	280	-	1,782
1957.....	456	32	522	344	136	1,490	282	-	282	-	1,772
1956.....	272	-	74	-	38	384	189	-	189	-	573
1955.....	282	-	56	-	28	366	189	-	189	-	555
1954.....	289	-	34	-	43	366	199	-	199	-	565
1953.....	295	-	21	-	24	340	193	-	193	-	533
1952.....	301	-	3	-	23	327	145	-	145	-	472
1951.....	301	-	-	-	12	313	137	-	137	-	450
1950.....	284	-	-	-	12	296	116	-	116	-	412
1949.....	247	-	-	-	25	272	121	-	121	-	393
1948.....	195	-	-	-	12	207	93	-	93	-	300
1947.....	179	-	-	-	17	196	126	-	126	-	322
1946.....	122	-	-	-	2	124	159	-	159	-	283
1945.....	106	-	-	-	2	108	43	-	43	-	151
1944.....	67	-	-	-	1	68	30	-	30	-	98
1943.....	46	-	-	-	1	47	19	-	19	-	66
1942.....	44	-	-	-	1	45	11	-	11	-	56
1941.....	22	-	-	-	1	23	11	-	11	-	34
1940.....	21	-	-	-	2	23	3	-	3	-	26
1939.....	19	-	-	-	2	21	2	-	2	-	23
1938.....	18	-	-	-	2	20	1	-	1	-	21

(-) means "none."

¹Amounts at the end of each fiscal year or accounting period. Except for the two 1963 and 1962 all ended on September 30. The later 1963 ended on December 31, while the initial 1963 and 1962 ended on February 28.

**U.S. Department of Agriculture
Agricultural Cooperative Service**

Agricultural Cooperative Service provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The agency (1) helps farmers and other rural residents obtain supplies and services at lower costs and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

The agency publishes research and educational materials, and issues *Farmer Cooperatives*. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, or national origin.