

# EARLY LAMBS, LATE LAMBS --

## *Which are More Profitable?*



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Generations of sheep producers have argued the merits of the various "ideal" lambing dates. Setting his lambing date is a major decision every sheep producer in North Dakota must make. Many factors, such as availability of both kind and quantity of winter and summer feed supplies and availability of labor, fencing and housing must be considered. Weather patterns, price fluctuations and market outlets also are extremely important.

The period from birth to market for lambs is relatively short, so the date at which the lambs are born has a direct bearing on the date of expected marketing and the management practices required. Lambs born in mid-winter normally are creep-fed and marketed without ever being allowed on grass. Spring lambs born in North Dakota normally are reared on a grass-centered nutrition program and marketed either as "feeders" in early fall or held in feed lots and fed to slaughter weights and sold some two to three months following weaning.

This trial was conducted to determine the relative merit of various lambing dates in terms of monetary return and costs involved. The study was conducted at the Hettinger Experiment Station under the same design for four consecutive years.

### **EXPERIMENTAL PROCEDURE**

Sixty-three commercial Columbia ewes were

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divided equally as to weight and age into three groups. Group I started lambing each year on February 1. The lambs were creep-fed, weaned at approximately 85 days of age, fed to slaughter weight and placed on the early fat lamb market. Group II lambled beginning March 15. These lambs were not creep-fed, but were allowed to graze early crested wheat grass, then alfalfa and then native pastures. At weaning time, approximately 125 days of age, they were weighed and priced as feeders and then fed out and sold as fat lambs. Group III started lambing May 1 on grass. These lambs were handled in the same manner as those in Group II. All groups were bred to the same Suffolk rams.

After the first lotting was made, the ewes remained in their respective groups throughout the trial. At breeding time in subsequent years, yearling ewes were added to each lot as required to replace ewes lost because of age, death, barrenness or spoiled udders.

Feed costs represent the major expense in a sheep operation and were measured closely. Certain other costs were considered constant between groups, and no attempt was made to measure them. They were sires, ewe replacement, veterinary services, shearing, drenching, and salt and minerals.

No attempt was made to measure differences in housing and labor costs between groups.

Feed prices were determined on the basis of local market prices in the fall of each year. Pasture charges were made in terms of animal unit months.

## RESULTS:

This trial was conducted over a four year period in an attempt to remove the effects of yearly price fluctuations of wool, lamb and feed costs.

Ranges in prices received during the study were as follows:

Fat lambs	\$18.50 to 27.50 per cwt.
Feeder lambs	17.00 to 22.30 per cwt.
Wool	.605 to .71 per lb.

It is assumed that the four-year averages can be considered as indicative of long term results that might be expected for each of the three lambing dates and corresponding management systems studied.

A summary of four years' data is presented in Table 1.

Each year, 21 ewes were assigned to each group. Lots where fewer ewes are indicated were the result of dog trouble during breeding season.

The relatively wide variation in weaning weights of lambs born in March and May reflects directly the variation noted in pasture quality and quantity those years.

Close examination of Table 1 indicates that the number of lambs weaned and marketed is an extremely important factor influencing relative profits.

Ewes lambing in February consistently dropped and weaned more lambs than those lambing in March and May. Prices received for these February lambs were consistently higher. However, feed costs for wintering ewes lambing in February and for finishing their lambs were enough greater that no real economic advantage was shown for this group.

The February and March lambing groups showed a small though non-significant advantage in terms of return per ewe over feed costs alone. Differences between years within groups varied widely.

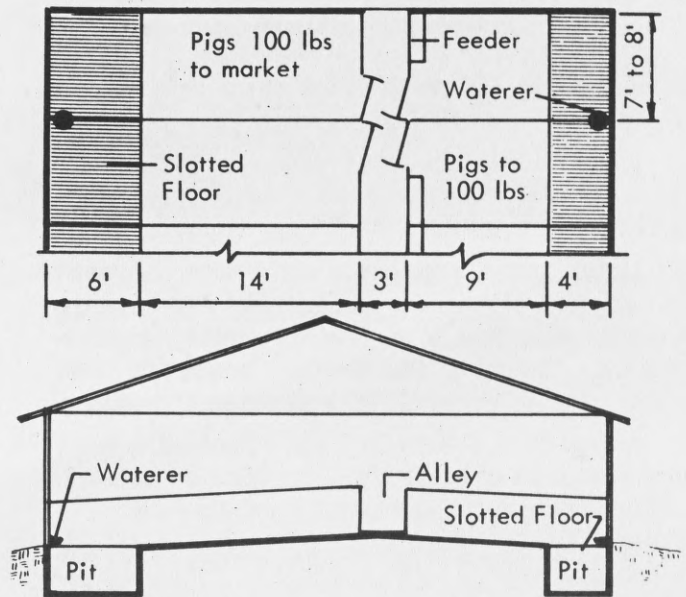
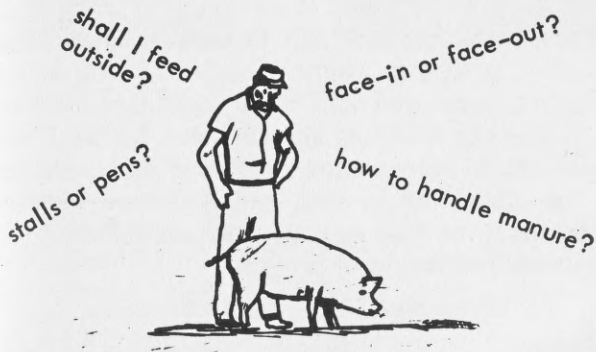
## SUMMARY

A study was conducted to investigate differences in return over feed costs from commercial sheep management systems where lambs were born at various times during the normal lambing season.

On the basis of this study as conducted, there was no significant difference shown between the three groups, which began lambing February 1, March 15, and May 1. Other factors, such as feed supply and availability of shelter and labor, must be considered of prime importance in selecting the most desirable lambing date for a specific unit.

Table 1. Summary of Four Years Data:

		Group I Feb. 1	Group II Mar. 15	Group III May 1
Number of ewes involved	1963	19	21	19
	1964	19	16	18
	1965	21	21	21
	1966	21	21	21
Total		80	79	79
Lambs dropped (per cent)	1963	157.9	157.1	126.3
	1964	152.6	131.3	133.3
	1965	142.9	181.0	133.3
	1966	157.1	109.5	133.3
Average		152.6	144.7	131.6
Lambs weaned (per cent)	1963	131.6	123.8	100.0
	1964	147.4	112.5	122.2
	1965	142.9	161.9	119.5
	1966	142.9	109.5	114.3
Average		141.2	126.9	114.0
Days of age @ weaning	1963	81.4	138.8	123.7
	1964	93.6	116.3	149.4
	1965	81.5	123.4	131.6
	1966	84.5	131.2	136.9
Average		85.3	127.4	135.4
Average weaning weight	1963	67.4	81.7	66.5
	1964	64.3	69.7	80.5
	1965	70.8	84.5	62.1
	1966	68.9	89.0	92.7
Average		67.9	81.2	75.5
Lambs marketed (per cent)	1963	131.6	123.8	94.7
	1964	147.4	112.5	122.2
	1965	138.1	161.9	119.5
	1966	142.9	109.5	114.3
Average		140.0	126.9	112.7
Days of age @ market	1963	130.9	188.7	232.6
	1964	149.8	193.8	207.9
	1965	143.4	175.2	218.2
	1966	152.0	161.4	156.2
Average		144.0	179.8	203.7
Average market weight	1963	94.2	103.4	113.8
	1964	93.8	109.3	108.1
	1965	100.4	105.0	104.2
	1966	103.6	100.7	98.9
Average		98.0	104.6	106.3
Feed Cost per ewe	1963	9.09	9.36	8.58
	1964	11.25	10.89	9.69
	1965	13.77	14.37	12.30
	1966	13.94	12.81	10.13
Average		\$12.01	\$11.86	\$10.18
Lamb feed cost per lamb	1963	3.95	2.40	4.54
	1964	4.91	4.29	3.08
	1965	5.84	3.40	6.41
	1966	5.57	1.60	1.01
Average		\$5.07	\$2.92	\$3.76
Return per ewe over feed cost if lambs sold as feeders	1963		17.20	11.89
	1964		13.41	17.43
	1965		22.55	10.58
	1966		16.51	20.49
Average		\$17.42	\$15.10	
Return per ewe over feed cost if lambs sold as fats	1963	20.24	18.06	15.19
	1964	19.61	16.87	19.92
	1965	15.70	23.66	16.00
	1966	16.59	16.84	19.91
Average		\$18.04	\$18.86	\$17.47



## A NEW HANDBOOK FOR SWINE PRODUCERS

Most successful producers of hogs know and use many planning and operating procedures as they manage their business. A hog producer's primary objective is usually to make as much money as possible with the available labor, time, and money. To meet this objective, he must understand the relationships of production costs such as:

1. Number of pigs farrowed and saved per sow. Profit usually comes from those pigs over a six pig average.
2. Quantity of feed needed. A controlled environment usually reduces this cost.
3. Amount of labor needed. Well-designed facilities reduce this cost.
4. Buildings and equipment. The investment increases with confinement production, but may be offset with labor and feed savings.

These relationships, with the emphasis on buildings and equipment, are discussed in a recently released book, "Swine Housing and Equipment Handbook." The recommendations and drawings within the book were prepared through the Midwest Plans Service from information from successful swine producers and agricultural engineers from the thirteen North Central States.

The areas of swine production discussed within the book include: Gestating facilities, farrowing facilities, young pig facilities, and finishing facilities. Within each section are recommended management procedures, sample floor plans for buildings, ventilation requirements, floor slope requirements, and space requirements.

The book also contains sections on slotted floor construction, heating and cooling equipment, ventilation requirements, manure disposal, plans for home-made equipment, and descriptions of construction materials.

Obtain your copy of MWPS-8, "Swine Housing and Equipment Handbook," for \$1.00 from local county agent offices, or write to the Extension Agricultural Engineer, North Dakota State University, Fargo, North Dakota 58102.