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LAMB PRODUCTION IN MICHIGAN

Successful Practices Followed by Winners of 1930
Wolverine Lamb Production Contest



MICHIGAN STATE COLLEGE
Of Agriculture and Applied Science

EXTENSION DIVISION
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INTRODUCTORY REMARKS

The New Wolverine Lamb Production Contest aroused the interest of sheepmen throughout the state. One hundred fifty-three enrollments were turned in representing flocks in 44 counties. A number of different breeds were entered. The flocks ranged in size from 20 to 265 ewes. A number of these flocks were fine-wool breeds.

The following organizations gave financial support and made this contest possible: The Michigan Pure Bred Sheep Breeders' Association; Bishop, Hammond, and Jackson; The Livestock Exchange, and the Michigan Farmer. The latter presented a handsome trophy to the champion flockmaster.

The results described herein were obtained through the courtesy and willingness of the co-operators to give out information. This data should have a definite value to the sheepmen in the State and should stimulate the sheep business in general.

A word of appreciation is extended to all contestants. We trust that you will enroll again and that the 1931 contest will be even better than the one which has just closed.

LAMB PRODUCTION IN MICHIGAN

D. H. LaVoi

Successful Practices of the Winners

1. Legume hay was fed as part of the winter ration, one and one-half to two pounds per head daily. Bean pods, corn fodder, silage, oat straw, pea straw, and mixed hay were other roughages fed.

2. Ewes were fed grain for a period of from one month to six weeks before lambing. Common rations were oats; oats and bran; or a mixture of two parts oats, one part corn or barley, one part bran, and one-half part oilmeal. The length of the feeding period depended on the condition of the ewes.

3. A liberal ration of these grains fed to the ewes after lambing proved profitable, and feeding amounts up to two pounds per ewe per day until pasture was available also was profitable.

4. Internal and external parasites were controlled by drenching and dipping. The best results were obtained when the flock was drenched at least three times during the grazing season and when it was dipped in the spring.

5. Water and loose salt were accessible at all times. Irregular watering resulted in weak lambs and lower gains.

6. Abundant pasture was provided during the grazing season, legume pastures were best. Sweet clover proved exceptionally good. Rotation of pastures was practiced.

7. Ewes were flushed before breeding and good purebred rams were used. New pasture and grain given from two weeks to one month previous to lambing was the most common method of flushing.

8. Individual care was given ewes at lambing time. The use of 4 ft. x 4 ft. pens, built from panels, made this possible. Flocks were watched carefully during this period.

9. Field feeding and large yards gave the flocks abundant exercise. Freedom to run in and out helped, cheap roughages were used as field feed.

10. Creep feeding of the lambs insured rapid growth and early marketing. A good ration was three parts oats, one part corn or barley, one part bran, one-half part linseed meal in clean trough. Feeding was started when lambs were two weeks old and continued until grass or after.

Contest Regulations

Basis of Awards:

Awards were made on the basis of the average number of pounds of lamb produced per ewe in 135 days. This gave credit for rapid gains and for large percentage of lambs raised.

Champion Flockmaster:

The selection was determined by successful practices followed, efficiency of management, rate of gains and financial success of the project.

Adjusted Weights:

In order to allow the large flocks a chance to compete with small flocks and to equalize management problems, as large flocks are not expected to make as high average weight per ewe as small flocks, weight allowances were made on the basis of the number of ewes in the flock. This weight is prorated, as the larger the flock the less difference an extra ewe makes in the probable average. The weight allowances made were:

One-third pound per ewe for the first 21 ewes above 20;

One-fourth pound per ewe additional for the next 40 ewes above 41;

One-fifth pound per ewe additional for the next 80 ewes above 80;

One-tenth pound per ewe additional for the next 160 ewes above 161.

Requirements:

In order to enroll, the contestants were required to have at least 20 ewes which had been bred to a purebred ram. All lambs were docked and all grade ram lambs castrated. Birth dates were recorded for each lamb and at the close of the lambing period the records were sent to the central office. The weighing-in date was figured as 135 days from the average date of lambing of the group. All contestants used their own methods and systems of management.

LAMB PRODUCTION IN MICHIGAN

MICHIGAN SHEEPMEN WHO PRODUCED AT LEAST 100 POUNDS OF LAMB PER EWE ON ADJUSTED BASIS

Name	Location	County	No. ewes and breed	Rams used	No. lambs		Per cent lambs dropped	Per cent lambs raised	Average weight per lamb	Actual average No. lbs. lamb per ewe	Adjusted No. lbs. lamb per ewe
					Dropped	Raised					
Port Coville.....	Harrisville.....	Alcona.....	34 Gr. Oxford are yearlings	Oxford.....	53	51	156.	150.	94.5	141.24	145.91
Chas. Covell.....	Elwell.....	Graetiot.....	25 Gr. Oxford and Lincoln	Oxford.....	40	37	160.	148.	93.8	138.8	140.47
Robt. Currie.....	Merritt.....	Missaukee.....	42 Gr. Hamp. and Shrop.	Shrop.....	73	66	173.8	157.1	83.7	131.59	138.84
W. S. Hittner.....	Gladwin.....	Chatham.....	23 Gr. Shrop. and Oxford.	Oxford.....	38	35	165.2	143.5	93.0	133.43	134.43
Armstrong Bros.....	Whiteville.....	Livingston.....	24 P. Shrop.	Shrop.....	91	80	168.5	148.1	84.8	121.36	132.11
Wm. Harrison.....	White Pigeon.....	St. Joseph.....	23 Gr. Shrop.	Shrop.....	48	48	184.6	161.5	80.4	129.9	131.9
Ed. Olson.....	Le Roy.....	Oscoda.....	162 Gr. Lincoln Ramb and Shrop.	Ramb, Lin.	108	101	122.2	117.9	83.7	98.69	131.79
Mike Cubillo.....	Lincoln.....	Alcona.....	20 Gr. Oxford	Shrop.....	37	35	185.0	175.	74.8	130.85	130.85
Percy Sagers.....	Harrisville.....	Alcona.....	206 Gr. Shrop. Lincoln and Ramb.	Oxford.....	36	34	158.6	150.	82.8	124.16	129.49
Hennes Brothers.....	Falmouth.....	Missaukee.....	2 Gr. Shrop.	Hamp.....	326	316	123.0	119.2	71.3	85.1	128.5
James Twicker.....	Evart.....	Oscoda.....	62 Gr. Oxford	Oxford.....	37	35	168.2	159.1	78.8	125.36	126.03
Lars Erickson & Son.....	Tustin.....	Oscoda.....	36 Gr. Shrop. and Oxford.	Shrop.....	44	41	144.8	140.	78.8	110.32	123.32
C. T. Chapman.....	Lewton.....	Van Buren.....	35 Gr. Shrop.	Shrop.....	53	51	132.8	141.6	80.9	117.44	122.77
Alvin Chapman.....	Bad Axe.....	Huron.....	22 Gr. Oxford	Oxford.....	36	35	163.6	159.1	76.34	121.4	122.07
Robt. Holbrik.....	Spratt.....	Alpena.....	29 P. Hamp.	Hamp.....	39	37	134.5	127.6	92.	117.24	120.24
Lake Field Farms.....	Clarkston.....	Oakland.....	91 Gr. Blacktop	Shrop.....	125	118	137.4	129.7	77.2	100.15	119.15
H. P. Roach.....	West Branch.....	Ogemaw.....	30 Gr. Hamp	Hamp.....	41	41	166.7	136.7	78.3	107.	116.5
Otis Pratt.....	Montgomery.....	Hillsdale.....	22 P. and Gr. Shrop.	Shrop.....	38	32	172.7	145.5	79.1	115.06	115.73
F. G. Hofferbert.....	Bannister.....	Graetiot.....	73 Gr. Shrop.	Shrop.....	40	34	160.	136.	83.2	113.16	114.83
F. F. Mark.....	Deckerville.....	Saukiac.....	33 Gr. Oxford	Oxford.....	104	96	136.8	126.3	77.	97.30	113.05
A. Erickson.....	Tustin.....	Oscoda.....	75 Gr. Oxford and Shrop.	Shrop.....	14	14	132.	125.3	76.1	95.34	110.84
Geo. Johnson.....	Frederic.....	Midland.....	20 Gr. Hamp	Shrop.....	30	30	150.	130.	73.2	109.85	109.85
Frank Dick.....	South Boardman.....	Kalkaska.....	20 Gr. Shrop.	Shrop.....	32	32	160.	135.	81.4	109.8	109.8
Joseph Sledge.....	Curran.....	Alcona.....	27 Gr. Shrop.	Shrop.....	37	37	140.7	127.7	78.2	107.11	109.44
Lawrence Busley.....	Spruce.....	Alcona.....	34 Gr. Shrop.	Hamp.....	47	45	138.2	132.4	76.7	101.47	106.14
Thomas Hogarth.....	Atlanta.....	Montmorency.....	48 Gr. Oxford	Shrop.....	63	55	131.3	114.6	84.1	96.33	105.08
John Randall.....	Brown City.....	Saukiac.....	40 P. Oxford	Oxford.....	53	53	140.	135.5	74.2	98.38	105.05
A. O'Neil.....	Sears.....	Alcona.....	40 Gr. Hamp	Hamp.....	56	55	138.6	125.	77.2	96.5	104.25
Fred Wolf.....	Hale.....	Oscoda.....	39 Ramb. Shrop. Mixed.	Oxford.....	48	48	150.	143.7	64.1	92.16	103.16
Ray Buchanan.....	Kalamazoo.....	Leosco.....	62 Gr. Shrop.	Shrop.....	98	88	150.8	127.7	70.4	89.86	102.86
Geo. H. Park & Son.....	Pittsford.....	Hillsdale.....	22 P. Hamp.	Hamp.....	38	33	178.8	150.	79.2	100.5	102.5
Harry Woodworth & Sons.....	Charlotte.....	Eaton.....	39 P. Shrop	Shrop.....	55	53	141.0	135.9	69.2	95.2	101.55
E. Cookham.....	Reed City.....	Oscoda.....	59 Ramb. and Oxford.	Shrop.....	82	82	126.8	110.7	81.2	89.90	100.65
R. S. Bentley.....	Whittemore.....	Leosco.....	131 Finewool Hamp.	Shrop.....	184	164	140.5	125.2	58.3	73.03	100.03

The 85 contestants weighing in produced an average of 87.07 pounds of lamb per ewe. This represents the Average of 3,682 ewes.



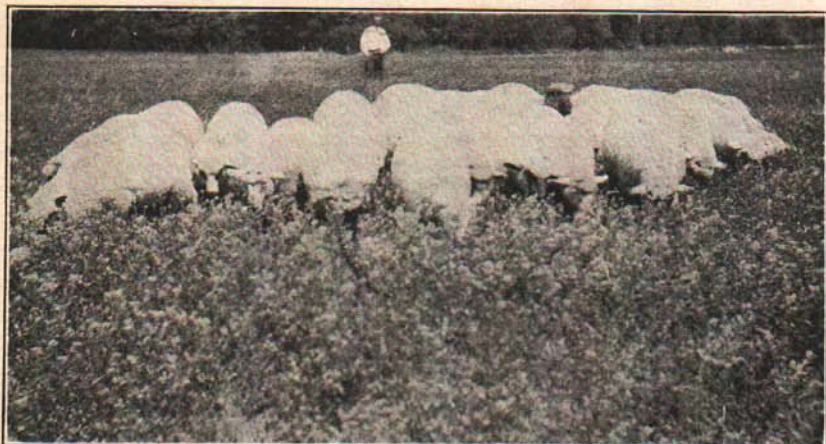
CHAMPION FLOCKMASTER

Port Coville, Harrisville, Alcona County

1st Prize Winner

For producing an average of 141.29 pounds of lamb per ewe from a flock of 34 ewes in 135 days, Mr. Coville was declared winner of first place and champion of the contest. The fact that he produced the most pounds of lamb per ewe was not the only reason for his winning championship honors. He had low costs of production, followed good practices, showed a very fine financial return, he liked his business, and he made an improvement over last year.

His ewes were grade Oxfords, uniform in breeding and vigorous and they dropped 53 lambs, 51 of which were raised. These lambs averaged 94.5 pounds when weighed in. Part of Mr. Coville's success can be attributed to the fact that he followed good practices and used good methods of management. He laid stress on drenching, feeding of legumes, good pastures. He used a good purebred ram which was an Oxford purchased off the 1929 ram truck from Bursley Brothers. A short summary of Mr. Coville's practices shows that he flushed his ewes on second cutting clover for six weeks previous to breeding and grained the ram daily with one pound of oats. Clear clover hay was fed all winter and a part of the hay was fed in the field to provide winter exercise. One-half pound of oats per ewe was fed beginning one month before lambing and this ration was increased to one pound after lambing and was fed until May 1 or time of pasturing. The lambs were not creep fed but ate some grain with their mothers. A large flowing well in the yard provided water all the year. Loose salt and bonemeal were accessible at all times. Parasites were controlled by drenching four times, in April, July, August, and November, using copper sulphate and black leaf forty and the sheep were dipped once with Cooper's dipping powder. Individual pens, 4 ft. by 4 ft. were used at lambing time, plenty of housing space was given the flock, and the south door of the barn was usually left open. An abundance of timothy and clover pasture was provided, followed by second cutting clover after haying. A barn and trees provided shade. He did not wean his lambs previous to marketing. Forty-five were sold at Detroit for \$10.25 a hundred when 139 days old and topped the market. Six of the best ewe lambs were retained for breeding stock. His flock averaged 9 pounds of wool and it sold at 22c per pound. The gross return per ewe counting wool and lambs was \$16.46. The average lambing date was April 7 and the lambs were weighed in on August 21.



Charles Covell, Elwell, Gratiot County

2nd Prize Winner

Second place went to Charles Covell for making a record of 138.8 pounds of lamb per ewe on his flock of 25 grade Lincoln and Oxford ewes. They were bred to a purebred Oxford ram. The 37 lambs which were raised averaged 93.8 pounds. He had a 160 per cent lamb crop.

In many respects, Mr. Covell's system was similar to that of the champion but he weaned his lambs when four months old, placed them on alfalfa pasture, and grained them with one-fourth to one-half pounds of oats daily. He flushed by graining with one pound oats for 10 days before breeding and continued grain feeding until December 1. The ram was also grained for one month before breeding. The flock was fed alfalfa hay one day and silage the next with bean pods a regular feed each evening until lambing. Two weeks before lambing, he started to grain with one pound of equal parts of oats and barley. This ration was continued after lambing but in larger amounts until May 1 or pasture season. Daily exercise was provided by chasing the ewes down a lane. The lambs were not creep fed, but received some grain with their mothers. Lambing pens were used with success, water and salt were accessible, the flock was drenched twice with copper sulphate and black leaf forty and was dipped with Cooper's dipping powder. Part of his pasture was wild grass, the remainder tame with some second cutting alfalfa. The average date of lambing was March 29 and the lambs were weighed in on August 12. The gross returns per ewe was \$15.69.

Robert L. Currie—Merritt—Missaukee County

Third Prize

With a flock of 42 grade Hampshire and Shropshire ewes bred to a Shropshire ram, Mr. Currie was able to make a weight of 131.59 pounds of lamb per ewe or 138.84 pounds on the adjusted basis. The lambing percentage was higher than that of the first and second places winners but his average weight per lamb was lower. Part of Mr. Currie's success can be attributed to his interest in his flock. He flushed with grain, fed legume hay during the winter, and grained with oats before and after lambing. His flock was drenched and dipped, given exercise during the winter, and provided with plenty of salt and water. Part of the pasture was mixed and part was on cut-over land, some of which was rather low. At four months of age, the lambs were weaned and turned in a cornfield containing sunflowers. Although Mr. Currie's flock was large and vigorous, he did have some trouble with goitre last spring and lost a few lambs from this cause. He did not feed potassium iodide.

W. S. Huber, Gladwin, Gladwin County

Fourth Prize

The 33 lambs raised from 23 Shropshire and Oxford ewes average 93 pounds. This was a 165 per cent lamb crop. Mr. Huber keeps his flock in good condition the year around. His methods differ somewhat from the others as he fed no grain to the ewes either before or after lambing. His winter ration was a feed of clean alfalfa in the morning, bean pods at noon, and corn stover at night. Legumes mostly alfalfa and clover predominated in his pastures. These were rotated. As soon as haying was over, the sheep were placed on second cutting alfalfa. Most of the lambs were weaned at four months of age and were grained on about a pound of wheat each. He left the doors to his barn open most of the time and the flock was fed in the yard to provide winter exercise. Bone meal was fed in the salt which with water was accessible at all times. He used lambing pens and gave his flock very careful attention at lambing time. Udder trouble of ewes caused the death of three lambs.

Armstrong Brothers, Fowlerville, Livingston County

Fifth Prize

Their purebred flock of 54 Shropshires made a very fine record of 132.11 pounds of lamb on the adjustment basis or 121.36 actual weight. This was a 168.5 per cent lamb crop. These men are the premier breeders of Shropshire sheep in the State of Michigan. They practice a very good system of management and use up-to-date equipment. Their flock is exceptionally good and this record is very good when compared to that made by coarser lambs. Their ewes are fed carefully on alfalfa hay and bean pods along with grain before and after lambing. Their grain ration was oats and bran. They creep fed their lambs which were weaned early and placed on second cutting clover. Mammoth clover was used as the only pasture crop. The flock was provided with bone meal and salt and had access to water at all times. The sheep were drenched twice and dipped and had free run of the yard during the winter time. Dogs caused two of their lamb losses shortly before weighing in time.

Roscoe Harrison, White Pigeon, St. Joseph County

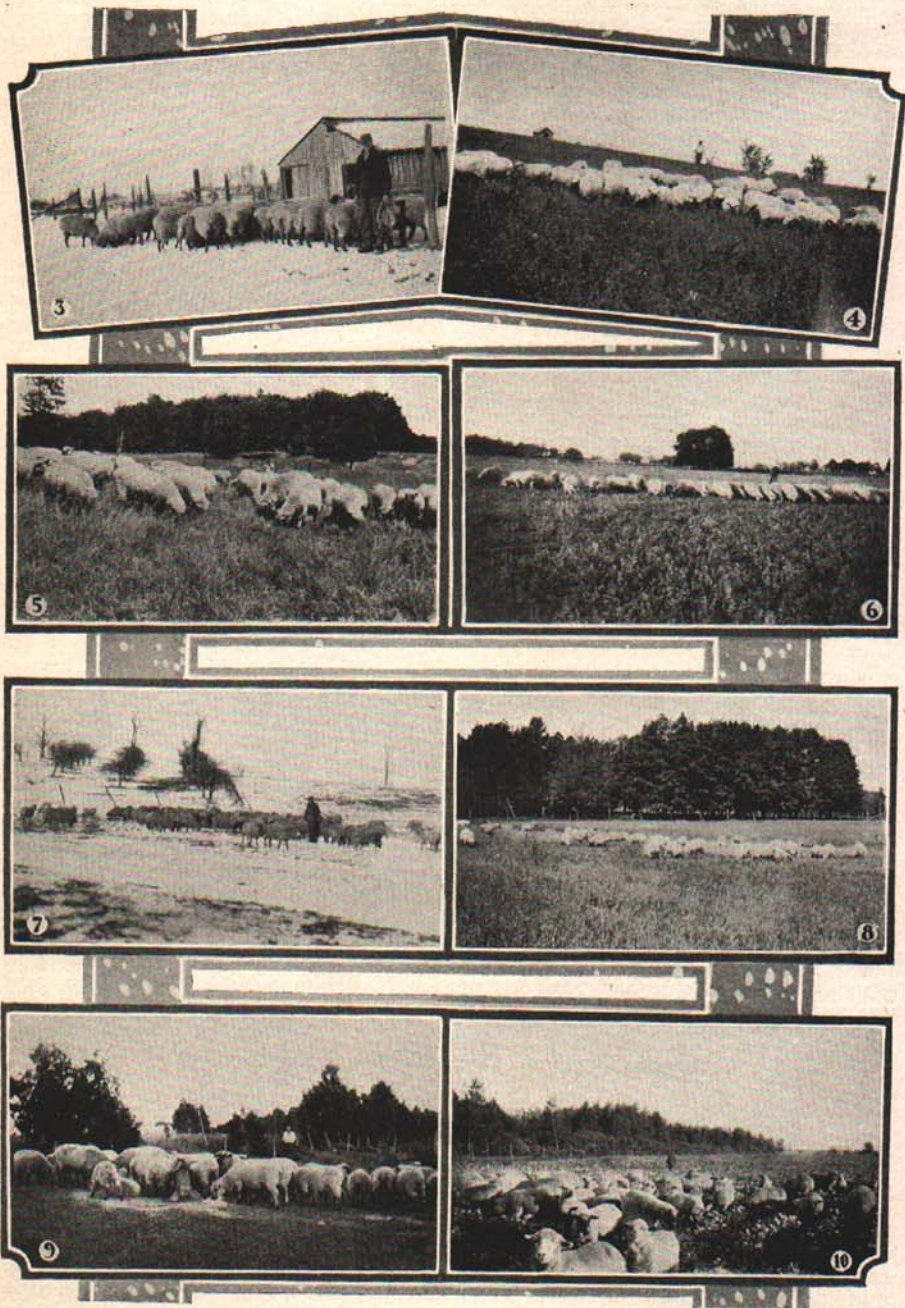
Sixth Prize

His record of 184.6 per cent lambs dropped and 161.5 per cent raised was the second highest in the contest. He has a flock of 26 grade Shropshire ewes showing uniform breeding from which he raised 42 lambs. Mr. Harrison's flock was flushed on second cutting alfalfa pasture. He winter-feeds alfalfa and corn stover and allows the flock access to straw. One month before lambing he began feeding ear corn and some oats. After lambing the ewes were fed one and one-half pounds of corn and oats daily. The lambs were creep-fed on corn and oats. The pasture consisted of timothy early in the spring and was later changed to alfalfa in rotation. He relates no bloating on alfalfa. He uses tar around the edge of his salt box and has loose salt accessible at all times. The summer water supply was rather irregular as the sheep had to be driven to the barn for water. Exercise was provided by allowing the ewes to run in a field of cornstalks. He drenched the flock but did not dip. The entire lamb crop was dropped between March 4 and the 26.

Edward Olson, LeRoy, Osceola County

Seventh Prize

His flock of 162 grade Lincoln, Rambouillet, and Shropshire ewes was the second largest in the contest. They dropped 198 lambs, a 122.2 per cent lamb crop, and 191 of this number were raised. Mr. Olson is practicing a system of double crossing Lincoln and Rambouillets. He interchanges rams between these two breeds every two years. He believes in feeding silage at the rate of one and one-half pounds per day and feeds alfalfa and alsike hay twice a day. His ewes are



These Flocks Belong to the Prize Winners Whose Methods Are Discussed.

grained all winter at the rate of half a pound each per day except for two weeks previous, to the three weeks period before lambing. During the period before lambing, he increases his grain ration to one pound. The lambs were dropped on grass and the ewes were not grained after lambing. He pastures on cut-over land seven miles from home. The lambs are checked in each night during the lambing season by keeping the ewes in a small pasture until after lambing time. The flock was housed in two barns one-half mile apart and exercise was provided by requiring each group to eat part of their daily ration in each barn. He provided salt and bonemeal and water in the barn at all times. Mr. Olson is especially enthusiastic and is interested in his flock.

Mike Cubilo, Lincoln, Alcona County

Eighth Prize

His flock had the highest prolificacy record in the contest, namely: 185 per cent or 37 lambs dropped from 20 ewes. Thirty-five of this number were raised. Mr. Cubilo uses good methods and part of his high lambing record is due to the way he flushed. This was done by pasturing in second cutting clover and, 10 days before breeding, the ewes were allowed to run in a small field of corn and on rutabaga tops. During the winter, he fed alfalfa and clover hay on alternate days and supplied bean pods in addition after lambing. His ewes received a little oats before and after lambing time. The lambs were creep-fed on ground oats and barley until they were turned on pasture. He drenched his flock three times, dipped, and provided loose salt and water in the barn. His permanent pasture was cut over and was rather low in spots. After haying, the flock was changed to second cutting tame grass. He makes the sheep business pay as is shown by his record of former years. He states that he has sold \$1,100 worth of lambs and \$180.00 worth of wool from this flock in 1927, 1928, and 1929.

Percy Somers, Harrisville, Alcona County

Ninth Prize

From his flock of 36 grade Oxford and Lincoln ewes, Mr. Somers was able to produce 124.16 pounds of lamb per ewe or 129.49 pounds on the adjustment basis. His average weight per lamb was 82.8 pounds. His flock was strong and vigorous and he had a small lamb loss. During the winter his flock was fed on clover hay and pea straw. The latter was scattered in the yard. One month before lambing, the ewes were grained with oats at the rate of a half a pound each per day. His flock received no grain after lambing as the lambs were dropped on grass. They were pastured on tame grass and on wooded lands until the grain was harvested, after which time the flock had the run of clover seeding in the grain stubble. His flock was drenched three times and was dipped. The sheep received yard exercise during the winter and the doors were left open at all times. Loose salt and water were accessible to supply their needs. Mr. Somers used a strong vigorous ram and one that produced a 14 pound wool clip. This ram was purchased off the ram truck in 1929.

Hemmes Brothers, Falmouth, Missaukee County

Tenth Prize

Their flock of 265 ewes was the largest in the contest. These were mostly Shropshire, Lincoln, and Rambouillet ewes of grade breeding. Ten of these ewes did not lamb but the remainder dropped a crop of 326 lambs, of which 316 were raised, this being a very fine record. The record of 96.9 per cent of the lambs being raised was the highest made by the ten winning men. The Hemmes Bros. used supplementary pasture crops with success. Rape sown in rows is proving successful as part of their pasture crop. Late summer and fall feed is supplied by sowing all stubble fields to rape and sweet clover. Permanent pastures are mostly made up of wild and cut-over land. They wintered their flock on alfalfa hay, some pea straw, and bean pods, three-fourths of the ration being alfalfa hay. No grain was used before or after lambing. The lambs were dropped on grass. Salt and bone meal and potassium iodide were supplied during the winter time.

Water was provided in a tank 16 rods from the barn and some of the feed was fed in the field; this helped furnish exercise. Part of the lambs were fed grain beginning in August, while all the lambs were weaned and placed on a grain ration before marketing. The dry season caused difficulties in supplying enough pasture for this large flock. The average of 71.3 pounds per lamb was a good record for this year. Three hundred ten of these lambs were marketed and of this number 303 topped the market at an average weight of 76.3 pounds. They used five rams, two Hampshires and three Shropshires, all of which were aged. These rams were placed in condition by grain feeding before the breeding season, at which time the flock was divided into groups. These men study their business very carefully and are making a success with large scale operations.

SUMMARY

All summary data is based on the reports of 102 contestants who were personally visited during the summer.

Winter Feeding—91 fed leguminous hays, 18 silage, 25 bean pods, 85 grained before lambing; 16 of this number grained all winter; 82 grained after lambing. Oats most common feed used.

Salt and Water—86 provided access to loose salt, 12 block salt, 2 salted irregularly, 2 did not salt; 13 watered irregularly during summer, 2 during winter, 6 used lake or river water the year around, 2 did not water during winter.

Parasite Control—72 drenched, 74 dipped, 49 rotated pastures, 17 have never dipped, and 17 have never drenched.

Pastures—41 supplied legume pasture, 50 cutover, 11 other tame grasses.

Winter Exercise—95 provided winter exercise, of this number 36 field fed, 51 used yards, and four chased ewes daily.

Management—62 flushed, 41 of which used better pasture and 21 grain; 75 used lambing pens, while 12 had their ewes on pasture at lambing time. Housing space varied from six square feet to eighty square feet per ewe.

Creep Feeding—52 creep fed lambs before grazing season, 5 continued while on grass; 7 fed lambs with the ewes.

Marketing—30 through co-operative shipping associations, 29 hauled direct to market, 27 sold to local dealers, while 20 were purebred breeders.

Highest Ten—Of the ten high place winners, all fed legume hays, and drenched with copper sulphate and black leaf forty. Eight drenched two or more times. The 10 high provided winter exercise, fed loose salt, used good purebred rams on vigorous well conditioned ewes, and all used lambing pens except three who had flocks on grass at lambing time. All except one dipped, using Cooper's Dipping Powder, 5 fed steamed feeding bone meal in salt, 5 weaned lambs and grained before marketing, 7 provided some legume pasture, 6 used buildings for shade, 6 marketed through Co-ops, 3 direct, 1 sold purebred sheep.

Lower Twenty in Contest—Smaller records were due to (1) poorer and insufficient pastures; (2) failure to control parasites; (3) lack of interest in the business; (4) irregular systems of management, such as a failure to have loose salt and water accessible at all times or to provide winter exercise; (5) not enough winter feed, no legumes in ration; (6) heavy loss at lambing time, did not use lambing pens or give ewes individual attention; (7) failure to flush ewes and get rams into breeding condition; (8) ewes lacked vigor, were aged and unsound; (9) shortage of milk for lambs, ewes needed grain.

Conclusions

1. High average weights per lamb coupled with a high percentage of lambs saved per ewe are necessary in profitable lamb production.
2. Pounds of lamb produced per ewe is a very good test of the ability of a market lamb producer.
3. Low costs of production is essential for profitable returns. Grain feeding the ewes throughout the winter is not always necessary if the flock is supplied with some leguminous roughage.
4. Grass fattened lambs can be produced to market topping finish before weaning if supplied with abundant pasture and kept healthy.
5. Lambs infested with parasites make poor gains. A system of parasite control must be practiced.
6. Vast amounts of Michigan cutover lands could be turned into profitable lamb production under good systems of management.
7. Twenty-four of the contestants had a 150 per cent or better lamb crop. They gave attention to flushing the ewes and the care of the stock rams, which resulted in more twins and shorter lambing periods. Both are essential to success.

Economic Factors in Quality Lamb Production

1. Study the market, sell only finished lambs meeting the consumers demands. Docked and castrated lambs are worth more.
2. Keep vigorous ewes of good breeding, cull out all old and non-producing ewes. Replace a sixth of the flock each year.
3. Prevent all possible losses. Parasites retard growth, and cause poorly finished lambs which do not sell to advantage. Help enforce the dog law.
4. Raise more lambs per 100 ewes. Save the lambs at birth and give the flock careful attention throughout the year.
5. Lower your costs of production. Keep overhead expenses down to a minimum; be more careful in your systems of management; and study the comparative value of feeds and needs of the flock.