

FALL CALVING IN THE INTERMOUNTAIN WEST

Dale R. ZoBell, Craig Burrell, Darrell Rothlisberger and Eleanor Jensen

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Fall calving has been practiced by beef producers for many years, although in small numbers relative to spring calving. The spring calf crop has been a traditional event for most beef producers and probably will continue to be. There are distinct advantages, however, to fall calving which producers could take advantage of. The potential for higher conception and weaning rates, price premiums and the elimination of calf scours are among the reasons some beef producers have switched from spring calving their herd to fall calving. When considering a new method of production, an assessment of the relative advantages and disadvantages can be helpful.

BENEFITS OF FALL CALVING

- Higher conception rate
- Lower calf death loss from birth to weaning
- Stronger market prices (3-5% premium)
- Culls culled at weaning – Stronger prices – up to 24%
- Calves wean easier
- Inexpensive pasture gains
- Cows give more milk longer
- Cows in better condition at calving
- Labor can be a positive or a negative in the fall
- Increased availability of bulls for lease (versus owned)
- Cows calve in better conditions on spacious, dry, clean pastures
- Less dystocia and stronger calves that require less assistance
- Reduced weather risk during calving
- Scours and pneumonia virtually eliminated in calves
- Less black fly problems
- Calves wean easier because they are accustomed to dry feed, presence of people and confined surroundings



DISADVANTAGES OF FALL CALVING

- Winter feed costs higher (10-15%) and management
- Calves may require a creep ration
- Should have cow close in during late summer for supervision – may still be out on range
- Higher level of management is required during winter
- A.I. or breeding takes place in cold weather

EARLY WEANING CONSIDERATIONS

Early weaning of fall calves has been practiced by some operations. Calves have been weaned when they were only 42 days of age. However, if the early weaning is going to have a great

impact on the number of cows cycling and conceiving early in the breeding season, calves must be weaned between 42 and 80 days of age. Early weaning may also offer an alternative to cut feed costs in some operations. For example, winter range or crop residue may provide adequate nutrition for a dry cow. It may require considerable supplementation to support a cow/calf pair on this type of feed resource. It may be less expensive to wean the calf and feed it in a drylot, then turn the cow out on the inexpensive forage.

ECONOMICS

Economics is the key reason to examine fall calving and this should be the primary reason for any management decision. Figure 1 illustrates that there is seasonality in calf prices with the lows coming during the traditional fall calf run. Calf prices are at their highest in late March through April when fall-born calves would normally be weaned.

Figure 1. Seasonality of markets (550 lb calf)

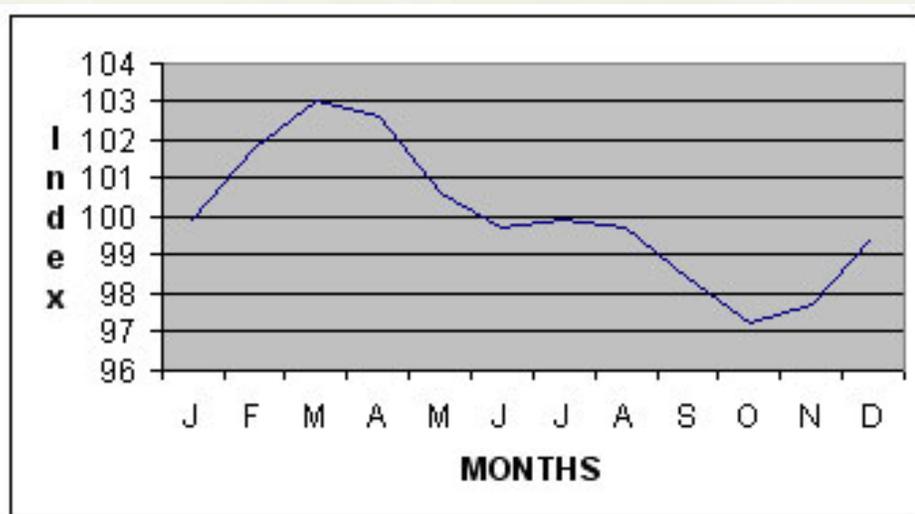


Table 1 provides an example of production variables that could be anticipated with fall calving and the associated costs and returns. Each operation would vary and these values are used as averages for comparative purposes.

Table 1. Economics of Production for Fall Calving versus Spring Calving

	Calving Season	
	Spring	Fall
calf crop weaned/cow exposed %	83	87
average weaning weight	495 lbs	515 lbs*
lbs weaned/cow exposed	410 lbs	448 lbs
@ \$.90/lb	\$445	\$463
Potential price premium (3-5%)		\$477 to \$487
Difference	---	\$32 to \$42
Additional Feed**		\$25

* Fall born calves could weigh 20 lbs more since they are born earlier in calving season.

** A calculation of extra feed inputs (partially offset by reduced pasture costs for the cow) shows that production costs are approximately \$25 higher. The potential \$32 to \$42 extra return should offset the anticipated increased production costs for fall calving herds.

FALL CALVING MANAGEMENT CONSIDERATIONS

Pre-Calving (May to Mid-August) - The easiest feeding period for the fall-calving cow is the grazing period from spring until mid-August when calving starts. The only precaution is to ensure that a body condition score of 4.5 to 5 is achieved by calving time. Green forage will likely provide enough protein, energy, vitamins and minerals to meet the cow's needs. It is also a good time to use native bush and marginal pastures. Forcing pregnant dry cows to browse on leaves and twigs is acceptable because they do not need good quality pasture at this time.

Calving (Mid-August and September) - Cows should be moved to pastures that are easily supervised for calving. These pastures should also be of better quality than those used during the pre-calving period. Either previously grazed pastures or hay fields that have good regrowth are suitable. Hay fields have an advantage over previously grazed pastures because they are uncontaminated by cattle parasites and diseases and therefore are ideal for calving. Cereal stubble grazing may be acceptable if sufficient green growth is present.

Post-Calving (October) - The cow-calf pairs can stay on pasture after calving as long as forage remains plentiful and is of high quality. Do not permit a drop in cow condition. The manager must closely supervise the herd because weather, forage quality and forage availability can change rapidly during the fall. Cows suckling calves are much more sensitive to a lack of nutrients than spring calving cows. Feed good quality hay or grain if forage quality and quantity deteriorates. Begin full winter feeding as soon as pastures are finished.

Breeding To Weaning (November to March) - The full winter feeding program should begin by the time breeding starts. Cold stress can be minimized by following good animal husbandry principles; however, adjustments to the feeding program will be required. Cattle produce heat as a normal by-product of digestion, metabolism and activity. A lactating cow produces more heat as a byproduct of increased digestion and metabolism and therefore can withstand lower temperatures than a dry cow. This means that a smaller share of feed is used for heat production leaving a larger share for productive purposes. Wind increases a cow's need for energy. Wind protection during winter is required for all beef cattle, regardless of when they calve.

Post Weaning (March to May) - The cow's feed requirement is reduced by about one-third after weaning. The risk of energy-requiring cold weather stress is also lower during late winter and spring. From weaning until turnout to grass, dry cows can use poor quality forage. Loss of body condition can be tolerated provided that the loss is not too rapid (not more than 3/4 lb per day) and the cow does not fall below a condition score of 4. Trace mineral fortified salt and vitamin supplementation is required. If straw or badly weathered hay is fed, some energy (e.g., grain) and protein may be required in moderate amounts.

HEALTH

Research results and producer experience shows that fall-calving herds have less calving difficulty, and very little scours or pneumonia, compared to spring-calving herds. This results in significantly less calf death loss. For example, one report found calf death loss at or shortly after birth at 1.2 percent for fall calving cows and 5.6 percent for spring-calving cows on average. The report suggests that the spring-born calves (January to March) died due to wet and cold environmental conditions. Fall-born calves will generally mother up and nurse without assistance.

Fall-born calves are usually born in spacious, dry, clean pastures during warm weather. The risk of wet, muddy conditions is less when compared to spring calving. Although less calving assistance is required, routine checks and calving supervision are recommended, especially for first calf heifers. Vaccinate and treat calves as prescribed by your veterinary practitioner.

GETTING STARTED WITH FALL CALVING

Since the majority of beef cows are now calving in the late winter or spring, there may be some difficulty in starting a fall-calving program. Slightly different approaches are required depending on whether the program is starting from scratch or involves switching from spring to fall calving.

ALTERNATIVES FOR SWITCHING FROM SPRING TO FALL CALVING

- Delay breeding your cows for 6 to 7 months after the normal breeding season. This may be difficult to do because of cash flow commitments, but probably is the easiest method to manage.
- Split the cow herd and delay breeding the late calvers.
- Delay breeding replacement heifers. Delaying both the heifers and late calvers may be carried out together to speed up the change over.

STARTING FROM SCRATCH

Purchasing a fall-calving herd is not likely possible. If spring-calving cows are purchased, the alternatives already discussed apply.

- Purchase virgin heifers. The investment can be kept to a minimum by purchasing light (350-400 lb) heifers and/or feeding for a moderate rate of growth (1.0 lb/day) through the winter. Moderate growth is acceptable because the heifers have an extra six months to reach the desired weight at breeding time. Of course, open heifers could be purchased any time up to breeding as long as the minimum target weight at breeding for the breed is reached. Pregnancy testing should be done 45 days or more after the end of the breeding season. This will allow selection of only pregnant heifers for wintering.
- Another alternative is to purchase late or summer calving cows. These are likely the least productive cows. If this is the method chosen then purchase about 50 percent more cows than needed and cull heavily after a short (45 day) breeding season. Avoid buying cows that are either not in calf or suckling a calf because they are likely to be infertile.

CONCLUSIONS

It is imperative that beef producers carefully weigh the advantages and disadvantages of fall calving. Visit with other producers who are practicing fall calving. Economics is the prime determinant but other factors such as labor and animal health should also be considered. Tradition dies hard but often there are good reasons that particular practices continue. Be sure any changes on your operation are for the right reasons.

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