

Controlled Grazing: It's An Attitude

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Mike Goldwasser, a cattle producer in Southwest Virginia, has been using controlled grazing management for nearly ten years. His livestock operation has grown from 13 cows and calves in 1974 to 55 cows and calves and 800 to 1,000 stockers today. Mike attributes much of his success to implementing a controlled grazing system. "Intensive grazing paid for itself in the first year," he stated.

Mike's interest in agriculture began while serving as a Peace Corps volunteer in Africa. "In addition to teaching math and physics, there was a goal to make the schools as self supporting as possible and to instill in the students a respect for manual labor. As a result, I began a project to raise chickens and became interested in agriculture."

The beautiful hills of Southwest Virginia are well suited for grazing livestock. He looks for different types of enterprises within the area of cattle production that best suit his current needs and interest. At present, a stocker operation best fits his situation but this is subject to change. "It fits small land areas well and is a better use of the land in that regard. I had the time and labor to invest, so I decided to go with a high management

segment of the livestock business. Also, the lighter the animal, the greater the potential financial gain."

Mike feels that he is not a goal driven person in the sense of having more land or cattle, but there are certain things that are important to him. "I want more time to spend with my family," he explained when discussing goals. "I enjoy the challenge of making things work together as efficiently as possible. And I enjoy working outdoors. In order to have these things, I also must make a profit." But, for Mike, quality of life is the guiding principle in determining the type and method of running an operation.

He began grazing with three pastures. From his observations of the effect of cattle on forage and as a result of conversations with Dr. Harlan White, retired Virginia Tech forage extension specialist, he made the decision to begin controlled grazing about nine or ten years ago. "In order to maximize resources, controlled grazing is a necessity," Mike explained.

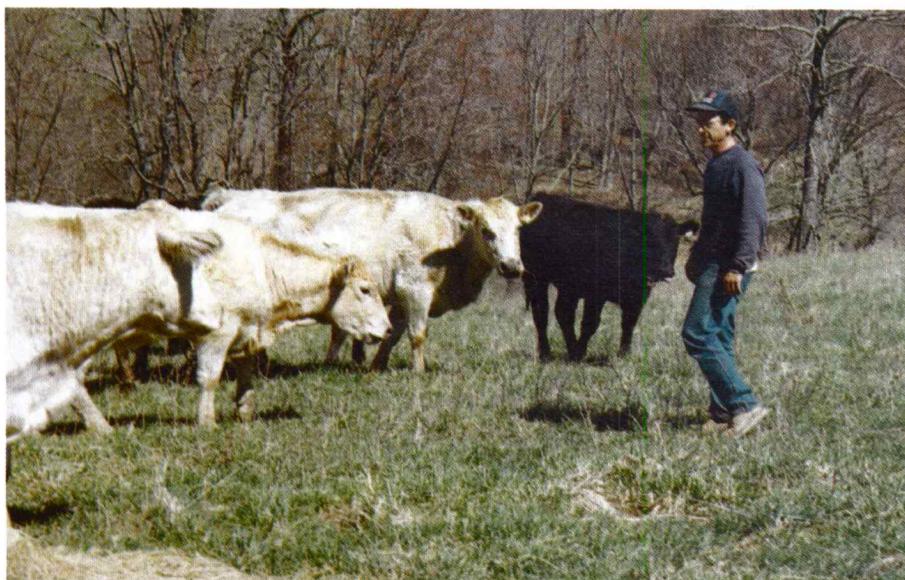
After gaining experience, Mike feels that "while there is no doubt that controlled grazing works, it is hard to have rules because you must consider many factors at any given time such as forages, livestock, and paddock goals. One thing I learned early is that grazing man-

agement is a compromise. There is no recipe. You have to be flexible."

Mike has used both NRCS and extension as information sources. He initially learned about beef cattle management from his county extension agent, Tom Tabor. Dr. White provided assistance and information on controlled grazing considerations. His neighbors also gave advice on conditions unique to the area. Danny Boyer, NRCS soil conservation technician, provided information on alternative water systems, such as a RAM pump and spring development. Mike took advantage of cost share for developing the water system.

His successful experience with intensive grazing management has been used in a variety of ways to disseminate information to others. A case study was done in May 1994 by David Faulkner, NRCS state economist, Kevin Kinvig, Arkansas NRCS economist and Danny Boyer, NRCS soil conservation technician for Carroll and Grayson Counties. This was an effort to relate in an organized way certain "before" and "after" treatment effects on a variety of utilization and resource concerns. Before treatment, the grazing period consisted of 150 days with the grass running out on his home farm in October. Direct access to streams and springs served as the only water sources. Sheet and rill erosion was estimated at nine tons per acre per year. Livestock access to streams contributed to non-point source pollution.

This was compared to the conditions after complete system installation from 1987 to 1994. The system included, among other things, an increase in the number of paddocks to 26, using high tensile electric and polywire fencing, the development of two alternative watering facilities (RAM pump and spring development) serving six troughs and fifteen paddocks, and the implementation of an intensive rotational grazing system. Soil erosion was reduced to 2 tons per acre per year, a 78% reduction! Hillsides, creek banks, paths and pastures have improved cover, contributing to enhanced water quality and improved aesthetics. The streams and springs have



Mike Goldwasser checking on cattle. Mike checks his cattle frequently. Health problems are detected earlier and management decisions are based on actual field and livestock conditions.

more vegetation around them because of minimal livestock use of these areas. A reduction in non-point source pollution of streams is a direct result of less access by livestock to this water source. Mowing and fertilizer applications have been reduced due to better nutrient cycling and the weed suppressing effects of intensive grazing. The grazing period was lengthened significantly.

In a recent training program for NRCS and district employees in southwestern Virginia, Mike's farm was visited to illustrate the practical aspects of forage and livestock management. After a morning classroom period to review basic management and production concerns, Mike and Dr. Harlan White conducted a pasture walk to see the principles as they are actually used. This gave agency personnel an opportunity to see first hand how improved management systems work and to ask questions of a producer and extension specialist. Mike said that "one of the best things NRCS has done is to work towards educating field personnel on livestock production in a way that helps them better relate to producers. Training is needed and ought to be required." Mike feels a sense of debt for the things he has learned from others and sees involvement in related organizations as a way to help repay that debt. He currently serves as president of the Virginia Forage and Grassland Council and has served as president of the Virginia Cattlemen's Association. "Even as I work in these groups, I continue to learn from them."

When asked if he felt his soil was improving, he responded, "I am getting over twice the forage production from my soils than the soil survey says can be produced. I have eliminated bare spots in my fields with fence placement and intensive grazing. Stream banks are in better condition due to livestock access being limited to any one part of the stream for no more than four or five percent of the time throughout the year."

According to the May 1994 Goldwasser case study, the SCS Natural Resource Inventory for 1987 indicated that approximately 1.1 million acres of pastures in the mountain and valley region of Virginia were eroding at rates two to three times sustainable tolerance levels. Such rates are comparable to the "before" treatment conditions on the Goldwasser farm. Given this situation,



Mike Goldwasser inspecting forages. Mike keeps close watch on newly renovated fescue. Cattle performance on this important forage is improved by keeping it vegetative, renovation with clovers and stockpiling.

additional investments in intensive rotational grazing systems offer significant potential for both private economic gain and public benefits from on farm efficiency gains and off site water quality improvements.

There are still areas that need improvement. Travel lanes present a challenge. Also, while manure distribution is better due to intensive rotations as opposed to continuous stocking, a lot of manure is "wasted" in the woods.

His livestock have benefited. Animals are kept separated for health reasons when first brought to the farm. This keeps health problems low. He sees the cattle more often, and they are easier to manage. Their diets have improved with the reappearance of clovers and the vegetative state of the grass. There is better utilization of forages as well.

Much of the grass is fescue. Mike feels that the best strategy for beef cattle is to use what you have. "The whole advantage of forages is low cost. This is lost when whole fields of cool season forages are replaced by other cool season forages." To improve fescue, Mike suggests renovation with clovers, keeping it vegetative and stockpiling it.

"Stockpiled fescue is a real advantage because it extends the grazing season." Each day of grazing is one less day cattle have to be fed. A forage sample of stockpiled fescue tested at 64% TDN and 14% protein. The grazing period has increased from 150 days to 180, a 20% increase. In some years, the grazing

season goes to 250 days, a 66% increase over 1974!

He manages the seasonal availability of forages by haying excess in the spring and changing stocking rates in the summer. Switchgrass has been planted on a few acres in cooperation with Dr. Dale Wolf of Virginia Tech in an effort to reduce the fluctuation in the seasonal availability of forages. "The best advantage of this grass is to put it on poor ground," Mike stated. "It is good for reducing forage shortages in hot summer months." Mike feels he does not have enough warm season perennial grass.

For those considering an intensive grazing system, Mike advises that "you have to want to do it for it to work. You must be open minded and willing to learn and listen to the land, plants and animals. Know that you will make mistakes; just learn from them."

Mike feels that more attention needs to be given to improved forage management systems because "improved grazing management benefits natural resources and is profitable at the same time. NRCS can continue to help producers best by training field personnel on forage management in a way that they can understand the business of farming as well as conservation. Often the two are complementary, but both must be understood for either to work."

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