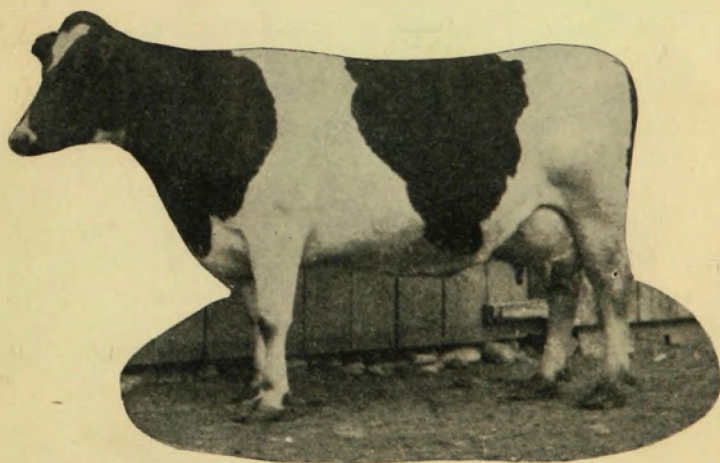


Bulletin 280-A - 319

December, 1929

SUMMARY OF RESULTS IN  
DAIRY HERD IMPROVEMENT  
ASSOCIATION WORK

FOR THE YEAR ENDING JULY 1, 1929



"Rockaie" owned by Dr. A. E. Miller of Austin, Colorado.  
High cow for the State, 1928-29.



COLORADO AGRICULTURAL COLLEGE  
EXTENSION SERVICE F. A. ANDERSON, DIRECTOR  
FORT COLLINS

Cooperative Extension Work in Agriculture and Home Economics, Colorado Agricultural College and the United States Department of Agriculture Cooperating. Distributed in Furtherance of the Acts of Congress of May 8 and June 30, 1914.

# DAIRY HERD IMPROVEMENT ASSOCIATION WORK

By C. A. SMITH

## Weeding, Feeding and Breeding Pays

The average cow in Colorado kept for dairy purposes, produces about 3731 pounds of milk a year. Her yearly production of butterfat is about 141 pounds. This production is not sufficient to pay for feed and return a fair price on the labor expended on the cow.

Colorado Herd-Improvement-Association cows averaged 8,007 pounds of milk and 309.9 pounds of butterfat per cow during the last testing year ending July 1, 1929. The feed cost of these cows was \$77.83; this cost includes pasture, roughage, succulent feeds and grain.

The high production of herd-improvement-association cows is due to rigid culling of the low producer or "boarder" cow. During the past year 556 unprofitable cows have been sold to the butcher by members in herd-improvement associations.

The profit in dairy farming is determined to a large extent upon the producing ability of the cows kept for milk. There is a great variation in the producing ability of cows. How great this variation is, can only be determined by a systematic record-keeping on each cow in the herd.

The important advantage of cow-testing work is that it supplies the members with records of production and feed cost on each cow in the herd.

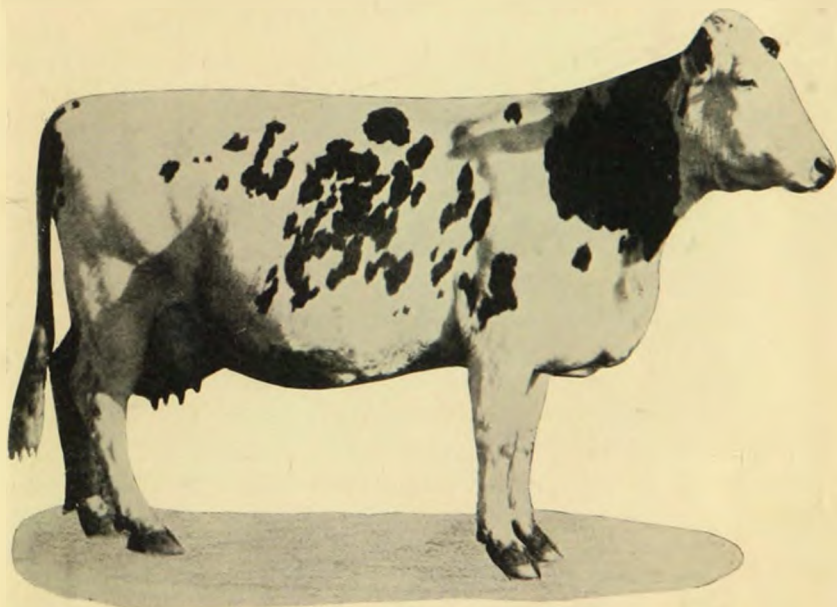
A dairy-herd-improvement association is an organization of 20 to 26 farmers, which has been formed for the purpose of providing means for the cooperation of its members in ascertaining the relative merits of their individual cows, and in the economical production of the dairy products.

The expense of operating the association is prorated among its membership. A full-time man is employed to do the testing. The tester visits each member one day every month. He determines the feed consumption of each cow in the herd. He weighs and samples the milk of each cow, both night and morning. During the forenoon he tests each sample of milk for butterfat and calculates the production, feed cost and returns above feed cost. The results are then entered in the member's herd book.

From these records kept by a disinterested party the dairy farmer has a basis upon which to:

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- 1—Cull his herd
  - 2—Select heifers for his future herd
  - 3—Determine the value of bulls used
  - 4—Feed his cows according to production

In addition to the actual records kept by the tester, he carries information on good dairy practices from one farm to another so that individual members may profit by good practices of other members.



Follette, a 5-year-old Grade Holstein, was high cow for the El Paso-Fremont Association. She produced 17,384 pounds of milk and 627.1 pounds of butterfat. Owned by the Sinton Dairy Company, Colorado Springs.

#### Associations Having Completed Year's Work July 1, 1929

| Association             | Year Ended    | Tester            |
|-------------------------|---------------|-------------------|
| Washington County       | April 1, 1929 | Carl Reid         |
| South Platte Valley     | April 1, 1929 | H. A. Law         |
| Northern                | May 1, 1929   | Fred Anderson     |
| Boulder-Brighton-Denver | June 1, 1929  | Chas. McDaniels   |
| San Luis Valley         | June 1, 1929  | E. L. Weiber      |
| Mesa County             | June 1, 1929  | Ralph Gelvin      |
| Montrose County         | June 1, 1929  | Ralph Gelvin      |
| Delta County            | June 1, 1929  | Herman Tomky      |
| Pueblo                  | July 1, 1929  | W. N. Christensen |
| Rye                     | July 1, 1929  | W. N. Christensen |
| El Paso-Fremont         | July 1, 1929  | Fred Kramer       |
| Teller County           | July 1, 1929  | Fred Kramer       |

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## Associations Operating, Year's Work Not Completed by July 1, 1929

| Association     |               | Tester           |
|-----------------|---------------|------------------|
| El Paso-Elbert  | Jan. 1, 1930- | Franklin Johnson |
| Huerfano County | July 1, 1930- | I. E. McKinley   |
| La Plata County | Aug. 1, 1930- | E. W. Martin     |
| Fremont-Custer  | July 1, 1930- | Albert Heskett   |



The herd of grade and purebred Ayrshires which produced 384 lbs. of butterfat on non-irrigated land west of Sterling—owned by John Knifton.

### Dairy Cows on Test 1928-29

|                             |      |
|-----------------------------|------|
| Grade Holsteins .....       | 1695 |
| Registered Holsteins .....  | 777  |
| Grade Jerseys .....         | 457  |
| Registered Jerseys .....    | 126  |
| Grade Guernseys .....       | 194  |
| Registered Guernseys .....  | 37   |
| Grade Ayrshires .....       | 22   |
| Registered Ayrshires .....  | 7    |
| Cows in mixed herds .....   | 259  |
| Grade Shorthorns .....      | 262  |
| Registered Shorthorns ..... | 52   |
| Total .....                 | 3887 |

### Average Production of All Registered Herds

Milk, 9,388                      Butterfat, 348.9

### Average Production of All Grade Herds

Milk, 6,657                      Butterfat, 277.1

## Method Used in Figuring Results

Herd averages are computed on the cow-month basis, as recommended by the Bureau of Dairying of the United States Department of Agriculture. The method is as follows:

| Yearly Individual Cow        |       |           |                |                |                |               |       |
|------------------------------|-------|-----------|----------------|----------------|----------------|---------------|-------|
| DAIRY HERD IMPROV            |       |           |                |                |                |               |       |
| Cows in Herd On              |       |           |                |                |                |               |       |
| Name and number of cow       | Breed | Age       | Months on test | Months in milk | Pounds of Milk | Pounds of fat | Price |
| Pet                          | R.H.  | 4         | 12             | 10             | 11,177         | 413.1         |       |
| Vera                         | R.H.  | 5         | 12             | 12             | 11,986         | 437.9         |       |
| Whitie                       | G.H.  | 6         | 12             | 11             | 12,494         | 404.4         |       |
| Bessie                       | G.H.  | 7         | 12             | 9              | 9,143          | 341.4         |       |
| Genevieve                    | G.H.  | 7         | 10             | 10             | 9,740          | 375.7         |       |
| Blackie                      | G.H.  | 3         | 4              | 4              | 4,149          | 198.0         |       |
| Jenney                       | G.H.  | 3         | 5              | 5              | 4,289          | 201.0         |       |
| <b>TOTAL</b>                 |       | <b>67</b> |                |                | <b>62,978</b>  | <b>2371.5</b> |       |
| Cow months—67                |       |           |                |                |                |               |       |
| Av. No. of Cows in herd—5.58 |       |           |                |                |                |               |       |
| Av. lbs. milk—11,286         |       |           |                |                |                |               |       |
| Av. lbs. fat—425.0           |       |           |                |                |                |               |       |

Where the producer was distributing his own milk the value of the product was figured at the wholesale or **whole milk** prices and not at the current retail **market milk** price.

**Return over feed cost** indicates gross return above feed cost, and does not show net profit. No attempt has been made to show the cost of labor, interest and depreciation on cows and equipment.

The value of increase in calves is not included in the returns listed. Only herds which have been on test a full year are listed in the high herds.

### Average Production for the State 1928-29

| Average number cows in herd | Average pounds milk | Average pounds butterfat | Average feed cost |
|-----------------------------|---------------------|--------------------------|-------------------|
| 16.3                        | 8,007               | 309.97                   | \$77.83           |

### High Cow for the State

Rocksie Parethema Fiekje Pontiac, a purebred Holstein, owned by Dr. A. E. Miller of Austin, produced 665.5 pounds of butterfat.

### High Herd for the State

A purebred herd of Holsteins, owned by W. V. McKaughan of Penrose, produced 517.1 pounds of butterfat.



### High Cow for Each Association

| Owner                                        | Association       | Breed             | Production |
|----------------------------------------------|-------------------|-------------------|------------|
| Dr. A. E. Miller                             | Delta             | Purebred Holstein | 665.5      |
| Sinton Dairy Co.                             | El Paso-Fremont   | Grade Holstein    | 627.1      |
| Colo. State School for<br>Dependent Children | Brighton-Denver   | Purebred Holstein | 616.7      |
| H. F. Sherman                                | Northern          | Purebred Holstein | 602.0      |
| H. L. Becker                                 | Rye               | Grade Guernsey    | 562.3      |
| Colo. State Hospital                         | Pueblo            | Grade Holstein    | 585.3      |
| H. S. Mason                                  | Washington        | Grade Holstein    | 581.9      |
| O. C. McKnight                               | So. Platte Valley | Grade Holstein    | 567.0      |
| Geo. N. Pond                                 | Mesa              | Grade Jersey      | 543.5      |
| W. C. Carruthers                             | San Luis Valley   | Grade Holstein    | 516.6      |
| W. A. Brown                                  | Montrose          | Grade Holstein    | 485.9      |

### High Herd for Each Association

| Owner            | Association       | Breed             | Production |
|------------------|-------------------|-------------------|------------|
| W. V. McKaughan  | El Paso-Fremont   | Purebred Holstein | 517.1      |
| Theo Meeds       | Brighton-Denver   | Grade Holstein    | 483.4      |
| Albert Cross     | Denver            | Grade Holstein    | 453.4      |
| Dr. A. E. Miller | Delta             | Purebred Holstein | 436.9      |
| Ted Donley       | Pueblo            | Grade Holstein    | 421.1      |
|                  |                   | Grade & Purebred  |            |
| Geo. N. Pond     | Mesa              | Jersey            | 416.2      |
| H. S. Mason      | Washington        | Grade Holstein    | 405.4      |
|                  |                   | Grade & Purebred  |            |
| John Knifton     | So. Platte Valley | Ayrshire          | 384.9      |
| R. L. Speer      | Rye               | Grade Jersey      | 368.5      |
| C. R. Marks      | Montrose          | Grade Jersey      | 367.0      |
| J. A. Mortinsen  | San Luis Valley   | Grade Holstein    | 351.6      |



The high herd for the State—owned by W. V. McKaughan of Penrose.

OWNERS—  
Mesa County

|                            | Number of cows in herd | Breed    | Average pounds milk | Average test |
|----------------------------|------------------------|----------|---------------------|--------------|
| L. W. Magnus Forsman ..... | 29.0                   | G. Sht.  | 5861                | 4.2          |
| Dave Anderson .....        | 28.6                   | Mixed    | 5846                | 4.3          |
| Colorado State Home .....  | 22.7                   | PB-G.H.  | 8997                | 3.5          |
| A. Pettengill .....        | 12.8                   | PB-R.J.  | 5906                | 5.3          |
| W. O. Crane .....          | 10.3                   | R.Shht.  | 4539                | 4.2          |
| Fred Clymer .....          | 38.0                   | R.Hol    | 10517               | 3.5          |
| J. O. Nissen .....         | 16.5                   | R.Jer.   | 7038                | 4.9          |
| Geo. N. Pond .....         | 15.3                   | G&PBJer. | 8197                | 5.1          |
| T. C. Taylor .....         | 13.5                   | G. Jer.  | 6874                | 4.1          |
| Seth McCarty .....         | 9.0                    | R.Jer.   | 6469                | 4.7          |
| H. J. Tupper .....         | 10.4                   | PB-Hol.  | 10020               | 3.3          |
| W. A. Lowe .....           | 21.0                   | R.Hol.   | 9908                | 3.2          |
| E. G. Pettengill .....     | 13.3                   | R.J.     | 7292                | 4.9          |
| Average .....              | 18.5                   |          | 7497                | 4.2          |

| Average pounds fat | Value of product | Cost of roughage,<br>including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expended | Feed cost per pound<br>butterfat | Feed cost per 100<br>pounds milk |
|--------------------|------------------|----------------------------------------|---------------|--------------------|-----------------------|----------------------------|----------------------------------|----------------------------------|
| 244.7              | 105.04           | 22.81                                  | 22.06         | 44.87              | 60.16                 | 2.34                       | .18                              | .77                              |
| 250.9              | 109.04           | 32.82                                  | 7.04          | 39.86              | 69.18                 | 2.73                       | .16                              | .68                              |
| 310.9              | 236.10           | 80.64                                  | 55.94         | 136.57             | 99.52                 | 1.73                       | .44                              | 1.52                             |
| 310.4              | 144.13           | 31.69                                  | 26.06         | 57.75              | 86.38                 | 2.50                       | .19                              | .98                              |
| 190.2              | 82.33            | 26.13                                  | 7.23          | 33.35              | 48.97                 | 2.47                       | .18                              | .73                              |
| 370.6              | 296.46           | 60.68                                  | 47.69         | 108.37             | 188.09                | 2.74                       | .29                              | 1.03                             |
| 344.2              | 267.17           | 56.07                                  | 40.38         | 96.45              | 170.72                | 2.77                       | .28                              | 1.37                             |
| 416.2              | 315.03           | 52.02                                  | 52.60         | 104.62             | 210.41                | 3.01                       | .25                              | 1.28                             |
| 280.3              | 224.28           | 70.53                                  | 47.32         | 117.85             | 106.43                | 1.89                       | .42                              | 1.71                             |
| 304.4              | 217.24           | 52.11                                  | 52.56         | 104.67             | 112.58                | 2.07                       | .34                              | 1.62                             |
| 333.5              | 146.60           | 38.18                                  | 26.57         | 64.75              | 81.85                 | 2.26                       | .19                              | .65                              |
| 315.2              | 252.16           | 59.98                                  | 39.93         | 99.91              | 152.25                | 2.52                       | .32                              | 1.00                             |
| 362.1              | 263.62           | 48.67                                  | 56.94         | 105.61             | 158.01                | 2.49                       | .29                              | 1.45                             |
| 310.3              | 204.55           | 48.64                                  | 37.10         | 85.74              | 118.81                | 2.42                       | .27                              | 1.14                             |



OWNERS—  
Montrose County

|                                           | Number of cows in herd | Breed   | Average pounds milk | Average test | Average pounds fat | Value of product | Cost of roughage,<br>including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expended | Feed cost per pound<br>butterfat | Feed cost per 100<br>pounds milk |
|-------------------------------------------|------------------------|---------|---------------------|--------------|--------------------|------------------|----------------------------------------|---------------|--------------------|-----------------------|----------------------------|----------------------------------|----------------------------------|
| J. C. Bell-Culver and Sons                | 19.6                   | G.J.    | 6960                | 4.5          | 314.9              | 144.85           | 36.15                                  | 20.87         | 57.02              | 87.83                 | 2.34                       | .18                              | .77                              |
| Uncompagnie Land and<br>Livestock Company | 12.4                   | Shh.    | 6374                | 4.0          | 256.1              | 120.12           | 28.18                                  | 26.87         | 55.05              | 65.07                 | 2.18                       | .21                              | .86                              |
| J. G. Husten                              | 4.3                    | G.J.    | 6455                | 3.8          | 250.5              | 211.01           | 35.03                                  | 33.92         | 74.85              | 136.17                | 2.82                       | .29                              | 1.16                             |
| C. R. Marks                               | 4.0                    | G.J.    | 7570                | 4.8          | 367.0              | 171.88           | 40.50                                  | 37.53         | 78.12              | 93.77                 | 2.20                       | .21                              | 1.03                             |
| W. T. Ferguson                            | 12.8                   | Gr.Hol. | 4758                | 3.9          | 187.4              | 80.92            | 28.20                                  | 1.92          | 30.22              | 50.70                 | 2.08                       | .16                              | .64                              |
| J. C. Bell Nelson                         | 32.5                   |         | 4623                | 3.4          | 150.2              | 102.65           | 35.76                                  |               | 35.76              | 66.89                 | 2.87                       | .22                              | .77                              |
| G. Mack and Son                           | 10.0                   | Shh.    | 4712                | 4.4          | 208.2              | 91.34            | 26.74                                  |               | 26.74              | 64.00                 | 3.42                       | .13                              | .57                              |
| O. C. Dunlap                              | 10.0                   | G.Shh.  | 6931                | 3.9          | 269.5              | 116.97           | 33.09                                  | 16.80         | 49.98              | 66.97                 | 2.34                       | .19                              | .72                              |
| W. A. Brower                              | 7.0                    | Hol.    | 8447                | 3.9          | 333.7              | 146.49           | 33.55                                  | 27.78         | 61.33              | 85.16                 | 2.39                       | .18                              | .73                              |
| Loesch Brothers                           | 17.5                   | Hol.    | 9060                | 3.4          | 305.2              | 146.50           | 51.91                                  | 24.81         | 76.72              | 69.87                 | 1.91                       | .25                              | .85                              |
| Hollingsworth-J. C. Bell                  | 14.8                   | Gr.Jer. | 5223                | 4.2          | 218.9              | 119.91           | 37.31                                  |               | 37.31              | 82.61                 | 3.21                       | .17                              | .71                              |
| J. C. Moberly                             | 12.3                   | Gr.Hol. | 8723                | 3.6          | 314.6              | 203.34           | 65.06                                  | 12.08         | 77.13              | 126.20                | 2.64                       | .25                              | .88                              |
| W. W. Price                               | 7.7                    | Gr.Jer. | 7420                | 4.3          | 319.9              | 155.51           | 31.43                                  | 20.52         | 70.95              | 84.56                 | 2.19                       | .22                              | .86                              |
| Average                                   | 12.7                   |         | 6711                | 4.0          | 269.6              | 139.34           | 37.23                                  | 19.01         | 56.24              | 83.10                 | 2.55                       | .20                              | .82                              |

| OWNERS—<br>Pueblo County      | Number of cows in herd | Breed       | Average pounds milk | Average test | Average pounds fat | Value of product | Cost of roughage,<br>including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expende | Feed cost per pound<br>butterfat | Feed cost per 100<br>pounds milk |
|-------------------------------|------------------------|-------------|---------------------|--------------|--------------------|------------------|----------------------------------------|---------------|--------------------|-----------------------|---------------------------|----------------------------------|----------------------------------|
| R. T. Donley .....            | 23.9                   | G.Guer.     | 7244                | 3.8          | 276.5              | 188.74           | 57.07                                  | 38.32         | 95.39              | 93.35                 | 1.98                      | .34                              | 1.32                             |
| Ted Donley .....              | 17.3                   | G.Hol.      | 12460               | 3.4          | 421.1              | 285.04           | 90.27                                  | 86.93         | 177.20             | 107.84                | 1.61                      | .42                              | 1.42                             |
| Pueblo County Farm .....      | 9.0                    | G.Hol.      | 9122                | 3.4          | 310.4              | 210.04           | 46.88                                  | 31.97         | 78.85              | 131.19                | 2.66                      | .25                              | .86                              |
| Hi Test Guernsey Dairy .....  | 19.5                   | Guern.      | 8036                | 3.9          | 317.2              | 215.70           | 75.22                                  | 55.26         | 130.48             | 85.22                 | 1.65                      | .41                              | 1.62                             |
| E. F. Himes .....             | 31.7                   | G.Hol.      | 11361               | 3.4          | 388.7              | 264.32           | 83.93                                  | 56.90         | 140.83             | 123.49                | 1.88                      | .36                              | 1.24                             |
| W. L. Stone and Son .....     | 27.9                   | Guern.&G.H. | 6465                | 4.0          | 259.1              | 176.16           | 62.34                                  | 39.60         | 101.94             | 74.22                 | 1.72                      | .39                              | 1.55                             |
| J. W. Loving .....            | 51.4                   | G.&R.G.     | 7915                | 4.3          | 339.9              | 230.90           | 80.78                                  | 51.79         | 132.57             | 98.33                 | 1.74                      | .39                              | 1.67                             |
| H. L. Riddle .....            | 24.2                   | G.Hol.      | 6653                | 4.1          | 273.9              | 131.77           | 42.65                                  | 24.00         | 66.65              | 65.12                 | 1.98                      | .24                              | 1.00                             |
| A. G. Stubblefield .....      | 20.6                   | G.Hol.      | 9707                | 3.6          | 345.7              | 238.16           | 91.21                                  | 63.30         | 153.51             | 83.65                 | 1.54                      | .45                              | 1.59                             |
| Colorado State Hospital ..... | 96.5                   | G.&R.H.     | 10048               | 3.5          | 351.5              | 239.10           | 103.58                                 | 46.52         | 150.10             | 89.00                 | 1.59                      | .43                              | 1.49                             |
| Joe Gersick .....             | 23.9                   | G.Hol.      | 12043               | 3.4          | 408.4              | 273.60           | 86.72                                  | 76.81         | 163.53             | 110.07                | 1.67                      | .40                              | 1.36                             |
| Average .....                 | 31.4                   |             | 9187                |              | 335.7              | 223.04           | 74.60                                  | 51.95         | 126.55             | 96.49                 | 1.82                      | .37                              | 1.37                             |

OWNERS—  
Rye County

|                       |      |        |       |     |       |        |       |       |       |        |      |     |      |
|-----------------------|------|--------|-------|-----|-------|--------|-------|-------|-------|--------|------|-----|------|
| F. O. Rindenour ..... | 15.0 |        | 5995  | 5.0 | 297.5 | 144.44 | 40.82 | 10.87 | 51.69 | 92.75  | 2.79 | .17 | .85  |
| R. L. Speer .....     | 11.5 | G.Jer. | 7193  | 5.1 | 368.5 | 179.79 | 47.93 | 7.48  | 55.41 | 124.38 | 3.24 | .15 | .77  |
| Frank Graham .....    | 18.5 | G.Hol. | 7783  | 4.0 | 308.4 | 150.49 | 39.76 | 19.79 | 59.55 | 90.94  | 2.53 | .19 | .76  |
| H. L. Becker .....    | 16.1 | G.Gu.  | 6808  | 5.1 | 346.9 | 167.05 | 39.98 | 12.12 | 52.10 | 114.95 | 3.21 | .15 | .77  |
| L. R. Hunter .....    | 11.1 | G.Jer. | 5418  | 4.8 | 261.6 | 125.15 | 30.20 | 17.22 | 47.42 | 77.73  | 2.64 | .18 | .88  |
| Henry Bondurant ..... | 12.2 | G.Hol. | 9219  | 3.8 | 352.9 | 175.02 | 49.17 | 21.17 | 70.34 | 104.68 | 2.49 | .20 | .76  |
| Mt. Baldy Ranch ..... | 19.6 | G.Jer. | 4925  | 4.9 | 240.6 | 117.74 | 23.58 | 14.88 | 43.46 | 74.28  | 2.71 | .18 | .88  |
| Dan Oakley .....      | 15.6 | G.Jer. | 5321  | 4.9 | 260.5 | 126.79 | 38.78 | 16.19 | 54.97 | 71.82  | 2.31 | .21 | 1.03 |
| Paul Ray .....        | 8.3  | G.Hol. | 9823  | 3.6 | 350.8 | 171.51 | 43.40 | 23.38 | 66.78 | 104.73 | 2.57 | .19 | .68  |
| Paul Meredith .....   | 11.9 | G.Jer. | 7184  | 4.7 | 334.2 | 160.11 | 36.15 | 22.66 | 58.81 | 101.30 | 2.72 | .18 | .82  |
| Ralph Midell .....    | 12.7 |        | 10070 | 3.6 | 359.0 | 174.32 | 46.66 | 16.40 | 63.15 | 111.17 | 2.76 | .18 | .63  |
| Average .....         | 13.9 |        | 7249  |     | 316.4 | 153.86 | 40.13 | 16.57 | 56.70 | 97.16  | 2.72 | .18 | .80  |

OWNERS—  
Boulder-Brighton-  
Denver

|                                 | Number of cows in herd | Breed       | Average pounds milk | Average test |
|---------------------------------|------------------------|-------------|---------------------|--------------|
| State School for Children ..... | 13.8                   | P.B.Hol.    | 12388               | 3.1          |
| Wm. Wall and Sons .....         | 17.0                   | G.Hol.      | 7194                | 3.8          |
| John Wall .....                 | 4.8                    | G.Shht.     | 12028               | 3.9          |
| Clarefield Farms .....          | 26.7                   | P.B.&G.H.   | 9234                | 3.3          |
| Lutheran Sanitarium .....       | 9.1                    | P.B.Hol.    | 11162               | 3.2          |
| Theo Meeds .....                | 12.8                   | G.Hol.      | 13197               | 3.7          |
| U. B. Peckham .....             | 29.3                   | G.Hol.      | 8607                | 3.4          |
| F. O. Vaille .....              | 7.5                    | P.B.Hol.    | 13143               | 3.3          |
| Carl Brown .....                | 29.6                   | G.Hol.      | 9950                | 3.5          |
| Ray Harper .....                | 6.9                    | P.B.Hol.    | 8865                | 4.0          |
| Marcus Harper .....             | 13.3                   | P.B.Hol.    | 9891                | 3.8          |
| Willow Springs Farm .....       | 25.4                   | P.B.Hol.    | 9921                | 3.3          |
| H. M. Anderson .....            | 22.5                   | G.Hol.      | 11329               | 3.4          |
| Fred Smith .....                | 26.5                   | P.B.Hol.    | 8734                | 3.2          |
| L. M. Boston .....              | 15.2                   | P.B.Hol.    | 10596               | 3.2          |
| Herman Rosenbrock .....         | 10.0                   | P.B.Hol.    | 9631                | 3.3          |
| State Industrial School .....   | 29.2                   | G.&P.B.Hol. | 10643               | 3.2          |
| Paul Meehl .....                | 13.4                   | G.&P.B.Hol. | 8743                | 3.5          |
| Kendalvue Balanced Farms .....  | 2.0                    | G.&P.B.Hol. | 10365               | 3.5          |
| Clayton College .....           | 11.9                   | P.B.Hol.    | 12657               | 3.4          |
| Average .....                   | 17.2                   |             | 10414               | 3.5          |

| Average pounds fat | Value of product | Cost of roughage,<br>including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expended | Feed cost per pound<br>butterfat | Feed cost per 100<br>pounds milk |
|--------------------|------------------|----------------------------------------|---------------|--------------------|-----------------------|----------------------------|----------------------------------|----------------------------------|
| 385.9              | 575.29           | 34.71                                  | 89.75         | 124.46             | 450.83                | 4.62                       | .32                              | 1.00                             |
| 275.5              | 165.26           | 35.55                                  | 22.87         | 58.42              | 106.84                | 2.83                       | .21                              | .81                              |
| 466.4              | 280.89           | 45.44                                  | 55.32         | 100.76             | 180.13                | 2.78                       | .22                              | .84                              |
| 307.7              | 185.75           | 48.18                                  | 36.71         | 84.89              | 100.86                | 2.19                       | .28                              | .92                              |
| 356.4              | 233.48           | 55.32                                  | 85.85         | 141.17             | 92.31                 | 1.65                       | .40                              | 1.27                             |
| 483.4              | 290.05           | 50.96                                  | 64.35         | 115.31             | 174.74                | 2.51                       | .24                              | .87                              |
| 292.7              | 153.70           | 58.22                                  | 21.45         | 69.67              | 84.03                 | 2.21                       | .24                              | .81                              |
| 439.1              | 270.70           | 65.62                                  | 55.96         | 121.58             | 149.12                | 2.23                       | .28                              | .93                              |
| 349.7              | 209.35           | 42.18                                  | 50.27         | 92.45              | 116.90                | 2.26                       | .26                              | .93                              |
| 355.6              | 184.92           | 52.76                                  | 50.84         | 103.60             | 81.32                 | 1.78                       | .29                              | 1.17                             |
| 378.9              | 207.36           | 57.76                                  | 60.53         | 118.29             | 89.07                 | 1.75                       | .31                              | 1.19                             |
| 323.7              | 323.75           | 47.21                                  | 40.74         | 87.95              | 235.80                | 3.68                       | .27                              | .89                              |
| 379.9              | 226.08           | 94.53                                  | 60.86         | 155.39             | 70.69                 | 1.45                       | .40                              | 1.37                             |
| 283.6              | 180.77           | 48.60                                  | 32.28         | 80.88              | 99.89                 | 2.23                       | .29                              | .93                              |
| 342.3              | 218.30           | 53.80                                  | 61.28         | 115.08             | 103.22                | 1.88                       | .34                              | 1.09                             |
| 318.7              | 191.13           | 26.06                                  | 38.32         | 64.38              | 126.75                | 2.97                       | .20                              | .67                              |
| 345.5              | 324.06           | 47.70                                  | 69.65         | 127.35             | 196.71                | 2.54                       | .37                              | 1.20                             |
| 304.1              | 205.41           | 32.33                                  | 49.61         | 81.94              | 123.47                | 2.51                       | .27                              | .94                              |
| 360.8              | 219.68           | 39.48                                  | 59.67         | 99.15              | 120.53                | 2.22                       | .27                              | .96                              |
| 426.4              | 255.22           | 56.49                                  | 80.07         | 136.56             | 118.66                | 1.87                       | .32                              | 1.08                             |
| 358.8              | 245.06           | 49.65                                  | 54.32         | 103.97             | 141.09                | 2.41                       | .29                              | .93                              |

OWNERS—  
South Platte Valley  
Association

|                              | Number of cows in herd | Breed       | Average pounds milk | Average test |
|------------------------------|------------------------|-------------|---------------------|--------------|
| Morland Realty Company ..... | 31.5                   | G.&P.B.H.   | 7288                | 3.4          |
| C. E. Giaugue .....          | 9.3                    | G.Hol.      | 7722                | 3.5          |
| M. E. Nelson .....           | 6.0                    | G.Hol.      | 7167                | 3.4          |
| I. Eicker .....              | 15.4                   | G.Hol.      | 8482                | 3.5          |
| Fred Norton .....            | 16.0                   | G.Hol.      | 7133                | 3.7          |
| W. H. Palser .....           | 9.5                    | G.&P.B.H.   | 9604                | 3.5          |
| Guy Yearous .....            | 7.0                    | P.B.Hol.    | 9492                | 3.4          |
| Lucas Waltz .....            | 7.0                    | G.Shht.     | 3388                | 4.3          |
| O. C. Fleming .....          | 7.8                    | G.Shh.      | 8035                | 3.7          |
| E. J. Leonard .....          | 13.5                   | G.Hol.      | 6605                | 3.8          |
| G. T. Brown .....            | 18.5                   | G.&P.B.H.   | 6439                | 3.7          |
| G. L. Bossee .....           | 30.0                   | G.Hol.      | 5983                | 3.7          |
| E. M. Hoffman .....          | 11.3                   | Ayr.        | 6535                | 4.3          |
| W. C. Lowry .....            | 9.3                    | G.Shh.      | 5720                | 3.9          |
| R. H. Drew .....             | 14.0                   | G.Hol.      | 5472                | 3.7          |
| Arthur Lowes .....           | 5.0                    | G.&P.B.Ayr. | 8461                | 3.8          |
| John Knifton .....           | 7.8                    | Ayr.        | 7881                | 4.9          |
| R. Toyne .....               | 10.3                   | P.B.Shh.    | 4456                | 4.3          |
| N. R. Lindburg .....         | 10.5                   | G.Hol.      | 6261                | 4.0          |
| Tidele Guenzi .....          | 21.6                   | G.&P.B.H.   | 8225                | 3.4          |
| L. T. Winger .....           | 40.3                   | G.&P.B.H.   | 9629                | 3.4          |
| O. C. McKnight .....         | 27.3                   | G.Hol.      | 7971                | 3.6          |
| Geo. Sellers .....           | 12.9                   | G.H.&Shh.   | 6775                | 4.2          |
| Average .....                | 14.9                   |             | 7162                | 3.8          |

| Average pounds fat | Value of product | Cost of roughage,<br>including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expended | Feed cost per pound<br>butterfat | Feed cost per 100<br>pounds milk |
|--------------------|------------------|----------------------------------------|---------------|--------------------|-----------------------|----------------------------|----------------------------------|----------------------------------|
| 245.2              | 211.25           | 49.01                                  | 41.63         | 90.63              | 120.62                | 2.33                       | .37                              | 1.24                             |
| 268.6              | 152.45           | 43.46                                  | 19.07         | 62.53              | 89.92                 | 2.43                       | .23                              | .81                              |
| 244.5              | 106.93           | 29.24                                  | 23.00         | 52.24              | 54.69                 | 2.04                       | .21                              | .73                              |
| 290.5              | 150.72           | 23.81                                  | 33.26         | 57.07              | 102.65                | 2.80                       | .19                              | .67                              |
| 263.7              | 138.74           | 45.22                                  | 25.59         | 70.81              | 67.93                 | 1.96                       | .27                              | .95                              |
| 332.8              | 122.48           | 26.52                                  | 42.82         | 69.34              | 53.14                 | 1.77                       | .21                              | .72                              |
| 318.7              | 150.31           | 38.27                                  | 57.17         | 95.44              | 54.87                 | 1.57                       | .30                              | 1.01                             |
| 145.2              | 61.89            | 29.05                                  |               | 29.05              | 32.84                 | 2.13                       | .20                              | .86                              |
| 295.4              | 172.30           | 63.72                                  | 29.07         | 92.79              | 79.51                 | 1.86                       | .31                              | 1.15                             |
| 253.7              | 131.62           | 40.04                                  | 36.24         | 76.28              | 55.33                 | 1.72                       | .30                              | 1.15                             |
| 239.3              | 109.64           | 21.08                                  | 48.05         | 69.13              | 40.50                 | 1.58                       | .29                              | 1.07                             |
| 222.7              | 136.35           | 22.98                                  | 4.87          | 27.85              | 108.50                | 4.89                       | .13                              | .47                              |
| 278.1              | 127.12           | 10.18                                  | 39.24         | 49.42              | 77.70                 | 3.57                       | .18                              | .76                              |
| 227.9              | 106.11           | 35.44                                  | 21.66         | 57.10              | 49.01                 | 1.86                       | .25                              | 1.00                             |
| 205.1              | 119.07           | 39.79                                  | 14.11         | 53.90              | 65.17                 | 2.21                       | .26                              | .99                              |
| 326.5              | 151.71           | 32.14                                  | 41.58         | 73.72              | 77.99                 | 2.06                       | .23                              | .87                              |
| 384.9              | 163.42           | 20.25                                  | 23.77         | 44.02              | 119.40                | 3.71                       | .11                              | .56                              |
| 192.8              | 83.05            | 27.54                                  | 19.93         | 47.47              | 35.58                 | 1.75                       | .25                              | 1.05                             |
| 251.3              | 119.54           | 27.12                                  | 10.54         | 37.66              | 81.88                 | 3.17                       | .15                              | .60                              |
| 276.2              | 175.84           | 44.72                                  | 45.54         | 90.26              | 85.58                 | 1.95                       | .32                              | 1.01                             |
| 327.8              | 279.88           | 39.21                                  | 34.10         | 73.31              | 206.57                | 3.82                       | .22                              | .76                              |
| 287.9              | 161.20           | 26.11                                  | 40.53         | 66.64              | 94.56                 | 2.42                       | .23                              | .84                              |
| 282.8              | 196.92           | 22.56                                  | 37.71         | 60.27              | 136.05                | 2.26                       | .21                              | .89                              |
| 268.3              | 148.71           | 32.93                                  | 29.98         | 62.91              | 85.80                 | 2.49                       | .24                              | .88                              |



| OWNERS—<br>Teller County | Number of cows in herd | Breed       | Average pounds milk | Average test | Average pounds fat | Value of product | Cost of roughage,<br>including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expended | Feed cost per pound<br>butterfat | Feed cost per 100<br>pounds milk |
|--------------------------|------------------------|-------------|---------------------|--------------|--------------------|------------------|----------------------------------------|---------------|--------------------|-----------------------|----------------------------|----------------------------------|----------------------------------|
| Alf Coulson .....        | 17.0                   | G.H.        | 7333                | 3.8          | 281.9              | 169.22           | 40.23                                  | 32.10         | 72.33              | 96.89                 | 2.34                       | .26                              | .99                              |
| Fred Honey .....         | 12.5                   | G.H.        | 6492                | 3.8          | 245.6              | 135.80           | 37.34                                  | 26.29         | 63.63              | 72.17                 | 2.13                       | .26                              | .98                              |
| R. L. Freeman .....      | 14.8                   | G.H.        | 7775                | 3.8          | 293.2              | 160.32           | 34.62                                  | 37.63         | 72.25              | 88.07                 | 2.22                       | .25                              | .93                              |
| Average .....            | 14.7                   |             | 7200                | 3.8          | 273.6              | 155.11           | 37.40                                  | 32.00         | 69.40              | 85.71                 | 2.23                       | .26                              | .97                              |
| OWNERS—<br>Northern      |                        |             |                     |              |                    |                  |                                        |               |                    |                       |                            |                                  |                                  |
| Harry C. Brown .....     | 26.5                   | G.Hol.      | 9863                | 3.5          | 343.0              | 106.24           | 48.60                                  | 41.65         | 90.33              | 115.91                | 2.28                       | .26                              | .92                              |
| C. W. Henry .....        | 13.3                   | P.B.Hol.    | 10561               | 3.6          | 377.2              | 226.25           | 56.68                                  | 44.54         | 101.12             | 125.13                | 2.24                       | .27                              | .96                              |
| F. R. Dwinelle .....     | 15.3                   | G.&P.B.Jer. | 5802                | 5.2          | 303.2              | 161.12           | 39.77                                  | 23.02         | 62.70              | 98.33                 | 2.57                       | .21                              | 1.08                             |
| Frank Dametz .....       | 4.1                    | G.Hol.      | 14760               | 3.4          | 504.3              | 273.78           | 99.39                                  | 62.19         | 161.58             | 112.20                | 1.69                       | .32                              | 1.39                             |
| Albert C. Cross .....    | 15.2                   | G.Hol.      | 12398               | 3.7          | 453.4              | 244.26           | 52.75                                  | 59.72         | 112.47             | 131.79                | 2.17                       | .25                              | .91                              |
| W. F. Sherman .....      | 18.5                   | G.Hol.      | 11346               | 3.4          | 388.5              | 214.80           | 55.49                                  | 69.83         | 125.32             | 89.48                 | 1.71                       | .32                              | 1.10                             |
| Walter Senn .....        | 5.4                    | P.B.Hol.    | 11706               | 3.4          | 403.3              | 208.28           | 76.32                                  | 18.48         | 94.80              | 113.98                | 2.20                       | .24                              | .81                              |
| J. M. Farris .....       | 24.4                   | Hol.        | 8723                | 3.9          | 336.8              | 190.36           | 46.41                                  | 28.68         | 75.09              | 115.27                | 2.54                       | .22                              | .86                              |
| P. C. Lamb .....         | 17.8                   | G.Jer.      | 6226                | 5.7          | 355.7              | 186.58           | 37.79                                  | 26.77         | 64.56              | 122.02                | 2.89                       | .18                              | 1.04                             |
| W. E. Fisher .....       | 12.3                   | G.Guer.     | 6599                | 5.0          | 330.9              | 174.78           | 38.88                                  | 32.83         | 71.71              | 103.07                | 2.44                       | .22                              | 1.09                             |
| Nelson Brothers .....    | 16.2                   | P.B.Hol.    | 10193               | 3.8          | 384.9              | 190.82           | 48.76                                  | 39.28         | 88.04              | 102.78                | 2.17                       | .23                              | .86                              |
| W. R. Mitchell .....     | 26.5                   | G.Hol.      | 7107                | 3.9          | 277.7              | 152.04           | 65.81                                  | 23.65         | 89.46              | 62.58                 | 1.70                       | .32                              | 1.26                             |
| Earl Temple .....        | 13.0                   | P.B.Jer.    | 6869                | 4.6          | 316.7              | 169.62           | 39.99                                  | 38.22         | 78.21              | 91.41                 | 2.17                       | .25                              | 1.14                             |
| J. A. Anderson .....     | 7.6                    | G.Hol.      | 8169                | 3.9          | 317.8              | 168.49           | 41.58                                  | 28.16         | 69.74              | 98.75                 | 2.42                       | .22                              | .85                              |
| Average .....            | 15.4                   |             | 9309                | 4.1          | 363.8              | 197.70           | 53.44                                  | 38.36         | 91.80              | 105.90                | 2.23                       | .25                              | 1.00                             |

OWNERS—  
Delta County

|                                      | Number of cows in herd | Breed       | Average pounds milk | Average test |
|--------------------------------------|------------------------|-------------|---------------------|--------------|
| Gilbert Graham .....                 | 13.0                   | R.&G.Hol.   | 8531                | 3.4          |
| H. D. McSherry .....                 | 16.8                   | G.&Shh.     | 5376                | 4.7          |
| F. W. McCallister .....              | 3.8                    | G.J.&G.H.   | 7651                | 4.4          |
| S. A. McKissen .....                 | 24.0                   | G.G.&G.J.   | 5395                | 4.2          |
| Heath Fluke .....                    | 9.0                    | G.J.&P.B.J. | 7215                | 4.1          |
| Ed. W. Ayer .....                    | 16.7                   | G.&P.B.Hol. | 6392                | 4.4          |
| A. Hulteen .....                     | 9.0                    | G. Jersey   | 6551                | 3.8          |
| Gordon Poe .....                     | 5.1                    | R.&G.Hol.   | 2909                | 3.7          |
| Mrs. G. Hulteen .....                | 8.0                    | G.Sht.&G.J. | 5751                | 4.4          |
| Delfelder Brothers .....             | 9.5                    | Mixed       | 7455                | 3.9          |
| W. H. Jackson .....                  | 8.2                    | Jer.&Sht.   | 6915                | 4.7          |
| O. W. VanOsdol .....                 | 6.4                    | R.&G.Guer.  | 6767                | 4.7          |
| Marrill Flint and J. D. Eckert ..... | 8.0                    | G.Jer.      | 6431                | 4.4          |
| J. H. Husey .....                    | 2.6                    | Mixed       | 4956                | 3.5          |
| I. E. Williamson .....               | 4.5                    | P.B.Jer.    | 6008                | 4.6          |
| W. W. Coldiron .....                 | 7.3                    |             | 4673                | 4.1          |
| C. J. Olson .....                    | 7.9                    | G.Sht.      | 5815                | 4.6          |
| H. D. Dalton .....                   | 17.0                   | Mixed       | 6566                | 4.0          |
| Fred L. Martin .....                 | 11.8                   | G.Hol.      | 7061                | 3.4          |
| Ed. B. Soren .....                   | 9.3                    | G.Sht.      | 6469                | 3.9          |
| A. E. Miller .....                   | 13.6                   | P.B.Hol.    | 12187               | 3.6          |
| J. C. Pounden .....                  | 3.8                    | Mixed       | 6806                | 3.7          |
| B. O. Hallar .....                   | 25.9                   | G.&G.Jer.   | 5017                | 4.3          |
| W. VanEngen .....                    | 6.8                    | G.Hol.      | 7432                | 3.6          |
| Leslie Beall .....                   | 14.0                   | Mixed       | 5940                | 3.9          |
| Average .....                        | 10.5                   |             | 6490                | 4.1          |

| Average pounds fat | Value of product | Cost of roughage,<br>including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expended | Feed cost per pound<br>butterfat | Feed cost per 100<br>pounds milk |
|--------------------|------------------|----------------------------------------|---------------|--------------------|-----------------------|----------------------------|----------------------------------|----------------------------------|
| 290.0              | 126.97           | 46.61                                  |               | 46.61              | 80.36                 | 2.72                       | .16                              | .55                              |
| 254.9              | 108.41           | 37.39                                  | 6.64          | 44.03              | 64.38                 | 2.46                       | .17                              | .82                              |
| 337.1              | 261.81           | 41.18                                  | 17.35         | 58.53              | 203.28                | 4.47                       | .17                              | .77                              |
| 224.3              | 98.22            | 51.76                                  | 4.86          | 56.62              | 41.60                 | 1.73                       | .25                              | 1.05                             |
| 296.2              | 134.86           | 36.18                                  | 13.26         | 49.44              | 85.42                 | 2.73                       | .17                              | .69                              |
| 283.3              | 104.34           | 49.72                                  |               | 49.72              | 54.62                 | 2.10                       | .18                              | .78                              |
| 250.4              | 119.47           | 42.49                                  | 9.31          | 51.80              | 67.67                 | 2.31                       | .21                              | .79                              |
| 112.1              | 55.02            | 13.24                                  | 3.08          | 16.31              | 38.71                 | 3.37                       | .15                              | .54                              |
| 251.9              | 120.86           | 51.89                                  | 5.55          | 57.44              | 63.42                 | 2.10                       | .23                              | 1.00                             |
| 293.9              | 124.70           | 38.19                                  | 13.06         | 51.25              | 73.45                 | 2.43                       | .17                              | .69                              |
| 327.8              | 144.09           | 44.03                                  | 14.03         | 58.05              | 86.03                 | 2.48                       | .18                              | .84                              |
| 315.1              | 130.82           | 34.57                                  | 17.95         | 52.52              | 78.30                 | 2.49                       | .17                              | .78                              |
| 283.5              | 122.42           | 46.23                                  | .30           | 46.53              | 75.89                 | 2.63                       | .16                              | .72                              |
| 171.3              | 79.88            | 47.27                                  |               | 47.27              | 32.61                 | 1.69                       | .28                              | .95                              |
| 273.9              | 131.58           | 45.60                                  | 14.25         | 59.85              | 71.73                 | 2.20                       | .22                              | 1.00                             |
| 191.1              | 82.48            | 34.58                                  | 1.37          | 35.95              | 46.53                 | 1.77                       | .19                              | .77                              |
| 269.2              | 128.81           | 52.27                                  | 8.78          | 61.05              | 67.76                 | 1.90                       | .23                              | 1.05                             |
| 265.1              | 127.69           | 44.70                                  |               | 44.70              | 83.50                 | 2.89                       | .17                              | .67                              |
| 238.2              | 109.25           | 38.77                                  | 7.85          | 46.62              | 62.63                 | 2.34                       | .20                              | .66                              |
| 249.9              | 119.18           | 53.20                                  | .37           | 53.57              | 65.61                 | 2.22                       | .21                              | .84                              |
| 436.9              | 193.89           | 60.76                                  | 47.92         | 98.68              | 95.21                 | 1.96                       | .23                              | .81                              |
| 255.2              | 122.67           | 44.37                                  | 35.84         | 80.21              | 42.46                 | 1.53                       | .31                              | 1.18                             |
| 218.2              | 174.49           | 41.70                                  | 4.69          | 46.39              | 128.10                | 3.76                       | .21                              | .83                              |
| 265.3              | 126.82           | 37.44                                  | 7.08          | 44.52              | 82.30                 | 2.85                       | .17                              | .60                              |
| 229.1              | 97.52            | 41.07                                  | 5.73          | 46.80              | 50.72                 | 2.08                       | .20                              | .79                              |
| 263.4              | 131.16           | 42.99                                  | 9.17          | 52.16              | 79.00                 | 2.54                       | .20                              | .81                              |

OWNERS—  
Washington County

|                        | Number of cows in herd | Breed   | Average pounds milk | Average test |
|------------------------|------------------------|---------|---------------------|--------------|
| W. G. Rorabaugh .....  | 11.0                   |         | 3007                | 4.5          |
| Cype Mincer .....      | 10.0                   |         | 4449                | 4.9          |
| A. L. Sullivan .....   | 5.0                    | Mixed   | 5511                | 4.9          |
| H. S. Mason .....      | 10.4                   | G.Hol.  | 11253               | 3.6          |
| C. E. Littleton .....  | 3.8                    | Mixed   | 5931                | 4.5          |
| L. M. McFarlane .....  | 12.6                   | G.Sht.  | 3455                | 4.7          |
| R. H. Gifford .....    | 7.8                    |         | 5009                | 4.5          |
| James E. Lee .....     | 4.2                    | G.Guer. | 5423                | 5.0          |
| W. L. McFall .....     | 4.5                    |         | 7378                | 4.5          |
| Albert Abersold .....  | 6.3                    | G.Hol.  | 7050                | 4.0          |
| Ernest Hulburd .....   | 6.1                    | Mixed   | 7209                | 4.4          |
| E. W. Rutz .....       | 6.0                    | G.Hol.  | 6925                | 4.1          |
| Harry L. Purdy .....   | 5.0                    |         | 6365                | 4.1          |
| Ed Hefty .....         | 4.0                    | P.B.H.  | 5237                | 3.7          |
| H. F. Hardy .....      | 3.2                    | G.Jer.  | 6629                | 5.3          |
| J. R. Sinnes .....     | 6.8                    | G.Hol.  | 5566                | 4.3          |
| C. A. Welch .....      | 4.9                    | R.Jer.  | 2864                | 5.8          |
| J. E. Reyburn .....    | 7.5                    |         | 4942                | 4.6          |
| T. D. Leech .....      | 9.3                    | G.Jer.  | 5866                | 5.2          |
| W. H. Mock .....       | 9.1                    | R.Jer.  | 5121                | 5.4          |
| Mathews Brothers ..... | 9.8                    | G.Sh.   | 5194                | 4.1          |
| R. S. Stanley .....    | 7.1                    | G.Sh.   | 5474                | 4.2          |
| W. P. Reid .....       | 13.9                   | Sht.    | 5212                | 4.7          |
| J. W. Moschel .....    | 7.4                    |         | 8560                | 3.6          |
| Average .....          | 7.3                    |         | 5817                | 4.5          |

| Average pounds fat | Value of product | Cost of roughage, including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expended | Feed cost per pound butterfat | Feed cost per 100 pounds milk |
|--------------------|------------------|-------------------------------------|---------------|--------------------|-----------------------|----------------------------|-------------------------------|-------------------------------|
| 134.2              | 64.84            | 14.50                               | 5.36          | 19.86              | 44.98                 | 3.26                       | .15                           | .66                           |
| 219.5              | 100.97           | 16.24                               | 10.62         | 26.86              | 74.11                 | 3.76                       | .12                           | .60                           |
| 267.9              | 125.98           | 8.70                                | 28.23         | 36.93              | 89.05                 | 3.41                       | .14                           | .67                           |
| 405.4              | 193.51           | 17.40                               | 38.74         | 56.14              | 137.37                | 3.45                       | .14                           | .50                           |
| 269.1              | 122.39           | 10.00                               | 18.87         | 28.87              | 93.52                 | 4.23                       | .11                           | .49                           |
| 161.6              | 71.30            | 9.65                                | 2.38          | 12.03              | 59.27                 | 5.93                       | .07                           | .35                           |
| 225.4              | 97.97            | 10.90                               | 13.61         | 24.51              | 73.46                 | 4.00                       | .11                           | .49                           |
| 273.8              | 130.40           | 9.64                                | 30.04         | 39.68              | 90.72                 | 3.29                       | .14                           | .73                           |
| 330.0              | 146.06           | 12.44                               | 29.93         | 42.37              | 113.69                | 3.68                       | .13                           | .57                           |
| 283.6              | 129.90           | 11.37                               | 12.10         | 23.57              | 106.43                | 5.53                       | .08                           | .33                           |
| 317.3              | 151.37           | 12.46                               | 27.53         | 39.99              | 111.38                | 3.79                       | .13                           | .55                           |
| 285.9              | 135.09           | 10.70                               | 23.57         | 34.27              | 100.82                | 3.94                       | .12                           | .49                           |
| 262.6              | 124.53           | 9.70                                | 16.51         | 26.21              | 98.32                 | 4.75                       | .10                           | .41                           |
| 194.3              | 85.32            | 10.30                               | 3.00          | 13.30              | 72.02                 | 6.41                       | .07                           | .25                           |
| 352.4              | 168.08           | 13.41                               | 28.02         | 41.43              | 126.65                | 4.06                       | .12                           | .62                           |
| 240.8              | 114.60           | 11.69                               | 25.40         | 37.09              | 77.51                 | 3.09                       | .15                           | .67                           |
| 166.8              | 69.92            | 10.51                               | 10.06         | 20.57              | 49.35                 | 3.39                       | .12                           | .72                           |
| 226.6              | 105.79           | 8.73                                | 22.12         | 30.85              | 74.94                 | 3.43                       | .14                           | .62                           |
| 306.1              | 146.39           | 12.96                               | 28.97         | 41.03              | 105.36                | 3.57                       | .13                           | .70                           |
| 274.8              | 128.67           | 11.48                               | 11.17         | 22.65              | 106.02                | 5.68                       | .08                           | .44                           |
| 213.7              | 105.02           | 10.63                               | 12.80         | 23.43              | 81.59                 | 4.48                       | .11                           | .45                           |
| 227.6              | 106.89           | 10.26                               | 4.59          | 12.85              | 92.04                 | 7.19                       | .07                           | .27                           |
| 246.4              | 113.34           | 12.88                               | 20.89         | 33.77              | 79.47                 | 3.36                       | .14                           | .65                           |
| 310.5              | 199.00           | 15.64                               | 33.36         | 49.00              | 150.00                | 4.06                       | .16                           | .57                           |
| 258.2              | 129.67           | 11.72                               | 19.08         | 30.80              | 98.87                 | 4.24                       | .12                           | .53                           |

OWNERS—  
San Luis Valley

|                                 | Number of cows in herd | Breed         | Average pounds milk | Average test |
|---------------------------------|------------------------|---------------|---------------------|--------------|
| Fettis Brothers .....           | 11.6                   | G.Hol.        | 10053               | 3.4          |
| Soldiers and Sailors Home ..... | 24.7                   | G.Hol.        | 8676                | 3.5          |
| A. J. Stoeber .....             | 15.9                   | Hol.          | 7952                | 3.5          |
| Roscoe Mullings .....           | 36.6                   | G.Sht.        | 5986                | 3.7          |
| W. O. Sauder .....              | 8.0                    | G.Hol.        | 7316                | 3.7          |
| Aydelotte Brothers .....        | 16.9                   | G.Hol.        | 5719                | 3.9          |
| W. R. Riegenbach .....          | 39.8                   | G.Guer.       | 5363                | 4.2          |
| L. B. Myers .....               | 6.8                    | G.Jer.        | 4250                | 4.8          |
| Ralph Caldwell .....            | 8.9                    | P.B.Sht.      | 6060                | 4.1          |
| Theo Morch .....                | 7.4                    | P.B.Hol.      | 9006                | 3.7          |
| Ed. Jones .....                 | 7.9                    | G.Hol.        | 7113                | 3.6          |
| J. J. Schecter .....            | 10.7                   | G.Hol.        | 5416                | 4.0          |
| Calbreath Dairy .....           | 17.7                   | G.Sht.&G.Hol. | 5977                | 3.7          |
| W. C. Carruthers .....          | 10.8                   | G.Hol.        | 8069                | 3.5          |
| Fred Sierra .....               | 10.1                   | G.Hol.        | 7238                | 3.5          |
| Con Gilleland .....             | 15.1                   | G.Sht.        | 6787                | 4.3          |
| J. A. Mortinsen .....           | 13.7                   | G.Hol.        | 9579                | 3.7          |
| Average .....                   | 14.8                   |               | 7092                | 3.8          |

| Average pounds fat | Value of product | Cost of roughage,<br>including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expended | Feed cost per pound<br>butterfat | Feed cost per 100<br>pounds milk |
|--------------------|------------------|----------------------------------------|---------------|--------------------|-----------------------|----------------------------|----------------------------------|----------------------------------|
| 345.7              | 177.16           | 44.33                                  | 37.90         | 82.23              | 94.93                 | 2.15                       | .24                              | .82                              |
| 305.6              | 190.28           | 46.95                                  | 63.95         | 110.90             | 79.38                 | 1.72                       | .36                              | 1.28                             |
| 283.9              | 140.01           | 32.06                                  | 49.17         | 81.23              | 58.78                 | 1.72                       | .29                              | 1.02                             |
| 219.6              | 139.20           | 52.02                                  | 30.34         | 82.36              | 56.84                 | 1.69                       | .38                              | 1.38                             |
| 270.3              | 170.20           | 51.71                                  | 50.12         | 101.83             | 68.37                 | 1.67                       | .38                              | 1.39                             |
| 225.1              | 133.00           | 51.82                                  | 12.02         | 63.84              | 69.16                 | 2.08                       | .28                              | 1.12                             |
| 227.7              | 141.66           | 52.32                                  | 23.59         | 75.91              | 65.75                 | 1.87                       | .33                              | 1.42                             |
| 202.9              | 120.00           | 37.71                                  | 20.54         | 58.25              | 61.75                 | 2.06                       | .29                              | 1.37                             |
| 247.5              | 118.78           | 31.42                                  | 36.68         | 68.10              | 50.68                 | 1.74                       | .28                              | 1.12                             |
| 333.0              | 146.91           | 48.78                                  | 30.37         | 79.15              | 77.76                 | 1.86                       | .24                              | .88                              |
| 259.4              | 129.03           | 45.92                                  | 2.53          | 48.45              | 80.58                 | 2.66                       | .19                              | .68                              |
| 218.5              | 98.70            | 36.99                                  | 16.01         | 53.00              | 45.70                 | 1.86                       | .24                              | .98                              |
| 219.8              | 138.80           | 51.64                                  |               | 51.64              | 87.16                 | 2.69                       | .23                              | .86                              |
| 285.0              | 141.76           | 51.63                                  | 31.92         | 83.55              | 58.21                 | 1.70                       | .29                              | 1.04                             |
| 255.3              | 126.52           | 46.88                                  | 18.75         | 65.63              | 60.89                 | 1.93                       | .26                              | .91                              |
| 289.6              | 146.79           | 47.38                                  | 13.79         | 61.17              | 85.62                 | 2.40                       | .21                              | .90                              |
| 351.6              | 180.94           | 40.84                                  | 37.15         | 77.99              | 102.95                | 2.32                       | .22                              | .81                              |
| 267.1              | 143.52           | 45.32                                  | 27.93         | 73.25              | 70.27                 | 2.01                       | .28                              | 1.06                             |

OWNERS—  
El Paso-Fremont

|                                         | Number of cows in herd | Breed       | Average pounds milk | Average test |
|-----------------------------------------|------------------------|-------------|---------------------|--------------|
| Colorado State Penitentiary .....       | 55.0                   | G.Hol.      | 11492               | 3.3          |
| Colorado School of Deaf and Blind ..... | 20.5                   | P.B.H.      | 12789               | 3.4          |
| Myron Stratton Home .....               | 49.9                   | P.B.H.      | 11683               | 3.4          |
| Holland Dairy Company .....             | 24.5                   | Guer-&Hol.  | 11308               | 3.6          |
| Geo. Turner .....                       | 32.8                   | Hol.        | 11083               | 3.4          |
| H. F. Lombard .....                     | 28.1                   | Hol.        | 11233               | 3.3          |
| Walter Sinton .....                     | 6.3                    | P.B.H.      | 13426               | 3.6          |
| Wm. McKee .....                         | 6.1                    | G.Hol.      | 8835                | 3.7          |
| L. Camden .....                         | 1.6                    |             | 11644               | 3.7          |
| Sinton Dairy Farm Co. ....              | 53.9                   | G.Hol.      | 12100               | 3.3          |
| Fremont County Farm .....               | 6.6                    | P.B.H.      | 12072               | 3.5          |
| Arthur Fielder .....                    | 21.3                   | G.Hol.      | 10272               | 3.6          |
| E. H. Rosenberg .....                   | 25.3                   | G.Hol.      | 9825                | 3.9          |
| R. L. Schrieber .....                   | 16.4                   | Jer.        | 5204                | 5.0          |
| Pine Valley Dairy Farm .....            | 9.6                    | Hol.        | 10518               | 3.8          |
| W. V. McKaughan .....                   | 9.3                    | P.B.&G.Hol. | 14924               | 3.5          |
| Average .....                           | 23.0                   |             | 11151               | 3.6          |



| Average pounds fat | Value of product | Cost of roughage,<br>including pasture | Cost of grain | Total cost of feed | Return over feed cost | Return for \$1.00 expended | Feed cost per pound<br>butterfat | Feed cost per 100<br>pounds milk |
|--------------------|------------------|----------------------------------------|---------------|--------------------|-----------------------|----------------------------|----------------------------------|----------------------------------|
| 383.8              | 261.01           | 51.43                                  | 54.15         | 105.58             | 155.43                | 2.47                       | .28                              | .92                              |
| 431.2              | 306.40           | 75.76                                  | 45.00         | 120.76             | 185.64                | 2.53                       | .28                              | .34                              |
| 402.8              | 273.43           | 85.72                                  | 40.87         | 126.59             | 146.84                | 2.16                       | .31                              | 1.08                             |
| 411.6              | 375.88           | 92.32                                  | 77.38         | 169.70             | 206.18                | 2.21                       | .41                              | 1.50                             |
| 374.8              | 255.24           | 56.63                                  | 30.55         | 87.18              | 168.06                | 2.93                       | .23                              | .79                              |
| 368.8              | 250.64           | 91.99                                  | 54.47         | 146.46             | 104.18                | 1.71                       | .40                              | 1.30                             |
| 483.7              | 325.13           | 91.70                                  | 46.35         | 128.05             | 187.08                | 2.36                       | .28                              | 1.02                             |
| 327.6              | 170.63           | 37.93                                  | 32.92         | 70.85              | 99.78                 | 2.00                       | .22                              | .80                              |
| 433.8              | 294.73           | 60.26                                  | 55.91         | 116.17             | 178.56                | 2.53                       | .27                              | 1.00                             |
| 403.8              | 274.02           | 78.34                                  | 63.31         | 141.65             | 132.37                | 1.93                       | .35                              | 1.17                             |
| 424.8              | 288.81           | 55.33                                  | 46.51         | 101.84             | 186.97                | 2.84                       | .24                              | .84                              |
| 367.9              | 293.48           | 82.97                                  | 50.66         | 133.63             | 159.85                | 2.20                       | .36                              | 1.30                             |
| 379.5              | 262.08           | 45.60                                  | 37.26         | 82.87              | 179.21                | 3.16                       | .22                              | .84                              |
| 263.4              | 179.09           | 36.35                                  | 32.41         | 68.76              | 110.33                | 2.60                       | .27                              | 1.32                             |
| 395.0              | 268.62           | 78.50                                  | 52.96         | 131.46             | 137.16                | 2.04                       | .33                              | 1.24                             |
| 517.1              | 314.06           | 49.13                                  | 65.74         | 114.87             | 199.19                | 2.73                       | .22                              | .77                              |
| 308.1              | 274.57           | 66.57                                  | 49.15         | 116.02             | 158.55                | 2.40                       | .29                              | 1.05                             |