

Animal Enhancement Activity – ANM26 – Managing calving to coincide with forage availability



Enhancement Description

This enhancement uses a controlled breeding season to match livestock nutrient requirements to available pasture forage and reduce supplemental feeding. This enhancement is applicable to all grazing livestock.

Land Use Applicability

Pastureland and rangeland

Benefits

Managing calving to coincide with the production of palatable, high quality pasture matches forage availability to the peak nutrient needs of beef cows and allows nursing calves to use pasture for much of their growth. The result is improved animal health for lactation and reproduction, lower calf death losses and more efficient use of labor and resources. Matching livestock feed requirements to when forage is most abundant and of the highest quality reduces dependency on supplemental feed, and it saves energy associated with hay production and harvest.

Criteria

Based on forage type and season of growth, use Land Grant University and/or state developed recommendations for controlled breeding and calving seasons (single and/or split) to plan the start and end dates for calving that will match the operation’s herd requirements with forage availability. This enhancement recognizes that time is needed to adjust the controlled breeding and calving season for the operation. The desired start and end dates for calving are based on:

1. Calving (within a herd) taking place within a 90-day or less time period
2. Calving occurring four to six weeks prior to initial availability of good quality pasture

Additionally,

3. Cow – calf pairs are on or are moved to pasture as soon as possible after birth, e.g., they are not left in dry lots or small calving pastures for extended time periods
4. 50% of breeding females are transitioned by the third year of the contract
5. 75% of breeding females are transitioned by the end of the contract period

Documentation Requirements

Document annually by herd the:

1. Percentage of breeding females with a projected calving date that falls within the established calving period
2. Number of calf births occurring between the desired start and end dates
3. Dominant forage type grazed
4. Acres of available pasture

CSP Animal Enhancement Activity

ANM26 – Managing Calving to Coincide with Forage Availability
New Mexico Supplemental Criteria (Sheep Timeline)

ISSUE:

Ranches are contracted to perform this enhancement (activity) and the criteria as written offers little guidance to field staff to judge if it is being implemented in a timely manner. The enhancement needs to be flexible enough to optimize mother cow nutrition and alternatively weaned calf nutrition based on the availability of good forage. Both scenarios have scientific literature to support their positive effects.

BACKGROUND:

Animal Enhancement Activity – ANM26 – Managing calving to coincide with forage availability

Enhancement Description;

This enhancement uses a controlled breeding season to match livestock nutrient requirements to available pasture forage and reduce supplemental feeding. This enhancement is applicable to all grazing livestock.

Land Use Applicability;

Pastureland and rangeland

Criteria;

Based on forage type and season of growth, use Land Grant University and/or state developed recommendations for controlled breeding and calving seasons (single and/or split) to plan the start and end dates for calving that will match the operation's herd requirements with forage availability. This enhancement recognizes that time is needed to adjust the controlled breeding and calving season for the operation. The desired start and end dates for calving are based on:

1. Calving (within a herd) taking place within a 90-day or less time period
2. Calving occurring four to six weeks prior to initial availability of good quality pasture
Additionally,
3. Cow – calf pairs are on or are moved to pasture as soon as possible after birth, e.g., they are not left in dry lots or small calving pastures for extended time periods
4. 50% of breeding females are transitioned by the third year of the contract
5. 75% of breeding females are transitioned by the end of the contract period

Documentation Requirements;

Document annually by herd the:

1. Percentage of breeding females with a projected calving date that falls within the established calving period.
2. Number of calf births occurring between the desired start and end dates.
3. Dominant forage type grazed.
4. Acres of available pasture.

Sheep Production Timeline;

Sheep are seasonal breeders. Initiation and end of this period varies between breeds and with daily air temperature. Generally it is most affected by day length. Sheep breed during decreasing or short day length days. Breeding cycle starts October with peak ovulation in November. Breeding season can last for 5 months.

Estrous Cycle: In sheep the length of estrous or time between periods of standing heat is about 17 days. Estrus or standing heat lasts about 30 to 40 hours with ovulation occurring during the last half of heat. A ewe, once she starts cycling in the fall, will cycle or come into heat about every 17 days. During a 35 day breeding period a ewe should have had the opportunity to cycle and be bred two times. A 60 day breeding period will allow the ewe three opportunities to become pregnant.

Gestation:

Average gestation length or length of pregnancy for sheep varies from 144 to 151 days (about 147 days). Individual pregnancies may vary from 138 to 159 days. Generally the earlier maturing meat breeds and the high prolific breeds such as the Finn have shorter gestation lengths (144 to 145 days), while the slower maturing finewool breeds (Rambouillet) have longer periods (150 to 151). Typically multiple lamb bearing ewes will have slightly shorter gestation periods. It is not unusual for individual ewes within breeds to vary in gestation length by 3 to 5 days. **The last six weeks of gestation is the most critical period in ewe nutrition.** Approximately 70 percent of the fetal growth occurs at this time. Nutrient restrictions during this period may result in lighter lambs at birth, increased postnatal lamb losses, lower levels of milk production, and possibly pregnancy disease (ketosis). **Nutrition for lactation: During the first few weeks following lambing, a lactating ewe requires about the same feed as in late gestation. Weaning;** Lambs are weaned at 60 to 120 days post lambing. Early weaning is generally considered to be 6 to 8 weeks after lambing.

Cool Season Sheep Production Timeline:

Cool season forage growth is well underway in most years in MLRA 36, 48, 49 and 52 by April 15. The science calls for good quality forage to be available to Ewes during their last 6 weeks of pregnancy and during lactation. For a Ewe to be just entering the last 6 weeks of pregnancy around April 15 she would have been exposed for an adequate period to assure maximum impregnation and that the first and last lambs all are born within a 90 day window of time. Exposure would need to end around December 31. Lambing dates would then be expected around May 27. Early weaning could be as early as July 8th.

Warm Season Sheep Production Timeline;

For the rest of NM warm season forage growth is well underway in most years by July 15. The science calls for good quality forage to be available to Ewes during their last 6 weeks of pregnancy and during lactation. For a Ewe to be just entering the last 6 weeks of pregnancy round July 15 she would have been exposed for an adequate period to assure maximum impregnation and that the first and last lambs are born within a 90 day window of time. Exposure would need to end around April 1. Lambing dates would then be expected around August 26 Early weaning could start as early as October 7.