

More Components

New Gates



Around the perimeter and within the interior fencing, new gates have been installed. Those 12 feet wide allow easy access for equipment (e.g. tractors, mowers, seeders, etc); those 6 feet wide allow for horse and human access only. We chose these particular gates for a few reasons:

- The mesh at the bottom of the gate prevents hooves from getting through, thus preventing injury.
- The mesh and bars of the gates allow for more stability and prevent horses from being able to stand on the lower bars, which would create a sag in gate alignment.
- Gates come in multiple sizes so you can tailor each gate to your farm's needs.

Rotational laneway



Demonstration Horse Farm

In 2005, a team of Rutgers researchers affiliated with the Equine Science Center and several state and federal agencies began a multi-year collaboration. They sought to develop a demonstration working horse farm on the George H. Cook Campus that would use agricultural Best Management Practices (BMPs) to provide solutions to many of the problems facing farm owners and stable managers today.

Our researchers have identified numerous environmental issues, such as preserving water quality, proper nutrient and waste management, farm and pasture management, weed control, fencing, pasture rotation, and soil enrichment. These are just a few of the many facets of farm management that the project will address.

Goals of the Project:

- To develop and maintain the facility as a Demonstration Horse Farm by implementing BMPs that address pasture management, stormwater, and manure issues.
- To conduct educational programs at the Demonstration Horse Farm that demonstrate the implementation of BMPs to enhance and maintain pasture and water quality.
- To utilize the farm site to conduct research on new forage varieties.
- To provide learning experiences and educational programs for the public.

For more information, visit <http://esc.rutgers.edu>.

The project was funded by:



Best Management Practice Demonstration Horse Farm



Development of the Rotational Grazing System



Plan of Action

The plan of action for pasture management is based on an integrated crop management (ICM) approach. ICM is a management approach that establishes a diverse and comprehensive system to manage pastures on a field-by-field basis. An ICM program designed to maintain productive pastures would include:

- Site-specific soil tests
- The use of fertilizer and herbicides when needed
- A rotational grazing plan
- A flexible pasture rotation program
- The use of stress lots or sacrifice areas
- Continual monitoring of forage species and plant density to determine the need for renovation
- A plan to overseed pastures when needed
- Continual monitoring and identification of pasture weeds
- Adoption of a weed management program which includes mowing, increased forage productivity to compete with weeds, and proper chemical control when necessary
- Development of a comprehensive nutrient management plan (CMNP) in order to determine site-specific recommendations for manure storage, composting, and spreading



Components of System

New Perimeter Fence



- The mesh in the fence is small enough to prevent horse hooves from getting through.
- The mesh can be purchased in different heights.
- The 5-foot height can be placed just above the ground to prevent outside intruders (e.g. children, dogs, etc.) from entering the pasture.
- The top board on the fence allows for more visibility and durability. If necessary, the farm can place a strand of electrical wire in front of the top board to deter cribbing and chewing. You can see this wire on the horses' side of the fence.

Rotational Grazing System

Both of the back fields are designed to hold five to seven horses on rotation, utilizing a three-field and a four-field rotation system. Stress lots were designed as heavy-use areas, where hay feeders, shelter, and water are located. In extreme weather conditions, horses can be maintained in the stress lots to allow for pasture recovery. Fields are monitored, and a rotation schedule varies depending on the weather conditions and pasture footing. Horse stocking density is adjusted as necessary; notes are made on a weekly basis as to the conditions of the pastures. Fields are mowed on a regular basis to maintain uniform grass height and control weeds.

Rotational Fencing

The rotational system fencing chosen uses a variety of types on the market to show horse farm owners the types available and the pros and cons of each:



- Four strands of narrow white electrical tape



- Four strands of "hot coat" horse-friendly wire
- Five strands of narrow yellow electrical tape (not pictured)
- Two strands of 1.5 inch wide electrical tape with two strands of 'hot coat' (not pictured)