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UNIVERSITY OF MINNESOTA
Department of Agriculture
UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics
Cooperating

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A Preliminary Report
of
LIVESTOCK COSTS AND RETURNS
From
Data Secured in 1927
on the
FARM ACCOUNTING ROUTE
at
ASKOV - PINE COUNTY - MINNESOTA

By

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INTRODUCTION

This preliminary report presents data on livestock costs and returns collected in 1927 on the 26 farms on the farm accounting route located in the vicinity of Askov, Pine County, Minnesota. It is not intended that the figures in this report will show the absolute costs and returns from each class of livestock, or the absolute cost per unit of product. The purpose of this report is to furnish each cooperator on the route with figures so that he may compare his figures with the average of the route and with figures from other farms in the same community operating under similar conditions. Each of the tables is composed of the itemized figures for each farm. The farms are ranked according to cost per unit or net return. The average figures for 1927 are placed just below the figures for the individual farms. Corresponding average figures for 1926 and 1925 are also given.

The farms included in this study are all in a Danish community centering about Askov, which is in Pine County about 40 miles south of Duluth. Practically all the tillable land on these cut-over farms has been cleared since the community became established in 1906. The soil in this immediate section does not vary greatly in type and the farmers are adhering very closely to a similar plan of farming. Sales of butterfat, potatoes and rutabagas provide most of the income, butterfat being decidedly the most important. All the butterfat on these farms is sold to one creamery and practically all products are marketed at Askov, so there is little difference between farms in market facilities. This uniformity in farming opportunities renders the material presented particularly valuable for comparative purposes in studying the efficiency of management between farms.

The three years for which the route was operated terminated on December 31, 1927. Twenty-two of the 26 members of the route in 1927 kept records for the three year period. The average labor earnings per family in 1927 were \$618. This was the lowest of the three years. 1925 was the year of highest earnings with \$1225. Crops were exceedingly good in 1925 and prices for butterfat and potatoes were high. The earnings dropped to \$964 in 1926. Most of the crops yielded less that year than in 1925, the hay crop being particularly poor. Altho rutabagas yielded heavily and sold readily at satisfactory prices, butterfat and potatoes sold below the previous year. In 1927 all crop yields were low except hay. The low yield of potatoes and rutabagas with the lowest price for potatoes since 1924 caused the income from crops to be \$300 lower in 1927 than in the previous year. Because of the short hay crop in 1926, alfalfa was shipped in from the Red River Valley at a cost of \$22.00 per ton to provide roughage for milk cows. The high price for butterfat and the success the farmers had in getting a high production per cow offset the high feed cost and made dairying in 1927 the most profitable of the three years. Without the increase in income from cattle, the earnings in 1927 would have been considerably lower than they were.

Dairy Cows.

The average production of butterfat per cow in 1927 was 270 pounds. This was 20 pounds greater than the production in 1926 and 24 greater than in 1925. The improvement in the quality of the ration is largely responsible for the increase in production. Table I shows the amount and kind of feeds fed for each of the three years.

TABLE I
Comparison of Feeds Fed per Cow

Year	Average production lbs.	Alfalfa lbs.	Other hay lbs.	Silage and roots lbs.	Grain lbs.	Commercial feeds lbs.	Oil-meal lbs.	Pasture days	Total digestible nutrients lbs.	Nutritive ratio
1925	246	36	3575	7527	675	411	155	150	3556	1:7.3
1926	250	143	3064	6951	929	450	194	166	3541	1:7.3
1927	270	757	2405	5830	838	616	184	170	3512	1:6 ¹ / ₅

There was very little change in the quantity of feed the cows received as measured by the average total digestible nutrients per cow. The decrease in the amount of roughage fed was offset by a larger allowance of concentrates. The amount of feed provided by pasture is difficult to measure. A part of the increase in production per cow might possibly be attributed to the pasture. The improvement in the quality of the ration is quite apparent. No significant change in the nutritive ratio occurred from 1925 to 1926. The addition of alfalfa to the ration in 1927 materially narrowed the nutritive ratio. The greater proportion of protein in the ration proved to be a stimulant to greater production. As only a limited amount of culling was done the increase in production must have been caused by the improvement in the ration.

To get the most profit from dairying a high production per cow must be obtained. This means that the herd must be selected and constantly culled to secure maximum production. It is impossible to get high production from cows that are not bred and selected for production. With cows capable of high production an intelligent feeding program must be followed. It takes about the same amount of feed and care to maintain a poor cow as a good cow. The feed required per pound of butterfat, however, is much less with the high producer. The extreme range in production among the different herds in 1927 was from 186 pounds to 368 pounds per cow. Those herds that had the highest production had the highest return over feed and the highest net return. The herds having the lowest production had the lowest return over feed and the lowest net return. Table II shows the relationship between butterfat production and returns per cow.

TABLE II
The Relationship of Butterfat Production to Returns per Cow in 1927

Production	No. of farms	Average production	Feed cost	Return per man hour	Return over feed	Net return
Over 340 lbs.	3	354 lbs.	\$93.67	59¢	\$125	\$58
300 - 340 "	5	317	85.75	51	110	53
260 - 300 "	7	270	77.15	34	94	28
220 - 260 "	6	241	74.90	35	78	22
Under 220 "	3	201	54.55	32	70	16

The herds having the highest feed cost had the highest production. (See Table II). This does not mean that farmers with low producing herds could increase the production merely by increasing the feed. A herd should not be fed beyond its capacity for production. However, there are some herds included in this study that would profit by more intelligent feeding. Others can raise their average production only by getting new animals in the herd capable of higher production.

Young Dairy Cattle.

Altho it costs more to raise young stock than it could have been sold for during the ^{three} years of this study, it is advisable for dairymen to raise heifers for normal replacement of cows in their milking herd. Selection is less difficult when the breeding of the animals is known. Because only heifers with the inherited ability to produce should be raised it is important that the herd bull should be a purebred animal from ancestry known to have producing ability. Few better investments on a dairy farm can be made than a good purebred sire. When animals must be sold it probably would be wise to retain heifers until after they have freshened and then sell them as cows.

All Dairy Cattle.

The returns from the milking herd more than offset the loss on young cattle. Cattle showed a return over all costs each year. The return per man hour increased from 20 cents in 1925 to 25 cents in 1926 to 32 cents in 1927.

Hogs are kept on these farms to utilize skim milk. Several times as much milk has been fed to hogs as they could use to advantage. Hog raising can not be expected to be profitable under methods that have been practiced. Less skim milk must be fed in proportion to other feeds if the cost of hog production is to be cut and the most realized from the skim milk. This may be accomplished by raising more hogs. If suitable pastures are provided a greater return for the milk should be obtained even tho more feed would have to be purchased. Growing pigs can utilize more milk in proportion to grain than fattening hogs. As the market for feeder pigs usually is strong farmers wishing to feed large amounts of milk should consider the opportunities in producing feeders.

Poultry.

The principal cause of the losses on poultry in 1927 was the low selling price of both eggs and poultry. A hail storm killed a large number of young chicks and was a factor in increasing the expense. The returns were great enough to cover all the costs except man labor. With higher prices for the products sold there should be a substantial increase in return for the labor. It might be possible to reduce costs by feeding home mixed grains rather than the commercial mixtures which sell at a higher price per pound. A relatively high production of eggs per hen has been obtained.

Horses.

The average cost of horse labor per farm was over \$300. This cost should be kept down by keeping as few work horses as are necessary for getting the work done satisfactorily.

Farm No.	Feed	Man labor	Horse labor	Shelter	Equipment
✓ 306	79.62	33.23	.55	9.01	2.09
✓ 113	84.42	32.23	.78	16.38	6.60
✓ 419	102.15	45.12	3.02	11.04	2.13
✓ 510	64.53	36.64	.60	19.27	2.33
✓ 110	86.47	29.42	1.12	14.43	2.42
✓ 206	107.86	36.91	1.69	14.85	2.85
✓ 208	94.44	32.51	.96	20.40	1.95
✓ 215	78.86	37.19	.93	12.75	2.42
✓ 607	101.14	81.14	2.25	7.42	11.93
✓ 703	73.44	41.98	.24	13.35	2.48
✓ 214	96.25	33.47	1.67	9.12	5.45
✓ 904	67.96	20.29	.59	8.90	6.36
✓ 819	84.24	30.01	.95	6.63	6.94
✓ 210	57.21	25.68	.15	6.30	1.89
✓ 812	67.02	37.03	1.03	13.00	1.49
✓ 106	70.99	54.14	.87	15.36	2.79
✓ 119	71.19	51.75	3.85	11.80	3.08
✓ 213	85.71	26.17	1.01	8.71	8.58
✓ 308	73.98	38.46	3.34	8.12	1.44
✓ 010	73.12	37.87	.54	12.15	3.62
✓ 519	53.60	27.89	1.69	5.91	2.20
✓ 108	76.77	38.20	2.66	11.63	1.23
✓ 618	81.63	44.52	.41	8.13	2.78
✓ 801	83.54	41.58	.43	11.07	6.49
✓ 410	52.85	49.91	.62	22.93	6.41
✓ 116	72.79	32.19	1.43	40.20	1.84
1927	76.53	35.06	1.10	11.57	3.58
Average					
1926	70.88	37.22	.82	10.73	2.66
Average					
1925	67.23	45.98	.86	11.41	2.69
Average					

SUMMARY OF COSTS AND RETURNS PER DAIRY COW - 1927 - ASKOV, MINN.

Interest	Cash	Depre- ciation	Total cost	Skimmilk credit	Manure	Appre- ciation	Total credit	Net cost	Lbs. of B.F.	Feed cost per lb.	Net cost per lb.	Average price received	Return per hour	Return over feed cost	Net return
4.08	.34	-	128.92	17.07	7.21	6.09	30.37	98.55	317	25.1	31.0	52.5	61.0	117.41	+68.11
4.33	1.13	4.57	150.24	23.21	9.25	-	32.66	117.58	348	24.3	33.8	52.4	80.1	130.41	+64.59
4.32	2.79	-	170.57	22.43	7.71	8.12	38.26	132.31	368	27.8	36.0	53.3	48.2	132.09	+63.67
4.43	-	-	127.80	12.83	10.78	2.27	25.88	101.92	305	21.2	33.4	51.4	49.9	118.00	+54.73
4.76	1.80	2.12	142.54	13.16	6.77	-	19.93	122.61	328	26.4	37.4	53.4	55.7	108.62	+52.55
5.72	.94	-	164.83	19.93	12.28	8.18	40.39	124.44	328	31	37.9	53	46.8	112.45	+49.48
5.78	4.44	.35	160.83	12.70	10.80	-	23.50	137.33	345	27.4	39.9	53.4	48.7	113.06	+46.67
5.19	.21	7.34	145.89	14.06	20.25	-	34.31	111.58	287	27.8	38.9	53.3	42.2	107.37	+41.34
9.06	2.26	-	209.20	95.03	7.50	6.37	108.90	100.30	285	35.5	35.2	49.6	30.1	149.07	+41.01
3.47	.81	-	135.77	18.21	13.31	7.57	38.99	96.78	261	28.1	37.0	52.6	39.4	103.02	+40.69
4.13	.68	-	150.77	15.51	5.46	4.80	25.81	124.96	306	31.4	40.8	53.2	42.7	92.51	+37.99
3.90	-	4.63	112.63	12.54	13.76	-	26.30	86.33	232	29.2	36.9	52.5	55.2	80.37	+34.69
3.79	.12	-	132.68	14.90	8.07	2.50	25.47	107.21	274	30.8	39.2	52.1	43.6	83.80	+34.36
3.25	-	-	94.48	9.51	7.11	6.95	23.57	70.91	198	28.9	35.8	51.8	44.6	68.86	+31.58
3.26	.74	-	124.57	12.63	10.93	11.92	35.48	89.09	225	29.8	39.6	52.2	35.3	85.79	+28.23
3.90	.39	-	148.44	19.52	18.81	1.15	39.38	109.06	260	27.3	42.0	52.4	30	104.53	+27.08
3.48	-	-	145.15	12.83	20.70	-	33.53	112.62	266	26.7	41.9	51.8	30.1	100.19	+26.23
4.39	.43	-	135.00	15.20	6.87	1.67	23.74	111.26	250	34.3	44.5	52.8	35.8	70.04	+20.75
3.84	-	1.13	130.31	12.10	10.66	-	22.76	107.55	241	30.6	44.6	52.0	29.3	74.32	+17.95
3.96	1.11	8.33	140.70	15.33	8.01	-	24.34	116.36	251	29.1	46.4	53.1	28.9	84.35	+16.76
3.30	.05	2.36	97.00	9.92	8.44	-	18.36	78.64	186	28.8	42.2	51.2	31.9	60.06	+16.66
4.04	.80	2.89	140.12	9.95	2.24	-	12.20	127.92	266	28.9	48.2	54.1	28.2	79.06	+15.72
3.99	-	-	141.46	12.54	5.41	6.79	24.74	116.72	244	33.5	47.9	52.7	25.3	71.59	+11.75
4.16	1.06	8.08	156.41	12.25	7.12	-	19.37	137.04	274	30.6	50.2	52.5	23.0	79.20	+6.33
3.49	.34	-	136.55	13.10	4.66	5.14	22.90	113.65	219	24.1	51.8	51.2	19.4	82.24	- 1.46
7.38	-	7.78	163.61	8.84	9.18	-	18.02	145.59	195	37.3	74.6	51.8	None	46.38	-44.43
4.08	.72	-	132.64	14.46	9.60	1.71	25.77	106.87	270	28.4	39.6	52.6	39.9	90.96	+34.85
3.86	.77	-	126.94	14.81	10.42	1.53	26.76	100.18	250	28.3	40.0	48.8	31.8	73.06	+22.00
3.82	.53	.60	133.12	13.21	11.38	-	24.59	108.53	246	27.3	44.1	49.82	26.1	79.98	+14.09

Farm No.	Pounds	Feeds		
	B.F. per cow	Dry rough.	Succul.	Corn
906 -	317	2820	6825	275
113 ✓	348	2459	10589	329
419 x	368	3839	6666	512
510 °	305	3587	6325	52
110 ✓	328	3419	5445	246
206 ✓	328	3740	5918	108
208 ✓	345	3393	7300	365
216 ✓	287	3068	7370	321
607 =	285	4247	2779	954
703 *	261	3649	6088	-
214 ✓	306	4473	4831	277
904	232	3006	4752	250
319 -	274	3038	5506	181
210 ✓	198	1934	3765	107
612	225	3105	5477	169
106 ✓	260	3096	6050	236
119 ✓	266	2909	7080	317
213 ✓	250	3671	5889	508
308 -	241	3957	3864	432
010 ✓	251	3298	6258	206
519 °	186	2717	4632	67
108 ✓	266	5035	2091	260
618 =	244	2673	5630	-
801 x x	274	3081	6917	368
410 x	219	1462	7342	68
116 ✓	195	3359	5619	169
Average				
1927	270	3162	5830	237
1926	250	3207	6951	193
1925	246	3611	7527	62

SUMMARY OF FEED AND LABOR FOR DAIRY COWS 1927 - ASKOV, MINN. (Per Cow Basis)

Per Cow Basis			Feeds Per Lb. B.F. Basis							Nutritive ratio	Total digestible nutrients per cow	Labor per Cow		Man hours per lb. B.F.
Small grain	Comm. feed	Oilmeal	Total concn.	Skim-milk	Pasture days	Dry rough.	Succul.	Concen-trates	Pasture			Man	Horse	
339	1208	109	1931	-	153	8.9	21.5	6.1	.48	1:5.9	3546	166 $\frac{1}{2}$	5	.52
433	683	199	1644	-	176	7.1	30.4	4.7	.50	1:7.2	3687	161 $\frac{1}{2}$	5 $\frac{1}{2}$	.46
832	896	318	2558	-	160	10.4	18.1	6.9	.43	1:5.5	4643	225 $\frac{1}{2}$	75 $\frac{1}{2}$	.61
238	26	36	352	1634	181	11.7	20.7	1.1	.59	1:5.8	3006	183 $\frac{1}{2}$	5 $\frac{1}{2}$	.60
633	827	247	1955	186	179	10.4	16.6	5.9	.55	1:5.7	3798	147	8 $\frac{3}{4}$	.45
1664	841	203	2536	375	170	11.4	18.0	7.7	.52	1:5.5	4509	184 $\frac{1}{2}$	10 $\frac{1}{2}$	.56
607	689	243	1904	-	153	9.8	21.2	5.5	.44	1:6.0	4037	162 $\frac{1}{2}$	6 $\frac{1}{2}$	.47
569	330	185	1405	-	151	10.7	25.7	4.9	.52	1:5.7	3489	186	6	.65
1028	905	525	3222	38	134	15.0	8.8	11.3	.47	1:5.2	4636	405 $\frac{3}{4}$	22 $\frac{1}{2}$	1.42
607	515	222	1344	-	163	14.0	23.3	5.1	.62	1:6.7	3472	210	2 $\frac{1}{2}$	.80
1060	665	194	2196	-	173	14.6	15.8	7.2	.57	1:5.4	4511	167 $\frac{1}{2}$	9 $\frac{1}{2}$	.55
464	759	-	1479	-	177	13.0	20.5	6.4	.76	1:7.0	3043	101 $\frac{1}{2}$	5 $\frac{1}{2}$	.44
776	663	152	2072	-	174	11.1	20.1	7.6	.64	1:5.9	3800	150	9 $\frac{1}{2}$	.55
612	680	262	1661	-	170	9.8	19.0	8.4	.86	1:6.7	2573	128 $\frac{1}{2}$	1 $\frac{3}{4}$	.65
345	381	225	1140	-	171	13.8	24.3	5.1	.76	1:7.4	3078	185 $\frac{1}{2}$	7 $\frac{1}{2}$	.82
887	212	46	1363	-	171	11.9	23.3	5.3	.66	1:6.8	3332	270 $\frac{3}{4}$	6 $\frac{1}{2}$	1.04
403	335	110	1165	574	176	11.3	26.6	4.4	.66	1:6.5	3359	258 $\frac{1}{4}$	36 $\frac{1}{2}$	.97
172	939	288	1987	-	169	14.7	23.6	7.9	.68	1:6.6	3944	130 $\frac{1}{2}$	6 $\frac{1}{2}$	.52
432	454	257	1575	1077	178	16.4	16.0	6.5	.74	1:6.9	3592	192 $\frac{1}{2}$	26 $\frac{1}{2}$	.80
394	612	115	1407	-	177	13.1	24.9	5.6	.71	1:7.3	3473	189 $\frac{1}{2}$	7 $\frac{1}{2}$	.75
675	112	123	977	-	169	14.6	24.9	5.2	.91	1:6.9	2602	139 $\frac{1}{2}$	1 $\frac{1}{2}$	.75
490	742	264	1764	112	157	12.9	7.9	6.6	.59	1:6.6	3947	191	11 $\frac{1}{2}$	.72
809	1129	169	2127	-	176	10.9	23.1	8.7	.72	1:6.5	3394	222 $\frac{1}{2}$	4	.91
660	674	100	1602	-	170	11.2	25.2	6.6	.62	1:6.3	3761	208	3	.76
693	66	-	847	-	179	6.7	33.5	3.9	.82	1:7.9	2189	249 $\frac{1}{2}$	6 $\frac{3}{4}$	1.14
936	385	181	1571	-	176	17.2	28.8	8.0	.90	1:6.4	3423	161	8 $\frac{1}{2}$	.83
601	616	184	1638	146	170	11.7	21.6	6.1	.63	1:6.5	3512	175 $\frac{1}{2}$	7 $\frac{1}{2}$	.65
736	450	194	1573	42	166	12.8	27.8	6.3	.66	1:7.3	3541	186 $\frac{1}{2}$	6 $\frac{1}{2}$	.75
613	411	155	-	-	150	-	30.6	5.0	-	1:7.3	3556	230	8	.93

Farm No.	Total feed cost	Labor Cost		Sheeter
		Man	Horse	

208	197.69	35.60	.79	34.00
116	557.13	91.50	-	128.00
510	151.70	29.55	.78	32.00
216	331.64	63.10	.62	99.00
110	181.61	37.70	.64	25.00
113	266.17	54.00	1.67	63.00
801	166.42	29.05	-	50.47
119	106.27	27.30	-	31.00
206	370.44	55.35	-	46.00
214	265.03	48.15	-	41.00
519	248.35	56.45	.92	35.00
308	196.95	41.75	.25	32.00
904	321.83	28.90	-	23.00
806	379.46	60.00	.43	46.00
106	312.83	59.65	1.68	91.00
703	359.37	73.75	-	44.00
108	142.17	27.90	-	22.00
812	460.11	71.85	-	41.00
618	367.11	68.85	-	47.00
607	766.19	86.40	9.35	49.00
419	366.74	69.65	.79	56.00
319	357.40	32.25	.88	37.00
410	204.12	37.35	.83	111.00
010	312.14	77.75	11.10	70.00
213	388.12	54.25	-	69.00
210	519.79	107.65	-	104.00

1927	290.56	51.99	.89	52.06
Average				
1926	298.03	59.53	.57	50.70
Average				
1925	249.59	49.04	.46	53.44
Average				

STATS AND RETURNS FROM YOUNG DAIRY CATTLE (PER FARM) 1927 - ASKOV, MINN.

Equip- ment	Interest	Cash		Decrease inventory	Total costs	Increase inventory	Sales	Products used in house	Credit for heifers fresh.	Cash	Manure	Total credits	Gain or loss	Hrs. of man labor
		Purchases	Other											
-	15.45	-	4.50	-	288.03	15.00	122.86	-	175.00	11.00	28.50	352.36	+64.33	178
-	56.85	-	4.50	-	837.98	165.00	490.00	-	135.00	-	85.28	875.28	+37.30	457 $\frac{1}{2}$
-	3.18	-	-	-	217.21	36.00	149.32	20.20	-	-	31.50	237.02	+19.81	147 $\frac{3}{4}$
-	29.10	-	16.50	-	539.96	-	293.2	1.75	175.00	-	87.38	557.25	+17.29	315 $\frac{1}{2}$
-	10.35	-	.22	75.00	330.52	-	132.69	22.50	145.00	17.84	21.75	339.78	+9.26	188 $\frac{1}{2}$
-	13.77	-	4.25	31.00	433.86	-	180.72	28.50	185.00	-	46.50	440.72	+6.86	270
-	11.97	45.00	1.00	-	303.91	71.00	33.90	52.80	120.00	4.50	27.00	309.20	+5.29	145 $\frac{1}{4}$
-	2.49	-	-	-	167.06	33.00	35.10	1.75	-	-	27.00	96.85	-7.02	136 $\frac{1}{2}$
-	18.63	77.00	17.50	-	584.92	189.00	208.26	1.50	80.00	-	52.54	531.30	-53.62	276 $\frac{3}{4}$
-	10.50	-	4.70	-	369.38	16.00	151.14	1.50	60.00	40.00	19.13	287.77	-81.61	240 $\frac{1}{4}$
-	14.79	30.00	-	-	385.51	97.00	69.59	19.76	50.00	7.00	52.88	296.23	-89.28	282 $\frac{1}{2}$
-	5.10	-	-	-	276.05	60.00	24.60	47.25	-	-	42.00	173.85	-102.20	208 $\frac{3}{4}$
-	10.05	-	-	85.00	468.78	-	148.31	83.30	45.00	-	74.63	351.24	-117.54	144 $\frac{1}{2}$
-	16.53	25.00	2.50	-	529.92	21.00	218.16	16.40	100.00	-	41.63	397.19	-132.73	300
-	13.05	-	2.25	-	480.46	25.00	94.42	11.83	110.00	-	94.50	335.55	-144.91	298 $\frac{1}{4}$
-	5.24	25.00	3.00	-	520.36	52.00	195.69	1.50	50.00	2.50	70.50	372.19	-148.17	268 $\frac{3}{4}$
-	34.98	-	-	34.00	261.05	-	77.41	21.00	-	-	6.00	104.41	-156.64	139 $\frac{1}{2}$
-	20.22	286.00	107.75	-	986.93	160.00	248.22	34.80	370.00	1.00	72.75	826.77	-160.16	359 $\frac{1}{4}$
-	62.94	60.00	-	-	605.90	32.00	212.49	55.31	110.00	-	28.50	438.30	-167.60	344 $\frac{1}{4}$
-	24.54	87.60	-	-	1023.08	232.00	511.16	6.50	-	3.00	92.25	844.91	-178.17	432
-	11.55	-	29.25	15.00	548.98	-	197.02	-	135.00	-	32.25	364.27	-184.71	348 $\frac{1}{4}$
-	22.80	-	2.00	-	452.33	120.00	72.24	1.75	-	-	46.50	340.49	-211.84	161 $\frac{1}{4}$
-	4.71	13.00	-	53.00	424.01	-	69.10	-	115.00	-	10.50	194.60	-229.41	186 $\frac{3}{4}$
-	18.57	-	4.80	-	494.36	33.00	82.89	8.40	85.00	-	51.75	261.04	-233.32	388 $\frac{3}{4}$
-	25.07	25.00	2.15	-	563.59	10.50	155.22	1.75	95.00	-	39.00	301.47	-262.12	271 $\frac{1}{4}$
-	21.30	50.00	-	30.00	832.74	-	132.03	31.00	240.00	10.00	126.00	539.03	-293.71	538 $\frac{1}{4}$
-	17.18	26.50	8.43	-	447.61	26.98	137.69	19.35	99.38	3.91	47.10	334.41	-113.20	260
.08	14.22	25.11	5.91	8.04	462.19	-	147.33	16.77	107.39	4.66	50.80	326.95	-135.24	297 $\frac{3}{4}$
-	15.15	49.75	3.23	-	420.65	5.00	110.68	13.01	130.68	8.27	47.09	309.73	-110.92	257

Farm No.	Opening inven- tory	Pur- chases	Total feed cost	Labor Man
113	1125.00	-	1291.94	445.60
306	1015.00	25.00	1360.36	469.40
510	835.00	-	861.48	432.75
208	1340.00	-	1244.02	395.90
110	940.00	-	1020.38	322.95
210	1530.00	100.00	1919.08	736.05
607	1100.00	87.60	2374.24	1376.90
419	810.00	-	1310.63	486.55
206	1011.00	77.00	1303.51	393.40
216	1280.00	-	1051.99	398.55
214	907.00	-	1321.93	415.70
504	1035.00	-	1123.74	268.35
703	883.00	90.00	1167.95	535.85
882	782.00	487.00	1248.95	507.85
519	993.00	30.00	964.95	429.45
106	740.00	-	927.57	528.35
308	720.00	-	934.51	425.60
319	815.00	-	1031.35	272.10
119	315.00	-	462.22	286.05
801	669.00	110.00	747.87	316.45
213	1402.50	107.00	1548.62	408.60
010	1123.00	-	1166.86	520.45
518	1763.00	60.00	1250.34	550.50
108	1090.00	-	655.00	283.05
410	465.00	13.00	510.67	326.80
115	2475.00	-	1511.40	513.50
Average				
1927	982.85	45.79	1101.08	423.27
1926	975.11	25.98	1106.28	484.05
1925	920.46	76.91	983.87	550.54

COSTS AND RETURNS FROM ALL DAIRY CATTLE (PER FARM) 1927 - ASKOV, MINN.

Cost base	Shelter	Equip- ment	Inter- est	Cash	Total costs	Closing inven- tory	Sales of cattle	Meat used in house	Sales of dairy products	Dairy products used in house	Dairy products used for feed	Cash	Manure	Total credits	Gain or loss	Return per hour
11.12	262.00	77.81	66.42	17.90	3297.79	1066.00	315.25	28.50	2046.06	137.79	309.18	4.69	159.00	4069.47	+791.68	75.5
7.17	157.00	25.75	66.78	6.65	3133.11	1211.00	218.16	16.40	1880.47	136.43	246.53	-	130.51	3839.50	+706.39	50.1
7.39	244.00	25.62	51.93	-	2457.97	896.00	149.32	20.20	1584.29	113.34	166.63	-	150.00	3079.78	+621.81	48.8
11.45	260.00	21.65	79.50	53.70	3406.22	1310.00	339.01	-	1954.63	64.44	150.76	20.71	148.13	3987.68	+581.46	49.4
11.56	165.00	23.44	56.55	17.72	2557.60	945.00	177.09	22.50	1560.26	102.00	159.50	22.84	87.38	3076.57	+512.97	52.1
3.69	258.00	46.14	100.80	-	4693.76	1830.00	262.03	31.00	2345.60	113.81	280.12	100.00	300.00	5172.56	+478.80	33.0
45.15	167.00	189.61	73.14	36.01	5457.25	1330.00	622.44	6.50	3397.01	214.41	146.27	3.00	211.50	5931.13	+473.88	26.9
28.71	158.00	19.67	51.45	85.05	2920.06	905.00	297.02	-	1688.17	55.74	274.25	-	103.50	3323.68	+403.62	36.6
15.51	182.00	26.24	70.98	26.15	3105.79	1355.00	208.26	1.50	1517.02	62.00	196.66	-	165.00	3505.43	+399.64	40.3
9.03	214.00	21.87	75.90	18.35	3069.69	1250.00	431.93	1.75	1259.51	99.53	147.18	-	270.01	3459.91	+390.22	39.6
18.36	141.00	59.89	55.80	12.19	2931.87	953.00	233.89	1.50	1713.16	56.76	187.93	40.00	79.13	3267.37	+335.50	36.1
6.95	128.00	75.05	56.10	-	2693.19	835.00	253.68	23.30	1217.87	214.19	155.80	-	237.01	2996.85	+303.66	42.6
2.67	191.00	27.25	53.49	11.90	2963.21	900.00	429.02	1.50	1441.45	72.30	200.25	2.50	216.00	3263.02	+299.81	31.2
12.10	194.00	29.35	58.62	116.45	3436.12	1172.00	669.53	34.80	1305.61	64.68	159.28	1.00	201.38	3608.28	+122.16	26.8
23.48	114.00	29.43	58.89	.65	2643.85	970.00	208.10	19.76	1137.12	122.01	147.55	7.00	165.76	2777.30	+133.45	26.2
9.24	224.00	24.13	46.80	5.70	2505.99	820.00	159.42	11.63	1121.96	51.95	174.11	-	256.50	2595.57	+89.58	23.4
33.51	113.00	14.35	43.35	-	2284.32	725.00	68.36	47.25	1089.22	127.20	152.58	3.00	148.50	2361.11	+76.79	23.6
8.45	90.00	55.54	53.10	3.00	2328.74	955.00	72.24	1.75	1031.43	105.67	122.67	-	111.00	2399.75	+71.02	25.2
19.24	90.00	15.42	19.89	-	1207.82	348.00	35.10	1.75	586.78	102.31	64.32	-	130.50	1268.76	+60.94	24.3
3.02	127.50	45.19	40.92	8.40	2070.35	695.00	207.69	52.80	946.71	48.80	83.15	9.05	76.50	2119.70	+49.35	23.1
13.74	187.00	116.14	84.47	7.90	3875.97	1413.00	354.86	1.75	1913.67	59.05	220.45	-	132.00	3894.78	+18.81	20.9
17.46	212.00	42.31	64.92	17.78	3164.78	1041.00	185.50	8.40	1485.01	74.11	166.86	9.36	157.13	3127.37	-37.41	16.6
4.49	135.00	30.05	106.14	-	3899.52	1775.00	415.94	55.31	1292.78	67.38	165.69	-	87.00	3859.10	-40.42	18.5
17.79	59.00	21.58	61.98	5.35	2233.75	976.00	138.13	21.00	892.92	57.10	75.95	-	21.00	2182.10	-51.65	16.0
4.42	244.00	27.16	24.96	1.99	1628.00	367.00	258.91	-	628.12	12.74	85.86	-	37.50	1290.13	-237.87	5.5
18.73	655.00	24.07	153.60	4.50	5355.80	2645.00	518.00	-	1219.74	50.98	171.20	-	205.66	4810.56	-545.22	None
12.52	174.56	37.96	60.41	16.12	2854.56	1030.67	253.68	19.35	1393.32	88.47	170.56	5.42	148.77	3110.24	+255.68	32.01
9.91	173.00	30.37	58.28	14.68	2877.66	942.72	295.15	19.05	1300.82	78.17	182.94	4.66	169.60	2993.11	+115.45	24.8
9.89	177.96	29.35	56.87	9.05	2814.90	974.66	209.71	16.04	1249.69	81.55	150.58	3.27	171.22	2856.63	+41.73	20.0

Farm No.	Corn	Wheat grain	Mill feeds	Butabagas and potatoes	Skimmilk equivalents
206	4	133	7	-	664
306	38	9	79	333	1336
801	98	63	80	133	552
070	30	53	126	20	1492
308	126	78	-	64	1248
110	146	40	12	-	944
213	67	29	122	159	1124
703	48	106	61	328	824
214	164	-	-	-	-
113	72	31	38	1620	1920
208	100	51	38	143	2040
419	133	49	88	306	1456
216	118	73	135	211	1024
812	135	99	122	236	996
319	52	7	14	354	3088
519	120	95	51	293	1832
618	30	77	75	57	2672
210	202	80	130	163	1704
904	56	149	165	199	2596
510	128	287	-	-	1228
410	56	100	17	701	1984
106	57	77	107	-	2564
1927	92	66	79	211	1432
Average					
1926	102	74	64	147	1619
Average					
1925	77	83	69	165	1364
Average					

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COST OF PRODUCING PORK PER 100 LBS. 1927 WASKOV, MINN.

Other	Man	Horse	Feed	Man	Horse	Shelter	Equip-	Inter-	Cash	Total	Manure	Cash	Total	Net	Price	Received
t feeds	hours	hours		labor	labor		ment	est		cost.			credit	cost	received	per crt. skimmilk
-	5 $\frac{3}{4}$	$\frac{1}{4}$	4.19	1.17	.06	1.68	-	.17	-	7.27	.15	-	.15	7.12	10.50	None
-	8 $\frac{1}{4}$	$\frac{1}{4}$	6.35	1.63	.02	.15	.11	.10	-	8.36	.11	-	.11	8.25	8.13	18.0
-	6 $\frac{1}{2}$	$\frac{1}{2}$	6.35	1.29	.07	.94	-	.13	.25	9.03	.12	-	.12	8.91	9.49	None
-	9 $\frac{1}{4}$	1	7.41	1.93	.08	-	-	.10	-	9.52	.53	-	.53	8.99	9.44	13.9
-	12	-	7.20	2.39	-	-	-	.05	-	9.64	.40	-	.40	9.24	10.54	4.7
-	13 $\frac{1}{4}$	1 $\frac{1}{2}$	6.50	2.66	.17	-	-	.15	.18	9.66	.18	-	.18	9.48	7.40	None
-	7 $\frac{3}{4}$	-	7.37	1.56	-	.84	-	.21	.05	10.03	.45	-	.45	9.58	12.80+	38.8
-	9 $\frac{1}{4}$	$\frac{1}{4}$	7.32	1.86	.01	.75	-	.20	-	10.14	.16	.05	.21	9.93	9.21	1.7
-	9 $\frac{1}{2}$	1	6.99	1.84	.16	1.50	-	.21	-	10.70	.18	-	.18	10.52	10.54	6.0
-	9	$\frac{1}{4}$	8.31	1.80	.05	.38	.08	.19	.05	10.86	.15	-	.15	10.71	8.65	10.2
-	10 $\frac{3}{4}$	$\frac{1}{4}$	9.08	2.14	.03	.59	-	.19	.11	12.14	.16	-	.16	11.98	8.20	None
9	10 $\frac{1}{4}$	$\frac{3}{4}$	9.43	2.12	.17	.74	-	.42	.10	12.98	.46	.43	.89	12.09	9.68	None
11	12 $\frac{1}{4}$	1 $\frac{1}{2}$	9.14	2.44	.22	.62	-	.12	.01	12.55	.34	service	.34	12.21	8.22	None
-	11 $\frac{1}{2}$	$\frac{1}{2}$	10.06	2.21	.09	-	-	.32	-	12.68	-	.11	.11	12.57	10.39	None
-	17 $\frac{3}{4}$	-	10.02	3.53	-	-	.15	.46	-	14.17	.62	-	.62	13.55	12.91	25.0
-	17	$\frac{1}{4}$	9.98	3.39	.06	-	-	.30	-	13.73	-	-	.6	13.73	8.83	None
-	21 $\frac{1}{4}$	$\frac{1}{2}$	10.44	4.25	.05	-	-	.25	-	14.98	.17	-	.17	14.81	23.33++	1.9
-	11 $\frac{1}{2}$	-	12.61	2.31	-	-	-	.48	-	15.40	.24	-	.24	15.16	10.24	None
-	13	$\frac{1}{2}$	13.47	2.63	.07	-	-	.37	-	16.54	.94	-	.94	15.60	8.33	None
-	13	$\frac{3}{4}$	11.27	2.58	.07	1.81	-	.50	-	16.23	.34	-	.34	15.89	10.92	None
-	26	1 $\frac{3}{4}$	10.00	5.19	.15	2.20	-	.48	-	18.02	1.03	-	1.03	16.99	8.52	None
-	22	$\frac{1}{4}$	10.60	4.39	.07	5.32	-	.34	-	20.72	.19	-	.19	20.53	10.00	None
2	10 $\frac{3}{4}$	$\frac{1}{2}$	8.59	2.17	.06	.62	.02	.25	.04	11.75	.27	.04	.31	11.44	9.86	.6
9	10 $\frac{1}{4}$	$\frac{1}{4}$	8.42	2.04	.07	.66	.01	.33	.07	11.60	.28	.03	.31	11.29	11.69	27.1
1	8 $\frac{3}{4}$	$\frac{1}{4}$	8.30	1.77	.04	.64	-	.28	.04	11.07	.40	.02	.42	10.65	11.26	32.9

figs
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Farm No.	No. hens	Per 100 Hens				Man hrs.	Feed
		Grain	Mill feeds	Other	Skim-milk		
213	25	3120	3404	2164	6080	482	33.78
210	70	3760	3501	540	8094	376 $\frac{1}{2}$	126.99
206	95	7844	2353	-	1722	399 $\frac{1}{2}$	192.50
607	50	2940	118	-	3968	116	44.95
110	110	-	6696	294	7032	234 $\frac{1}{2}$	242.63
410	125	2128	3300	2498	2489	312	198.80
108	100	5842	2666	-	5265	773 $\frac{1}{2}$	172.06
106	35	57	2354	-	10797	487 $\frac{1}{2}$	27.15
519	80	6279	3084	1540	1785	407 $\frac{1}{2}$	167.91
119	25	-	7548	-	16112	620	54.57
419	65	2818	4360	769	6662	339 $\frac{1}{2}$	126.59
618	55	1789	6149	1818	7673	506 $\frac{1}{2}$	115.90
010	35	1629	5737	437	4529	457 $\frac{1}{2}$	66.26
306	70	1593	5443	-	5083	316 $\frac{1}{2}$	124.35
308	50	4618	1178	488	6856	376	85.84
703	95	3260	4868	830	4749	391 $\frac{1}{2}$	197.47
208	160	34	9119	1319	5216	249 $\frac{1}{2}$	444.60
113	35	-	7986	1037	5480	471 $\frac{1}{2}$	85.56
812	65	4641	4729	1051	-	442 $\frac{1}{2}$	141.60
510	55	1640	3564	-	10178	316 $\frac{1}{2}$	83.82
319	60	108	6033	937	6382	296 $\frac{1}{2}$	99.68
214	110	-	2541	3300	1744	150	221.40
904	45	2011	3667	471	9253	362 $\frac{1}{2}$	69.21
801	55	2662	5556	251	4336	372 $\frac{1}{2}$	114.08
216	60	1958	5225	2065	6008	696 $\frac{1}{2}$	122.26
Average							
1927	69	2465	4909	852	5567	375	134.49
1926	84	2274	4489	917	5058	385	141.26
1925	80	2126	5130	1462	8682	419 $\frac{1}{2}$	164.36

COSTS AND RETURNS FROM POULTRY - 1927 - ASKOV, MINN.

Per Farm Flock Basis														Eggs per hen	Cost per doz. eggs	
Man labor	Horse labor	Shelter	Equip- ment	Int.	Pur- chases	Other cash	Depr. inv.	Total exp.	Egg rec.	Pou'try rec.	Appre.	Manure	Total rec.			Net return
24.10	-	11.00	-	1.86	.85	1.25	-	72.84	64.23	7.17	8.00	3.00	82.40	+9.56	139	19.5
52.75	-	37.00	-	5.64	10.00	9.36	-	241.74	166.13	41.76	24.00	4.50	236.39	-5.35	136	23.9
75.85	.66	26.00	-	7.56	42.00	8.31	18.00	370.88	300.98	52.07	-	6.00	359.05	-11.83	174	22.6
11.60	-	26.00	-	3.12	15.00	4.15	14.00	118.82	93.15	9.87	-	3.00	106.02	-12.80	112	22.7
51.60	2.96	17.00	7.41	6.75	34.65	11.63	25.00	399.63	314.25	57.50	-	3.00	374.75	-24.88	150	24.6
78.00	-	12.00	7.03	9.36	4.56	11.83	6.00	327.58	234.96	59.85	-	6.00	300.81	-26.77	113	21.4
146.70	-	22.00	.70	6.90	26.00	7.45	90.00	478.81	351.24	86.43	-	7.50	445.17	-33.64	144	32.8
34.15	-	29.00	-	20.01	-	.40	17.00	109.71	67.24	6.25	-	1.50	74.89	-34.82	111	31.9
65.27	.42	21.00	-	5.55	10.00	3.75	5.00	288.90	183.79	58.99	-	9.75	252.53	-36.87	127	23.6
31.00	-	6.00	-	1.53	12.70	1.45	29.00	136.25	82.67	11.40	-	1.50	95.51	-40.68	193	30.7
44.15	.89	19.00	-	3.99	20.70	6.00	35.00	258.32	187.37	23.18	-	3.00	213.55	-44.77	155	27.6
55.75	-	16.00	-	3.72	-	1.25	20.00	232.62	110.21	53.86	-	3.00	167.07	-45.55	112	24.8
32.00	.37	5.00	-	2.67	8.50	7.81	-	122.61	49.34	17.01	3.00	3.00	72.35	-50.26	96	30.6
44.35	.20	13.00	4.44	4.14	36.00	1.25	32.00	257.73	175.66	24.44	-	6.00	206.07	-51.66	138	28.4
37.60	-	4.00	-	3.41	-	6.84	11.50	149.19	84.37	9.31	-	3.00	96.68	-52.51	101	32.5
74.35	-	19.00	-	6.81	23.45	4.50	-	325.58	207.66	32.71	27.00	3.00	270.37	-55.21	114	27.8
79.95	2.07	93.00	5.27	11.85	67.50	21.71	15.00	740.95	556.39	120.13	-	7.50	684.02	-56.93	171	26.5
33.00	-	6.00	2.5	2.22	18.20	.25	12.00	159.38	68.23	22.04	-	4.50	94.77	-64.61	101	42.3
57.55	-	11.00	-	5.43	3.50	3.10	11.00	233.38	130.02	28.68	-	7.50	166.20	-67.18	105	33.4
34.85	.52	18.00	.49	3.48	-	5.59	34.00	180.75	94.51	12.75	-	1.50	108.76	-71.99	111	31.4
35.60	1.39	11.00	6.89	4.20	24.33	14.56	40.00	237.65	137.73	26.96	-	7.50	161.19	-76.46	133	30.2
36.15	-	31.00	4.00	7.02	-	4.15	26.00	329.72	200.37	41.15	-	7.50	249.02	-80.70	103	29.2
32.60	.74	18.00	7.58	7.35	58.45	.65	-	194.58	42.90	13.30	49.00	1.50	106.70	-87.88	53	25.4
41.00	-	72.00	-	3.54	12.00	10.13	66.00	318.75	147.73	50.30	-	4.50	202.53	-116.22	161	35.6
83.60	2.77	34.00	6.30	3.27	67.75	24.69	-	344.64	194.35	22.20	7.00	4.50	228.05	-116.59	186	30.5
51.73	.52	23.28	2.09	4.94	19.65	6.88	15.94	259.72	169.42	35.53	-	4.53	209.48	-50.24	133	28.2
64.68	.39	23.46	3.22	5.91	9.02	5.53	11.12	264.59	227.49	37.36	-	4.35	269.20	4.61	122	26.3
67.10	.61	20.13	4.61	5.62	26.78	4.24	-	296.36	246.87	42.44	23.84	5.69	318.84	25.39	129	27.4

Farm No.	Roughage	Grain	Silage and rutabagas	Skim milk	Pasture days
010	3516	855	-	1275	139
210	2726	1638	-	-	137
703	4924	1219	-	441	101
410	1642	1221	-	-	226
607	2658	1727	-	-	150
618	4350	684	-	-	150
319	4135	949	-	849	124
119	4375	670	851	828	157
306	4072	814	-	-	122
510	4457	243	-	-	172
904	3055	901	700	-	161
308	4034	1787	-	-	152
110	5952	738	-	-	161
113	3251	1010	420	-	149
106	2159	1648	-	-	119
519	3028	748	602	-	142
812	5806	1646	108	-	40
801	6676	1594	-	-	140
208	5482	747	-	-	64
216	3839	1358	-	-	106
213	3097	1010	-	-	162
206	3714	1332	-	-	143
116	3429	897	434	-	207
214	5060	559	-	-	175
419	9050	1571	51	-	31
108	4867	798	-	-	115
Average					
1927	4178	1117	128	99	133
1926	4047	1219	151	157	122
1925	5798	1196	270	291	127

COST OF HORSE LABOR - 1927 - ASKOV, MINN.

Man hours	Total feed	Man labor	Shelter	Equip-ment	Interest	Cash	Depre-ciation	Total expense	Cash	Appre-ciation	Manure	Total credits	Net cost	Hours worked	Cost per hour
95	42.17	18.99	8.75	2.75	3.86	3.02	2.50	82.04	-	-	9.84	9.84	72.20	981 $\frac{1}{2}$	7.4
105 $\frac{1}{2}$	50.26	21.12	7.24	4.97	3.96	.09	1.72	89.36	-	-	6.46	6.46	82.90	1019 $\frac{1}{2}$	8.1
96 $\frac{1}{2}$	58.85	19.33	8.12	4.55	5.25	2.11	1.07	99.28	-	-	16.67	16.67	82.61	928 $\frac{1}{2}$	8.9
99 $\frac{1}{2}$	34.21	19.91	22.22	2.24	2.66	-	7.41	88.65	-	-	5.55	5.55	83.10	907 $\frac{1}{2}$	9.2
52 $\frac{1}{2}$	56.43	10.52	9.12	3.30	5.39	-	6.26	91.02	-	-	5.97	5.97	85.05	851 $\frac{1}{2}$	10.0
112 $\frac{1}{2}$	43.81	22.49	5.23	2.99	8.19	-	-	82.71	-	15.67	8.91	24.58	58.13	569 $\frac{1}{2}$	10.2
60 $\frac{1}{2}$	50.76	16.09	8.30	5.65	5.26	-	5.66	91.72	-	-	22.64	22.64	69.08	673	10.3
112	50.01	22.38	7.50	6.40	3.45	1.75	5.00	96.49	-	-	6.00	6.00	90.49	857 $\frac{1}{2}$	10.6
121 $\frac{1}{2}$	53.94	24.23	14.67	2.40	5.50	1.58	-	102.32	-	6.67	15.00	21.67	80.65	753 $\frac{1}{2}$	10.7
84 $\frac{1}{2}$	43.12	16.97	8.00	2.22	5.30	-	3.33	78.94	-	-	10.00	10.00	68.94	613 $\frac{1}{2}$	11.2
57 $\frac{1}{2}$	43.46	11.46	9.00	5.04	4.24	.38	6.25	79.83	-	-	14.91	14.91	64.92	569 $\frac{1}{2}$	11.4
153 $\frac{1}{2}$	62.71	30.70	2.00	3.23	2.85	1.75	5.00	108.24	-	-	9.00	9.00	99.24	789 $\frac{1}{2}$	12.6
70 $\frac{1}{2}$	62.84	14.14	15.00	2.24	5.75	2.90	8.33	111.20	-	-	5.00	5.00	106.20	834 $\frac{1}{2}$	12.7
103	54.08	20.58	18.46	9.70	4.08	3.38	6.79	117.07	-	-	4.62	4.62	112.45	809 $\frac{1}{2}$	13.9
164 $\frac{1}{2}$	56.42	32.88	8.55	4.49	4.74	4.49	8.55	120.22	-	-	4.49	4.49	115.63	836	14.0
92 $\frac{1}{2}$	39.62	18.49	13.00	3.79	6.00	.98	10.00	91.88	-	-	10.13	10.13	81.75	578	14.1
105 $\frac{1}{2}$	66.15	21.10	7.48	2.74	5.10	.64	18.04	121.25	-	-	10.34	10.34	110.91	772 $\frac{1}{2}$	14.4
105 $\frac{1}{2}$	85.41	21.16	10.61	10.01	4.67	4.32	-	136.18	-	-	10.61	10.61	125.57	869 $\frac{1}{2}$	14.4
82	60.28	16.38	14.99	5.87	8.29	2.95	5.17	113.93	-	-	5.81	5.81	108.12	735 $\frac{1}{2}$	14.7
119	53.36	23.80	11.34	4.29	4.75	1.00	5.00	104.54	-	-	5.00	5.00	99.54	645	15.4
84 $\frac{1}{2}$	45.27	16.85	10.50	6.28	5.96	.94	1.25	87.05	-	-	7.50	7.50	79.55	505 $\frac{1}{2}$	15.7
109 $\frac{1}{2}$	59.89	21.84	11.11	4.09	4.10	4.06	34.19	139.28	-	-	9.62	9.62	129.66	785 $\frac{1}{2}$	16.5
81	44.61	16.19	30.75	2.88	5.32	.75	10.00	110.50	-	-	7.50	7.50	103.00	606 $\frac{1}{2}$	17.0
89 $\frac{1}{2}$	49.85	17.85	7.53	4.80	3.39	1.41	13.44	98.27	-	-	5.65	5.65	92.62	513 $\frac{1}{2}$	18.0
17 $\frac{1}{2}$	66.69	23.44	8.33	5.87	5.90	5.20	6.67	152.10	-	-	12.50	12.50	139.60	704 $\frac{1}{2}$	19.8
72	55.92	14.47	10.33	3.22	9.00	.63	1.67	95.24	-	-	10.00	10.00	85.24	369	23.1
96	54.06	19.20	10.20	4.44	5.20	1.55	5.12	99.77	-	-	9.25	9.25	90.52	742 $\frac{1}{2}$	13.2
79	46.84	15.80	11.53	4.22	5.40	1.51	5.61	99.91	04	-	8.98	9.02	81.89	736	11.1
77 $\frac{1}{2}$	53.07	15.47	11.64	4.80	5.16	2.20	8.66	101.00	-	-	12.29	12.29	88.71	836 $\frac{1}{2}$	10.6