



INCLUDING ALFALFA IN THE GRAZING SYSTEM Dr. Marvin Hall Dept. of Agronomy Penn State University

Alfalfa grazing is not new. Alfalfa has been grazed alone or in mixtures with grasses and other legumes since its introduction into the United States. Compared with other management systems, however, grazing alfalfa has never been a widespread practice in this country. While alfalfa has been used extensively as a grazing crop in other countries, grazing of alfalfa in this country traditionally has been relegated to a clean-up operation in the fall.

Grazing systems to optimize alfalfa's grazing potential requires a higher level of management than do some grazing systems. In spite of this, interest in grazing alfalfa has been increasing.

Alfalfa Grazing Management Rotational grazing is a "must" for optimum returns in an alfalfa or alfalfa-grass grazing system. Rotational grazing is more labor intensive than continuous grazing because of the need to provide and maintain electric fencing and to move animals from one paddock to another on a carefully planned and executed schedule. Care also must be given to avoid damaging the alfalfa stand, because comparatively high numbers of animals graze on a relatively small area of alfalfa. However, the rewards can offset the extra effort.

There is no set rule on number of paddocks required or on paddock size. Most recommendations call for fields to be divided into a minimum of six to eight paddocks for most effective management. Paddock size depends on the number and size of animals being grazed. However, there should be enough animals in a paddock to harvest the available forage in less than four days.

As an example of a rotational grazing practice, a recent demonstration successfully grazed 24 beef cattle on a four-acre alfalfa plot. The field was subdivided into eight half-acre paddocks. After four days grazing on each paddock, the cattle were rotated. After all eight paddocks had been grazed, cattle were returned to the first paddock, which had recovered and was ready for another round of grazing.

Determining the number of animals that each acre of alfalfa will support in a grazing system is a difficult process. The number of animals per acre can be increased as alfalfa becomes more productive beyond the first year of stand life and as the management skills of the farm operator improve. A conservative suggestion is two to three dairy cows or three to five stockers per acre during the early part of the grazing season.

The numer of animals per acre is normally reduced when alfalfa production declines, such as during the typical mid-summer slump period. It is very important to closely monitor grazing to prevent overgrazing. Overgrazing can force animals to consume more supplement, if one is supplied, increasing production costs. Overgrazing also may force animals to eat the basal stems which are not very nutritious, thus limiting animal gain. Severe overgrazing also could damage the crowns of the alfalfa plants.

Undergrazing, on the other hand, can lead to uneven grazing. When unevenly grazed, the remaining plants become larger and less palatable. When the field is grazed again, the animals once more will favor the young tender plants. This in effect reduces the productive acreage unless the older, larger plants are clipped periodically.

One or more "sacrifice" paddocks also enhance a grazing program where alfalfa is the main forage. A sacrifice paddock is an area, preferably with grass sod, that can be used to hold animals during wet weather or to allow. adequate growth of the alfalfa paddocks. Hay may be fed in sacrifice paddocks to keep pasture growing at an optimum rate.

**Reducing the Risks of Bloat** 

Bloat can be a problem when animals are grazed on young lush alfalfa. Bloat can be prevented through management practices, feeding poloxalene, or a combination of both. New grazing-type alfalfa varieties are just as likely to cause bloat as traditional hay-type varieties. Some of the management tips include:

• Fill animals with another roughage before turning them onto alfalfa the first time. Don't allow animals to get hungry. Hungry animals may over-eat and bloat when they get fresh pasture.

• Gradually (over a five- or sixday period) increase the time that animals have access to alfalfa pasture.

• Observe animals at least twice a day when they are turned onto alfalfa pasture. Some animals are chronic bloaters and should be watched especially close or removed from the pasture.

• Once they are used to alfalfa pasture, leave the animals on the pasture constantly, even at night.

• Extra caution should be taken during wet, cloudy periods in the early spring when alfalfa is making its most rapid growth. Do not put animals onto alfalfa pasture if a heavy dew is present.

• More mature alfalfa is less likely to cause bloat. Minimize potential problems by initially turning them onto alfalfa that has reached the bloom stage.

• Begin feeding poloxalene two to five days before turning animals onto alfalfa pasture. Use higher dosages when animals are first placed on alfalfa pasture, and reduce the rate if no problems occur. Animals on lush alfalfa will require more poloxalene than on more mature alfalfa.



