

Introduction

Converting to a smaller seasonal grazing dairy operation can be profitable if managed properly. With the high cost of grain and energy, a seasonal dairy operation can result in savings in both of these areas. Generally, the cost of product in a seasonal dairy is lower than average because you depend more on pasture than harvested forages. Grass-based producers ensure that forages provide the bulk of the energy and protein required to produce milk by providing high quality pasture during the grazing season and stored forages in the dormant season.

With current energy and grain costs, converting to a seasonal grazing dairy operation may be more economically suitable.



Figure 1. Seasonal breeding involves a 12-month calving interval, estrus detection, light culling and manipulation of day length and endocrine functions.

What is Seasonal Production?

Seasonal production is based on a 12-month pattern where all cows are bred to calve in a 60-day window and then the whole herd is dried off at the same time. Cows are dried off for 30-60 days before they calve in the following year. The major challenge for any seasonal operation is the herd's reproductive management by getting the maximum number of cows to freshen in a short calving window. Cows that are outside of this interval will need to be sold as either culls or replacement animals since this is a cost to the operation.

Importance of Genetics

Selection of the genetics is very important in a grass-based seasonal operation. In the U.S., ninety percent of the cattle genetics are Holsteins. This is based on the fact that they have been bred for a conventional farm operation and the ability to produce in excess of 20,000 pounds of milk per year. In grass-based operations, they are looking for a smaller framed animal similar to the Jersey, Guernsey or Ayrshire body type. These breeds can also be cross-bred to add hybrid vigor.

Forage Quality

Pasture quality is also extremely important in a grass-based operation. Producing and managing quality pastureland can have a major impact on herd performance and return. By establishing the type of pasture needed to meet a herd's nutritional requirements, producers not only protect animal health, but also reduce or eliminate the cost of purchasing alternate feed sources which can add up quickly.

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To determine whether your pasture should be improved, ask yourself, "Are there more weeds than consumable grass?" If weeds have the upper hand, you probably have lower-quality forage, since the desirable grass is competing with weeds for nutrients and moisture. Also, check for signs of plant disease, which can cause forage quality to decline.

When animals graze, the food choices they make is another forage quality indicator. They naturally tend to choose the highest quality forage available. When they would rather eat the hay you put out than grass growing in the pasture, it's a sign forage quality is low.

Body condition is another criteria to use in measuring forage quality. If you see changes like weight loss or deteriorated body condition, it's a sign of poor nutrition. Unfortunately, at that point it requires a great effort to help those animals recover.

Some Tips When Converting

When exploring conversion to a grazing operation, Darrell Emmick, a grazing specialist with New York National Resources Conservation Service, has suggested some steps to evaluate resources:

- First, identify your goals. What do you expect to get out of grazing the cows?
- Next, identify problems to overcome and opportunities in which you can take advantage.
- List your on-farm assets as they are now, such as land, livestock, forages, water, lanes, buildings, machinery and wildlife (NRAES, 2006a).
- Once you complete your inventory, compare your grazing goals to the resources that you have to determine the feasibility of converting to a grass-based seasonal operation.

Conventional, grain-based dairies are often skeptical of switching to grass for fear of lost production and profits which isn't necessarily true. The record grain prices make it increasingly difficult to make money on a grain-based dairy. And, grazing is sustainable. What the cows eat, they later drop as fertilizer. The key is to do your research and be prepared to not expect the high herd average that you did with a conventional grain-based operation.

Resources

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For more information visit www.umass.edu/cdl

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