



Out-of-season lambing

Fall or out-of-season lambing involves breeding ewes in April and May to produce lambs in September and October. The inability of most breeds of sheep to cycle and breed in the spring to early summer is a major constraint for success. Despite that there are producers who are successful in getting a high proportion of their ewes to lamb in the fall. Some of the benefits for attempting to have ewes lamb in the fall include:

- Forage availability for ewes in early lactation.
- Weather conditions are ideal for pasture lambing.
- Lambs born at this time of the year hit market weights when supplies are low and generally sell for a higher price.

The key to success in obtaining a high percentage of ewes that lamb in the fall is to induce estrus and ovulation in ewes that are in seasonal anestrus (non-cycling). There are basically four approaches that may be used:

- Selection of breeds and ewes within breeds that are more likely to cycle during the spring.
- Manipulate the light-dark cycle of the ewes or administer melatonin implants.
- Administer hormones, usually progestins plus gonadotropins.
- Use of the "ram effect." This may be used alone or in conjunction with pre-treatment of the ewes with progestins.

Trying to control light exposure is not feasible for commercial use. Melatonin implants, progestagens and gonadotropins do not have FDA approval for use in sheep in the United States at the present time. One is left with breed selection and the use of the "ram effect" for getting ewes to breed for out-of-season or fall lambs.

The use of the "ram effect" is the most important management tool to use in improving the fall lambing rate.

Dorset, Polypay, Rambouillet, and crosses of these breeds are commonly mentioned as breeds to consider for use in a fall lambing program. Other breeds also will have a certain percentage of ewes that cycle for out-of-season lambing. Selection studies for shortening or eliminating the anestrus period have produced encouraging results.

The use of the "ram effect" is the most important management tool to use in improving the fall lambing rate. The ram effect is a phenomenon where anestrus ewes are induced to begin cycling by the introduction of a ram. Ewes must have had no previous ram exposure for a minimum of three to four weeks. This means not even fence line contact.

Ewes that respond to the ram effect have two peaks of breeding

Shortly after ram introduction there is a hormonal response in the ewe that results in ovulation within 50 hours. This ovulation is generally not accompanied by estrus and is commonly referred to as a "silent" estrus. All subsequent ovulations are accompanied by behavioral estrus and the ewes are mated by the rams. Ewes that respond to the ram effect have two peaks of breeding activity that occur around days 18 and 24 after ram introduction. The principal behind the ram effect is based on the pheromones secreted by the glands of the wool follicles. Their secretion is androgen dependent. These chemicals plus the sight and sound of the ram result in bringing the ewes into estrus.

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Breed of ram can influence the number of ewes responding to the ram effect and their overall pregnancy rate. New Zealand research has shown that Romney rams are less effective than Dorsets in inducing the ram effect. Research conducted at Virginia Tech University indicated that Dorset rams were superior to Suffolk rams both in manifesting the ram effect and settling ewes for out-of-season lambing. Yearling rams are not as good as mature rams.

When breeding for fall lambing overall fertility and prolificacy will be lower than when ewes are normally mated. Another negative that might be observed is smaller birth weights in lambs. This tends to occur when ewes are exposed to environments with high summer time temperatures. Since these temperatures do not occur in western Oregon, this should not be an issue.

Fall lambing requires top management and knowledge of reproductive physiology and selection. It does merit consideration because it is a means for leveling out the lamb supply by producing lambs at a time of the year when few are being produced.





(<https://extension.oregonstate.edu/sites/default/files/styles/full/public/images/2018-08/fall-lambs.jpg?itok=qUojKyKw>)

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