
Transitioning On and Off Pasture

One challenge with grazing is how to help the cows adjust to a new feed source in both the spring and fall. Changing from lower-quality stored feeds to high-quality pasture is much like changing silos. If the change is made too quickly, milk production drops until the cows and the rumen microbes become accustomed to the new feed. The rumen microbes are especially sensitive to sudden changes, because it takes time to shift their numbers and types to those that are more adapted to higher quality forage.

The first day of grazing should be when the grass is only 3 or 4 inches tall, and the length of time cows are let out should be relatively short (1-2 hours). If left out for longer than that, they will likely eat too much and when they return to the barn they may refuse quite a bit of the ration.

Over the next few days, the length of time the cows spend on pasture should be gradually increased until they are out full time. At this point there will also be a gradual increase in the amount of feed they refuse in the barn. Depending upon what the “final” pasture ration is going to look like, protein forages such as haylage, baleage, and dry hay should be reduced first (unless the ration will be based on one of those forages). Next the amount of protein from grain or concentrate should be cut back, because the cows will be increasing their intake of protein from pasture.

If feeding a TMR, the easiest way to make the transition is to mix for 5 to 10 fewer cows (depending on herd size) each day as they are refusing it anyway. When the TMR is being fed at a rate that is less than 70% of the full ration, begin reducing protein levels by 1 pound every 3 days. When the TMR is below 50% of normal, protein and NFC levels should be checked to make sure they are in balance, and at this time the TMR may need to be reformulated.

After 7 to 10 days of transitioning, the ration should be comprised of less than 10 pounds of dry matter from stored forage, and pasture dry matter intake should be greater than 15 pounds. Also, grain mixes should be below 16% protein (or protein concentrates should be fed at a rate of less than 2 pounds per cow).

In the fall, the concerns about changing to new feeds are essentially the same. However, there are a few new challenges. The stored forages to be fed are most likely from the new growing season. Since no two growing seasons are the same, the quality of the forages will be different from what was being fed earlier in the spring. It is hard to predict how the cows will respond to the new forages, in terms of both intake and performance. Also, determining when the grazing season will end can be difficult to predict. If transitioning

begins too early, the opportunity to capture cheap, high quality feed may be lost. Likewise, if it is begun too late, the grass could run out before the stored forages have been introduced.

Predicting the end of the grazing season will be different every year depending on the weather and management of the pastures. However, it is important to try to predict the last day of grazing by using some simple planning techniques. Paddocks should be walked at least once a week beginning in mid-September, and the total amount of the grass dry matter available on the farm should be measured. Once the total “cover” on the farm is known, that number should be divided by the total amount of grass dry matter needed per day. The resulting number is an indication of approximately how many more days of grazing remain if the feeding program stays the same. When there is a significant difference in total grass available from week to week, a transition plan should be put in place.

Strategies for transitioning in the fall will be similar to spring – except things will happen in reverse. Stored forages should be introduced or increased in the barn. Cows should be kept in the barn at night once the temperatures begin to fall below 35 degrees (unless the plan is to outwinter). Eventually the amount of time the cows spend on pasture will be gradually diminished, especially after a frost has killed the grass and there is little to no new growth. At this point the winter ration should be developed, because the majority of intake will be provided in the barn.

By, Karen H. Sullivan,
Animal Scientist
USDA-NRCS
Norwich, New York

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