Fall Lambing Management Calendar

NDSU Research Extension Center
Hettinger, North Dakota

North Dakota State University
Agricultural Experiment Station

Our Goal

The goal of this calendar is to provide you with a management plan that has developed as a result of fall lambing research at the NDSU Hettinger Research Extension Center at Hettinger, North Dakota. The keys to successful use of this management regime are: **1) strict adherence to calendar dates, 2) optimum use of the ram effect, 3) higher than normal ram to ewe ratios (one ram to 20 ewes), and 4) focused ewe nutrition.**

All research was conducted with western white-faced ewes and ram types (21 micron wool), which suggests that this is a good place to start. Once producers have perfected fall lambing in their operation using traditional genetics they can begin to interject other breeds into the system to evaluate how they might also fit.

Producers must evaluate why they want to change from highly predictable traditional lambing systems to fall lambing. Producers need to look beyond economics, if that is the motivating factor, and carefully determine if the management calendar will fit with other activities of the farm/ranch operation. There are many technologies, such as: ultrasound, production record keeping programs, and enterprise record keeping programs, which are already available to producers and if employed will enhance the productive outcome of fall lambing in their operation.

Following this are some short excerpts from areas that are critical to successful development of a fall lambing management plan specific to your operation. To customize an out-of-season management plan for your operation you can get assistance from:

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The Reason for this Calendar Beginning in July

To effectively use this calendar you need to begin the thinking process when selecting ewe lambs that were born in the spring (January-May) or mature ewes with the intent that you would expose them to lamb in January and then re-expose them to lamb again in the fall. Selected ewe lambs will be bred to lamb their first time when they reach 20-24 months of age. Once they have lambed in the fall they are exposed to lamb only in the fall, with January as their clean-up lambing period. Ewes that do not lamb in either September or January are removed from the breeding program.

Nutrition of Fall Lambing Ewes

It is important to realize that the nutritional requirements for ewes are set so that the ewes end each production year at similar body weights (and presumably the same body condition score) as at the beginning. This is true for fall lambing ewes as well as spring lambing ewes. The nutritional needs of ewes should be monitored closely during the reproductive phase. Using feeds high in energy and protein approximately two weeks before breeding can increase the ovulation rate and increase the chance of multiple births. It is important to maintain good body condition throughout the gestation period and carefully monitor health during lactation. Although ewes may be allowed to lose weight during lactation without affecting future lamb crops, good body condition should be maintained at all times.

If fall lambing ewes are highly productive ewes, that are expected to re-breed for spring lambing, it is important that during lactation ewes are not allowed to lose much weight as they must be able to re-breed soon after the lambs are weaned.

Using Records to Improve Production

Production records serve many purposes. The primary purpose is to evaluate the genetic potential of an individual flock. Producers should use records to locate productive ewes, to select replacement stock and, when possible, to evaluate sires. This is true for any lambing season, including fall. The genetic base to produce lambs is available in our sheep population. What producers need to work on is finding those ewes with the genetic potential to produce lambs **and raise them**. Maintaining and using production records is one way producers can move their production forward. The **North Dakota Sheep Production Testing Program** is one tool producers can use.

Economic Considerations in a Fall Lambing Flock

Fall lambing shows promise for producers in the Northern Plains. There may be several benefits to producers including, but not limited to, reduced weather risk at lambing time, marketing at peak lamb prices, marketing at more than one time during the year and increased efficiency in facilities and labor use. These potential benefits may be used to increase the profitability of your flock.

When contemplating a management change, an astute producer will also look at potential economic pitfalls relating to the change. These may include, but not be limited to, an increase in overall feed cost, a lowering of reproductive performance, an increase in labor and management requirements, and an increase in marketing cost.

It is imperative that producers carefully calculate the economic implications of the switch to fall lambing and the total impact that these changes will have on cash flow, profitability and total farm management. Some potential benefits may not accrue to your flock. For example, while the fall lambing scenario has potential to increase the efficiency of facility use, if an existing facility already is sized for the flock and no flock size expansion is planned, using the same facility three times in two years for the same number of ewes would not reduce fixed cost per ewe and will increase variable facility cost.

Likewise, if ewes are not sorted by production stages and fed appropriately, feed costs for the flock as a whole can increase dramatically. Marketing costs can increase if small groups are marketed several times a year rather than one time. Both sides of the equation need to be considered in making the decision to switch to a fall lambing system.

In summary, the fall lambing system has good potential for producers in this region. Careful planning is required to ensure that you receive the economic benefit such a switch may bring to your operation.

Grazing Plan

A good starter to a grazing plan is a range inventory on all pastures available to the operation. Range inventories provide information such as carrying capacities, condition of pasture, stocking rates, key species, and acreage of invasive species in each pasture. From this, short and long term goals can be set and a grazing plan can be drawn up to utilize pastures to benefit both livestock species and plant species. Each pasture should be monitored throughout every grazing season. Remember, a grazing plan is a guideline and not every growing season is the same. Carrying capacities and stocking rates will change from one growing season to the next and over time with a proper grazing plan.

Early spring grazing should occur on domesticated cool-season species, such as crested wheatgrass and smooth bromegrass. These species should be in the 3 to 3˚ leaf stage before ewes or any livestock species graze. These cool-season species reach grazing readiness as early as April 20 and as late as the middle of

May. Proper stocking rates should based on carrying capacity and desired length of grazing period planned and a good rule of thumb is to take half and leave half (50% use).

Native rangeland should not be grazed until key native cool-season species reach grazing readiness (3˚ to 4 leaf stage). In a typical growing season these species reach grazing readiness around the end of May to the first of June. The timing of ewes going out to native pasture fits well with fall lambing since the rams are removed from ewes at this time. Native pasture should be stocked based on the carrying capacity of the pasture. If leafy spurge infested native rangeland is available, ewes can start grazing these acres as early as May 15, without harming native species. Evaluate the infested acres and if the leafy spurge plants are at least 3 to 4 inches tall turn ewes out. In a multi-species scenario using cattle and sheep, stocking rates of cattle should be based on the carrying capacity of the native pasture and sheep stocking rates should be based on actual infested acres. The recommended stocking rate for sheep on leafy spurge infested rangeland is one to two ewes per acre of leafy spurge for four months. Cattle should not be turned out until key native cool-season species reach the 3 ˚ to 4 leaf stage.

Ewes and other livestock species should come off of native rangeland when 50 to 60% use is achieved or by October 15 depending on condition of pasture and climatic conditions. Ewes should be transferred to a fall pasture (crested wheat grass or wildrye) or crop aftermath.

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It is important that the dates highlighted in this calendar be followed.

This management calendar involves 12 months — July 2002 through June 2003.

Future management calendars should be amended consistent with the dates used in this calendar.

Use of the Footnotes

Footnotes with the dates printed in **green** represent management directed toward September lambing; those in **red** represent management for January clean-up lambing; **blue** dates focus on profit-maximizing management for ewes that will be eliminated from the the fall lambing management plan because they did not conceive for either September or January lambing.

JULY

SUN	MON	TUES	WED	THUR	FRI	SAT
	1 Evaluate rams for breeding soundness	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17 Rams go out (1 ram: 20 ewes)	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

7/1 Evaluate rams for breeding soundness and trim hoofs on rams for the next breeding period.

7/17 Rams go out (1 ram: 20 ewes) with ewes that are not bred to fall lamb and 10 month old replacement ewes. These ewes are interspersed with the ewes that are pregnant to lamb in September.

AUGUST

SUN	MON	TUES	WED	THUR	FRI	SAT
				1	2	3
4	5	6	7	8	9	10 Begin feeding thin ewes grain
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25 Ewes come off grass	26 Ultra-sound ewes	27 Sort non-pregnant ewes off and return to grass with rams	28 Pregnant ewes crutched and put in lambing barn/normal grain feeding	29 Lambing could begin (expect 2% to lamb by 9/15)	30	31

8/10 Begin grain feeding if thin ewes are evident.

8/25 Ewes come off of grass.

8/26 Ewes are ultra-sounded for pregnancy.

8/27 Ewes not pregnant for fall are sorted away and go back to grass with rams.

8/28 Pregnant ewes are crutched and put in lambing barn. Normal grain feeding begins if it had not started on 8/10 due to thin ewes.

8/29 First lamb could be born (expect 2% of fall lambing ewes to lamb by 9/15).

SEPTEMBER

SUN	MON	TUES	WED	THUR	FRI	SAT
1	2	3	4	5	6 Take rams away from ewes that are exposed for winter lambing	7
8	9	10	11	12	13	14
15 Intensive fall lambing begins	16	17	18	19	20 Expose baby lambs to starter feeds	21
22	23	24	25	26	27	28
29	30					

9/6 Rams taken away from ewes exposed to lamb in the winter.

9/15 Intensive fall lambing begins.

9/20 First time that fall born baby lambs are exposed to starter feeds.

OCTOBER

SUN	MON	TUES	WED	THUR	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19 End of fall lambing period
20	21	22	23	24	25	26
27	28	29	30	31		

10/19 End of fall lambing period.

NOVEMBER

SUN	MON	TUES	WED	THUR	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11 First weaning date	12	13	14	15 Evaluate rams for breeding soundness	16
17	18 Lamb ration changed to 50% pelleted starter and 50% grain ration	19	20	21	22	23
24	25 Lamb ration changed to 100% grain ration	26	27 Ultra-sound ewes exposed for winter lambing	28 Sort off non-pregnant & turn rams out with these ewes (1 ram: 33 ewes)	29 Shear winter lambing ewes & put into winter lambing facilities (begin graining)	30

11/11 First weaning date with lambs going to feedlot and ewes going to dry grass pasture that has at least one half mile separation from any MALE SHEEP. Weaned ewe lambs go to feedlot with wether lambs and receive same pelleted starter feed as fed while with ewes.

11/15 Evaluate rams for breeding soundness and trim hoofs on rams for the next breeding period.

11/18 Lamb ration changed to 50% pelleted starter feed and 50% grain ration (20% alfalfa, 75% barley or corn, 5% soy bean oil meal, and supplements).

11/25 Lamb ration changed to 100% grain and roughage eliminating starter pellets.

11/27 Ultra-sound ewes exposed for winter lambing.

11/28 Sort off mature ewes that did not fall lamb and are not pregnant for winter lambing (expect 1-3% annually). Turn rams out with these ewes (1 ram: 33 ewes).

11/29 Shear winter lambing ewes and put into winter lambing facilities. Begin grain feeding to winter lambing ewes. Replacement ewes lambing for their first time should be sorted and fed separately to receive additional energy.

DECEMBER

SUN	MON	TUES	WED	THUR	FRI	SAT
1	2	3 Final weaning date for lambing ewes	4 Treat for Coccidiosis in water source	5	6	7
8	9	10 Work ewes that lambed in the fall cull for age, condition and soundness	11 Winter lambing could begin	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28 Winter lambing begins in earnest
29	30	31				

12/3 Final weaning date for fall lambing ewes with ewes added to those weaned earlier and lambs added to feedlot lambs or started in a separate pen and added to those weaned earlier after ten days if pens are available. It is advisable that any slow growing lambs be handled separately until they catch up to the other lambs.

12/10 Work ewes that lambed in the fall culling for age, condition, and soundness.

12/11 Winter lambing could begin, expecting 1 to 3% to lamb in first cycle.

12/28 Winter lambing begins in earnest.

JANUARY

SUN	MON	TUES	WED	THUR	FRI	SAT
			1	2	3	4
5 Expose baby lambs to starter feed	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

1/5 Expose winter lambs to starter feed (use 18 to 20% protein ration balanced for baby lambs).

FEBRUARY

SUN	MON	TUES	WED	THUR	FRI	SAT
						1 Weigh fall born ewe lambs. Select replacement ewe lambs.
2 End of winter lambing period. Replacement ewes are sent to separate bunk line	3	4	5	6	7	8
9	10	11	12	13	14	15 Remove rams from mature ewes that did not fall or winter lamb
16 Ultra-sound ewes that did not fall or winter lamb	17	18	19	20	21	22
23	24	25	26	27	28	

2/1 Ewe lambs are weighed to select for replacement ewes. Replacement should weigh in 70 to 90 lb range.

2/2 End of winter lambing period.

2/2 Replacement ewe lambs (for fall lambing) fed separately ration changed to 80% alfalfa and 20% barley. Wether and non-replacement ewe lambs stay in feedlot.

2/15 Remove rams from mature ewes that did not fall or winter lamb.

2/15 Ultra-sound ewes that did not fall or winter lamb. A decision will have to be made at this time if you wish to spring lamb pregnant ewes or sell as bred ewes. Open ewes should be sold to the slaughter market.

MARCH

SUN	MON	TUES	WED	THUR	FRI	SAT
						1
2	3	4	5	6	7	8
9	10	11 First weaning period with ewes being added to isolated fall lambing ewes	12	13	14	15
16	17 Evaluate rams for breeding soundness	18	19	20	21	22
23	24	25	26 Second weaning period for winter lambing ewes	27 Treat for Coccidiosis in water source	28	29
30	31 Work winter lambing ewes cull for age, condition, soundness. Fall lambing replacement ewes are weighed and go through a second selection process					

3/11 First weaning period with ewes being added to isolated fall lambing ewes and lambs. Handle similar to those weaned in the fall period.

3/17 Evaluate rams for breeding soundness and trim hoofs on rams for the next breeding period.

3/26 Second weaning period for winter lambing ewes.

3/27 Treat for Coccidiosis in water source.

3/31 Work winter lambing ewes and cull for age, condition, and soundness.

3/31 Fall born replacement ewe lambs are weighed and go through the second selection process. Ewe lambs that don't make the cut go to feedlot. (Producers set criteria based on soundness and performance.)

APRIL

SUN	MON	TUES	WED	THUR	FRI	SAT
		1 Shear all fall lambing ewes. Replacement ewe lambs are crutched and faced.	2	3	4 Rams go out with all ewes except replacement ewe lambs born the previous fall	5
6	7	8	9	10	11	12
13	14	15 Wether and non-replacement ewes are sold	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

4/1 Shear all fall lambing ewes.

4/4 Rams go out with all ewes except replacement ewe lambs born previous fall. (1 ram: 20 ewes).

4/15 Wether and non-replacement ewe winter lambs, from feedlot, are sold.

MAY

SUN	MON	TUES	WED	THUR	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25 Take rams away from ewes	26 Ewes go to grass including fall born replacement ewes lambs	27	28	29	30	31

5/25 Rams taken away from ewes.

5/26 Ewes exposed to lamb in the fall go to grass and replacement ewe lambs go to grass with mature ewes (120 pound approximate wt).

JUNE

SUN	MON	TUES	WED	THUR	FRI	SAT
1	*2*	*3*	*4*	*5*	*6*	*7*
8	*9*	*10*	*11*	*12*	*13*	*14*
15	*16*	*17*	*18*	*19*	*20*	*21*
22	*23*	*24*	*25*	*26*	*27*	*28*
29	*30*					

Notes