Average production per cow in some Iowa dairy herds has gone up to more than 8,500 pounds of milk, 340 pounds of butterfat per year.

# 11. The Development of Iowa's High-Producing Dairy Cattle

C. Y. CANNON, Dairy Husbandry

From 1850, when a cow produced 147.9 gallons of milk, dairymen of Iowa have improved their cattle until the 1940 census reported average production for the state of 555.8 gallons. And this was only an average. Superior quality cows enrolled in herd-improvement associations produced an average of 947 gallons.

This increase is largely due to more extensive use of purebred dairy cattle, especially high quality dairy bulls, and to the elimination of unprofitable animals.

In 1850 Iowa had fewer than forty-six thousand cows being milked, twenty-two thousand working oxen, and sixty-nine thousand other cattle. There was about one cow for every four persons in the state. Both numbers of cows and gallons per cow increased steadily. The increase in numbers was especially rapid from 1870 to 1890 when the number of cows per one hundred persons more than doubled (Table 8).

Increased interest in dairying was due principally to the change of cheese and buttermaking from farm to factory. This move improved the quality and increased demand for these products.

An Iowan's winning of first prize for butter at the Centennial Exposition at Philadelphia in 1876 gave great impetus to dairying in the state. A large foreign trade was being established for United States dairy products, especially in Great Britain, which took 96 per cent of American cheese exports in 1880. Other factors of importance in turning the farmers toward dairying included wheat crop failures and improved transportation facilities.

After the turn of the century, dairy cattle no longer increased in numbers faster than the human population. Foreign trade had declined until by 1899 export prices of butter reached 16.3 cents and cheese, 8.6 cents. Government methods of counting the cattle popu-

lation changed in 1920, but it is probable that up until 1920 the number of dairy cows increased only about as rapidly as the population, but that since 1920 they have increased in number somewhat faster.

During the sixties the sharp rise in cattle prices in Iowa, especially for cattle of improved breeding, brought sharpers and swindlers of all

Year	Number of Cows per 100 People	Average Gallons per Cow	
1860	28	195	
1870.)	1 21	229	
<del>18</del> 80.)		215	
1890		325	
1900	64	376	
1910	63	348	
1920	46	330	
1930	57	462	
1940	59	556	

TABLE 8
Dairy Cow Population and Production\*

kinds who took advantage of the farmers' ignorance. Because many farmers were unaware that it took thought and daily care as well as fine pedigrees to reap full benefit from superior stock, they bought stock in hope of making a fortune without too much work. A mania swept the country for unfamiliar breeds of supposedly superior quality. Many an honest Iowa livestock dealer would advertise the sale of improved livestock, then would find the market ruined by some unscrupulous dealer who had rushed worthless mongrel stock into the area and sold it as purebred to unsuspecting farmers.

Unprincipled dealers would go into Illinois and Wisconsin to the large dairies where it was unprofitable to raise calves and buy one or more carloads from four to ten days old, stuff the calves with condensed milk and rush them into Iowa where they were sold at a large profit. These calves were sold mostly on color. If they were black and white they were Holsteins; if they were deep red they were Devons. One writer said, "If anyone was so unsophisticated as to want Jerseys, they were supplied from the little, ornery, scrawny things left after the rest were selected."

<sup>\*</sup> Population based on Iowa state census, number of milk cows based on United States census. Figures before 1900 represent "milch cows"; in 1900, "cows kept for milk 2 years old or over"; 1920, "dairy cows and heifers 2 or more years old"; 1930, "cows and heifers born before 1928 kept mainly for milk production." This change in classification probably accounts for the marked drop in milk cows between 1910 and 1920 figures.

#### BREED ASSOCIATIONS

By the early seventies the desire for good cattle among Iowa farmers had gained such strength that a number of them banded together to organize the Iowa State Improved Breeders' Association. During the years following, improvement was rapid so that in 1885 C. M. Moninger, the president of the association, was able to say:

When our society was organized there were in Iowa a few herds of purebred Shorthorn cattle, Jerseys, and Devons; but the Herefords, Holstein, Friesians, Aberdeen, Angus, and Galloways we had none. Now there is scarcely a county in the state but can make a good showing of purely-bred representatives of two or more of these breeds.

Because of the great wealth of grass, hay, and corn on the farms of this state, the early breeders for the most part used Shorthorn blood in the improvement of their cattle. Even though this was true, a great many of them were still mindful that dairying was a productive enterprise. In 1885, C. F. Clarkson, of Des Moines, said, "The farmers of Iowa want a breed of cattle superior both for milk and beef and no matter how much ignorance may hoot, or interest oppose, it will come. . . . Much harm has been done by neglecting and ignoring the milking qualities of cows belonging to beef breeds." At that time the raising of calves by putting two to a cow was widely advocated by farm leaders and was practiced by many farm people. "So that one half of the herd raises the calves; the other half they milk and make butter or sell cream. In this way they get an additional profit from the herd."

Among the earliest published sources of information on dairying in Iowa are the proceedings of the Improved Stock Breeders' Association which published such material as an article entitled, "The Relation of the Creamery to Iowa Farming," written in 1880 by Henry Wallace, then editor of the *Madisonian* at Winterset.

# **PREFERENCES**

The first improved dairy cattle introduced were dual purpose—Devon, Shorthorn, and Red Polled. The Secretary of the State Agricultural Society reported in 1858 that several herds of Devons had been introduced, Muscatine, Johnson, and Scott counties leading in this breed.

The Devon's short legs and compact body made it a good draft animal and it was used for this purpose extensively by Iowa farmers until horses became plentiful. Early breeders in Iowa also recommended it for its milking qualities.

Shorthorn cattle were highly esteemed by the early settlers of

Iowa, for they usually were good milkers as well as good beef cattle. This breed increased on Iowa farms faster than any other, and has maintained considerable popularity. Leslie Carl, federal statistician for Iowa, estimated in 1932 that about 35 per cent of the cattle in Iowa which were listed as being kept for milking purposes were of Shorthorn breeding. Since 1932 specialized dairy breeds have become somewhat more numerous in the state and have pushed the Shorthorns into a less prominent position as milk cows. By 1945 cows of this breed constituted only about 21 per cent of those kept for milk on Iowa farms. In 1930 a Milking Shorthorn Society was organized under the leadership of such men as R. R. Clampitt, of New Providence, Frank Holland, of Milton, and Roy Cook, of Independence, the society's first secretary.

Red Polled cattle also have furnished a fair share of the milk handled by the Iowa creameries. The first importation directly into Iowa was in June, 1886, when General L. F. Ross, of Iowa City, imported one bull and William Huake, of Iowa City, brought in two bulls and sixteen cows.

As time passed Iowa farmers became more dairy minded and a demand arose for such breeds as Ayrshires, Brown Swiss, Guernseys, Holsteins, and Jerseys.

A few Ayrshires were brought into Iowa by the early settlers and a class of Ayrshires was established at the Iowa State Fair in 1863 but no entries were made until Iowa Agricultural College's entry in 1869. The College entered Ayrshires for four years and in 1872 was awarded five prizes. The first entry by Iowa farmers was that made by C. C. and E. W. Horton, of Muscatine, 1873. An outstanding event in the history of this breed in Iowa has been described by Tom P. Whittaker, of the Ayrshire Breeders' Association:

The one incident which stands out most conspicuously in the records of the Ayrshire breed in Iowa occurred on June 12, 1919, when C. H. Peverill, of Waterloo, paid the highest price ever bid for an Ayrshire cow at auction when he secured Lotus Jean Armour 3rd for \$8,100. This great cow had an Advanced Registry record of 17,411 pounds of milk and 609 pounds of fat at 7 years.

Iowa had a population of 1,220 Ayrshires in 1941 and was twelfth among the states in number registered.

Brown Swiss cattle were brought to Iowa by Governor William Larrabee in 1882. They were exhibited as the first Brown Swiss herd at the Iowa State Fair in 1885 and awarded a silver medal. Governor Larrabee owned the first Brown Swiss animal to be registered by an Iowa breeder—Valentine, 334, born February 14, 1885. The first

Brown Swiss bull to be recorded from the state also was registered by Governor Larrabee—Shiloh, 226, born April 6, 1885.

The Larrabee herd, later known as the Mooney and Larrabee herd, and the herd owned by Dr. C. F. Osborne, of Hampton, had great influence on the growth of the breed in Iowa. A cow owned by Dr. Osborne—June's College Girl 11,427—produced in 1926, when five years old, 24,571.6 pounds of milk and 1,062.30 pounds of fat.

The secretary of the Brown Swiss Cattle Breeders' Association reported that during the year ending September 30, 1945, 3,113 Brown Swiss animals were recorded by Iowa breeders. This was 16.5 per cent of the national total registered and ranked Iowa first among the states.

The first prizes awarded for Guernseys at the Iowa State Fair were received by S. G. Livermore, Cedar Rapids, in 1877. Information from the American Guernsey Cattle Club shows that the earliest transfer of a registered Guernsey to an Iowa breeder was in 1880, when William Niles, of LaPorte, purchased Nance 2nd 515 from Le Graut Cannon, of Burlington, Vermont. In 1882 he registered the first Guernsey in Iowa, Cromlech 427.

C. W. Wilcox, of Des Moines, and W. W. Marsh, of Waterloo, were outstanding among early Iowa Guernsey breeders. Wilcox, together with his sons-in-law, operated under the name Wilcox and Stubs and at one time had a herd of about two hundred Guernsey cattle. Marsh became widely known for the high records produced by his Guernseys, of which the outstanding animals were Dairymaid of Pinehurst and Glencoe's Bopeep. In recognition of his outstanding record as a breeder of dairy cattle, the National Dairy Association awarded him the honor of Master Breeder, the first such honor ever bestowed by this association.

Guernsey cattle have become popular with dairy farmers in Iowa and their numbers have increased nearly 50 per cent in the last fifteen years.

The Holstein is the most numerous dairy breed in Iowa. Iowa's climate, the broad, level fields, and plentiful feed resemble conditions in Holland, the birthplace of the breed.

When Holsteins first came to Iowa is not known, but as early as 1880, Cary R. Smith told a meeting of the Iowa State Improved Stock Breeders' Association:

I believe the coming cow will be a cross between the Shorthorn and the Holstein. I have a Holstein which averaged 81 pounds of milk per day for a month; some days she gave 91 pounds. . . My Mink, a Holstein, has given over 10,000 pounds, and it is now only six months since she calved. I may say I have known of a Holstein cow giving over 16,000 pounds of milk in a year.

Among the early breeders of Holsteins in Iowa was Thomas B. Wales, Jr., who moved his cattle from Massachusetts to Iowa City in about 1882, and established them as the Brook Bank Holstein herd. Wales was an active importer of Holsteins until 1884 and is recorded as having brought from Holland almost three hundred head. Although he sold his farm and dispersed his herd about 1891, many of his cattle remained in Iowa.

Wales became vice-president of the Holstein Breeders' Association in 1875 and was made secretary and editor in 1881. The headquarters of this association were established in Iowa City in 1882 and remained there until 1891 when they were moved back to Boston.

There is no record giving the first importations of Jerseys into Iowa, but in 1867 four Jerseys were exhibited at the State Fair under the name of Alderneys, three by Stillman Stockwell, of Lyons, and one by a Milo Smith.

A herd of Jerseys was exhibited at the Muscatine County Fair in 1868 by B. Husby. The committee considered this herd to be equal to the cattle imported from Europe, and Husby was congratulated and awarded a special prize of fifty dollars.

The first registered Jersey cow in Iowa was Newport Beauty 2,509, dropped May 16, 1864, and purchased by Judge Walter I. Hayes, of Clinton. Other registered Jerseys were imported by Judge Hayes, including the bull, Faust, imported in June, 1870. The first Jersey bull recorded as owned in Iowa was Prince Frederick William 583, purchased by Rev. G. M. Porter, of Garnavillo, although it is not possible to determine whether this bull or Faust actually reached Iowa first.

The man deserving the most credit for popularizing the Jersey breed in Iowa is undoubtedly Colonel J. J. Richardson, of Davenport. Richardson served six terms as a director of the American Jersey Cattle Club. He took charge of the dairy cow demonstration at the Louisiana Purchase Exposition at St. Louis in 1904 where the Jerseys won the first four and the seventh to fourteenth places, inclusive, for production.

Interest in the Jersey breed has gradually increased. The American Jersey Cattle Club reported that 141 new Iowa breeders started with Jerseys during the fiscal year 1944–45.

## **COW-TESTER ASSOCIATIONS**

Largely responsible for elimination of unprofitable cows and subsequent increase in milk yields have been Iowa's dairy herd-improvement associations, although fairs, breed associations, the Improved Stockbreeders' Association and the State Dairy Association also deserve credit.

Dairy herd-improvement associations, then known as cow-testing associations, first started in Iowa in 1909, in Black Hawk County. The Pioneer and the Benson Associations operated that year with a total of fifty-one herds containing 877 cows on test. Average production per cow was 5,260 pounds of milk and 207.1 pounds of butterfat.

Associations have operated in the state ever since (Table 9). Average milk and butterfat production per cow has risen, reaching its highest point in 1941 when cows averaged 8,567 pounds of milk and 340 pounds of butterfat.

Number Year Associations				Average per Cow	
	Number Herds Tested	Number Cows Tested	Pounds Milk	Pounds Butterfat	
1909*	2				
1910	5				
1915	13	<i></i>			
1920	14				
1925	56				
1926 †	61	1,895	27,176	6,997	272
1930	101	2,431	44,326	7,307	289
1935	52	1,113	24,453	8,306	321
1940	66	1,627	35,481	8,337	331
1945	47	1,212	27,308	8,151	324

TABLE 9
RECORDS ON DAIRY HERD-IMPROVEMENT ASSOCIATIONS

## DAIRY CATTLE SHOWS

Exhibitions of the Dairy Cattle Congress have been held at Waterloo annually since 1910. Because of World War II, the exhibition was suspended from 1943 until 1946. However, during the war years statewide 4-H Club dairy cattle shows, 4-H judging contests, demonstrations, exhibits, and entertainments were held. The Dairy Cattle Congress has drawn exhibits of dairy cattle and Belgian horses from all sections of the United States and Canada.

The Iowa Jersey Cattle Club originated the parish or district shows in Iowa in 1933, when 106 owners exhibited 300 Jerseys at seven

<sup>\*</sup> Year Dairy Herd-Improvement Associations were started in Iowa.

<sup>..</sup> No information available.

<sup>†</sup> First year for which complete records are available.

shows. Approximately 1,750 breeders and their friends attended. That same year the Iowa Jersey breeders, with the assistance of the Cedar Rapids Chamber of Commerce, started the All-Iowa Show, at which only winners of the parish or district shows were eligible to exhibit.

The Iowa Holstein Breeders' Association divided the state into ten districts in 1936. They planned to hold a district meeting and show in each one, but most of the shows were postponed until the following year. In 1937, renewed effort was put into this program, with the assistance of the Dairy Husbandry Extension Department of Iowa State College. Ten shows were held the first two weeks in June. A total of 123 exhibitors showed 446 Holsteins and about thirteen hundred people attended. All ten of the districts took their first and second prize animals to the state show held at Waterloo.

The Iowa Guernsey Cattle Club held parish shows for the first time in 1936 in eight districts of the state. Winners were exhibited in the All-Iowa Dairy Show.

The Iowa Brown Swiss Association did not organize district shows until 1937, when several summer picnics were held and cattle shows were set up in two areas or cantons. Both of these cantons had herds in the All-Iowa Show that year. Later the state was divided into six districts with winners going to Cedar Rapids.

The Iowa Milking Shorthorn Breeders held seven district shows in 1937, in connection with county fairs.

The year 1938 established the previous work in district and state shows as a sound part of breed extension work. The Ayrshire Breeders held one district show. Other shows included: Brown Swiss 6, Guernsey 3, Holstein 9, Jersey 7, and Milking Shorthorn 8.

The Holstein breeders held a state show at Waterloo, and the Ayrshire breeders held one at the Iowa State Fair in 1938. All of the other breed associations participated in the All-Iowa Dairy Show at Cedar Rapids in September. The Chamber of Commerce at Cedar Rapids co-operated in sponsoring the All-Iowa Show and paid premium money to owners of all animals exhibited, in proportion to the distance traveled. Only animals winning first or second place in the district shows are eligible to go to the State Show at Cedar Rapids.

In 1942 the district and state shows were discontinued as a war measure. In 1946, all of the dairy breeds resumed the shows, which culminated in the All-Iowa Show at Cedar Rapids.