

Common Grazing Methods and Some Specific Farm Applications

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Many people confuse the terms "grazing system" and "grazing method". In actuality these are very different terms. **Grazing system** is a broad "umbrella" term and is defined as "any integrated combination of animal plant and other environmental components and the *grazing method* by which the system is managed to meet specific results or goals". A **grazing method** is "a defined procedure or technique of grazing management designed to achieve a specific objective". If you examine these definitions closely, you can see that a grazing system can be defined broadly- like an automobile. Grazing method is a subtype of a system- like a truck, station wagon or motorcycle- all of which are automobiles, but are most useful in different situations. Grazing methods are extremely variable in their design and due to this **there is no "one size fits all"** method for all farms. In this paper several controlled grazing methods will be outlined along with specific examples of situations where they are useful.

Continuous stocking This is the simplest grazing method and is almost certainly the most commonly practiced in Georgia. Animals are stocked on a single pasture unit for the length of the grazing season. Utilization of forage in this system is typically low, unless the pasture is overstocked (when animal performance will suffer). Spot grazing can occur in this system, particularly when pastures are understocked or during periods of rapid forage growth. Normally animals are *set stocked* through the entire grazing season, with no animals added or removed from the system. Unfortunately, this makes it practically impossible to achieve optimal forage utilization during the majority of the season. If stocking rate can be altered occasionally during the season, forage utilization can be improved. Continuous stocking can be useful when stocking rate is set properly and maximum individual animal performance is desired (for example, replacement heifers on bermudagrass pastures). In this situation, animals have the ability to select high quality diets, but forage utilization and gain per acre can suffer under these circumstances.

Rotational stocking This method is commonly referred to as "rotational grazing" although animals are actually stocked on the pasture on a rotational basis. Under this system the grazing area is divided into several small "paddocks". Animals are concentrated on these paddocks for relatively short periods of time with the ultimate goal being uniform and efficient utilization of forage species. The number of paddocks can vary from 2 to over 40. Large numbers of paddocks improve control of grazing and animals, but increases input costs and labor. In general, 8 to 12 paddocks provides sufficient utilization efficiency and rest periods for most forage and animal systems. Some operations may benefit from more paddocks- particularly when multiple forage species or herds are grazed.

Grazing period varies according to number of paddocks and range from 14 days to less than 1 day. Following the grazing period animals are moved to another paddock for grazing and the previously grazed paddock is allowed to rest and regrow. This system minimizes the amount of individual animal diet selection and can reduce individual animal performance. However, the improved forage utilization normally allows increased stocking rates and increased animal gain per acre. In addition, the rest periods enable less grazing tolerant species like endophyte-free tall fescue, orchardgrass and native species to persist for longer periods of time. This method also allows a large amount of producer flexibility. During periods of rapid forage growth

some paddocks can be deferred from grazing and used for hay production. This can be an excellent system for beef cow-calf producers, particularly when cool season perennials are grazed.

Deferred grazing or "**stockpiling**" This is a largely underutilized grazing method where forage production is deferred from grazing until later in the season. Stockpiling is typically performed in the fall months to reduce hay needs in late autumn and early winter. This practice is particularly useful in tall fescue based systems where fall growth rates are good and forage maintains quality well into the winter. This practice can also be utilized in bermudagrass systems, but diet quality rapidly declines after frost and protein supplementation may be necessary.

Creep grazing Creep grazing is essentially identical to traditional creep feeding young animals, except that forages are grazed in place of grain feeding. This method allows young animals with high nutrient requirements to access high quality forages like pearl millet, chicory, grazing tolerant alfalfa or winter annuals. Access to these high quality paddocks is provided either underneath electric fences or through a creep opening (See Southern Forages for gate design). Dams are maintained on traditional perennial base forages like tall fescue or bermudagrass and prevented from grazing high quality forages. Excellent calf gains have been reported in Georgia with summer creep grazed pearl millet on fescue based pastures. This is a system that offers excellent potential to improve weaning weights and should be utilized more often in Georgia beef cattle operations.

Table 1. Effect of allowing calves to creep graze pearl millet from June to September (104 d) in North Georgia tall fescue based pasture systems.

	Control	Creep-grazed calves
Calf gain, lb/hd	144	219
Calf average daily gain, lbs	1.38	2.10
Cow weight change, lbs	-60	27

Strip grazing This is a self-descriptive grazing term where animals are held in small areas by a movable electric fence graze and normally graze a one or two day forage supply. Once this 'strip' is utilized, the front fence is moved forward in the pasture. A back fence may or may not be used depending on circumstances. Due to lack of forage selectivity, performance of animals with high nutrient requirements will likely be depressed when strip grazing is used. Labor requirements can also be high for strip grazing. This method works particularly well when dry cows are grazing stockpiled forages as it typically forces high forage utilization rates.

Limit grazing Another self-explanatory term where animals are allowed limited time in certain paddocks. This method is typically practiced when animals are grazing a base paddock containing low quality forages (like dormant bermudagrass or low quality hay) and are allowed periodic access to high quality and high cost pastures (like winter annuals). This is an extremely effective practice where animals limit graze a pasture for a few hours per day or on an alternate day basis. Advantages include decreasing intake of high quality forages to more effectively "balance" animal nutrient requirements (particularly with mature animals grazing winter annuals). Decreased pugging or trampling of winter annuals also improves forage utilization. This method can be used with summer annuals to improve cow condition in mid-summer.

Leader-follower grazing, first-last grazing, or forward grazing In leader-follower systems the herd is sorted into multiple (normally two) nutrient requirement groups. The high nutrient requirement (leader) group is rotated through paddocks before the low nutrient requirement (follower) group. Paddocks are lightly grazed by the leader group which allows these animals to select a high quality diet to meet growth or production needs. The follower group then grazes the paddock to utilize lower quality forage and allow high quality regrowth. This method is used in stocker operations where growing calves graze in front of cow-calf pairs. Dairy operations also frequently use this method with either two or three groups. In a two group system lactating cows

are the leader group with all other cows in the follower group. In a three group system, lactating cows graze first, replacement heifers second and dry cows third.

Summary

All of the above grazing methods can be useful in particular situations. Carefully think through individual farm operation goals and needs. Match grazing methods with animal, plant and producer needs to implementing a successful grazing system. All of the systems above, including continuous stocking, require management skills and inputs. At a minimum, pasture growth rate needs to be monitored frequently with forage and cattle managed in timely manner. Carefully consider farm goals before implementing grazing methods to match systems to desired animal and land productivity.

None of these methods is rigid in nature or "set in stone". Some producers allow the grazing system to determine farm goals while the opposite should be true. A farm need not practice rotational stocking during all periods of the year, with all classes of animals, and on all available forages. Many methods can (and probably should) be combined within a grazing system to meet seasonal needs. For example, a producer may continuously stock bermudagrass pastures during summer months with areas of pearl millet reserved to creep graze calves. This same producer could then rotationally stock additional paddocks of tall fescue in fall and spring months and defer grazing on a few tall fescue paddocks to stockpile forage and minimize or eliminate hay needs. Other producers may not have access to tall fescue and could limit graze winter annuals during winter months while grazing dormant bermudagrass or feeding low quality hay.

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