**Heritage Hills Equestrian Center**

Owner: Laura and Steve Zaharek, Northampton County

Owned and operated by Steve and Laura Zaharek, Heritage Hills is a boarding and lesson facility in Northampton County. The operation is home to about 45 horses with 16 acres of pasture. Heritage Hills became involved with the Equine Stewardship On –Farm Project by attending a Penn State Environmental Stewardship short course.

**Best Management Practice (BMP) Identified:**

Reduce bare ground and increase vegetation in pastures that can provide nutrition for horses.

**Reason for BMP:**

Heritage Hills maintains approximately 45 horses on 16 acres of pasture. Such a high animal density can result in overgrazed pastures that provide little nutritional value. Bare ground is evident and perennial weeds may make up the majority of the pasture’s vegetation. Soil exposed to weather conditions is more likely to suffer from erosion and nutrient loss. Eroding sediments and nutrients negatively impact and degrade water systems.

Heritage Hills is committed to maintaining productive pastures on the farm.  The owners plan to utilize sacrifice areas to house the horses in spring and when conditions are not conducive to pasture forage growth. However, several of the pastures lacked significant forage or vegetative cover and were in need of reseeding and renovation.

**Course of Action:**

* **Date of Reseeded:** Mid Spring
* **Equipment Used:** A spike harrow with logs attached for added weight, was used to loosen soil. Seed was broadcasted using a seed spinner. A chain link harrow was used to pull soil over the seeds to achieve seed to soil contact.
* **Seed Mix:** 25 pounds of a commercially available pasture mix
* **Soil Tested:** Yes
* **Fertilizer:** 75 pounds of 20 – 10 – 10
* **Lime:** None
* **Other:** Three months after the initial reseeding, grasses were six inches tall and horses were re – introduced to the pasture.

**Results:**

|  | **Before Renovating Pasture** | **After Renovating Pasture** |
| --- | --- | --- |
| Canopy Cover |                  25%  |                 100%  |
| Desirable Forage |                  10% |                 78% |
| Perennial Plant |                  23% |                 96% |

Prior to renovating, the pasture had only 25% vegetative growth, and the remaining 75% was bare ground. Only 10% of the pasture contained desirable forage. After renovating, there was a significant increase in vegetative growth. Canopy cover increased from 25% to 100% vegetation. Desirable forage increased from 10% to 78% after renovation.

**Challenges:**

Heritage Hills has a high animal density, making it difficult to keep pastures lush and green. Removing horses from pasture and reducing grazing hours is not easy, however it is a necessary management decision to allow grasses to rest and regrow. Heritage Hills did not have access to a No – Till drill or other planting equipment, but the farm successfully established pastures using  equipment available on the farm.

**On – Going Management and BMPs:**

Heritage Hills continues to renovate and reseed pastures that lack adequate canopy cover. In order to maintain and continue improving pasture conditions, the farm utilizes the following best management practices:

* Regular mowing, to prevent weeds from going to see head and spreading.
* Applying herbicides to kill already established weeds.
* Use of sacrifice areas to rest pastures.

[Pasture prior to renovation](http://extension.psu.edu/animals/equine/farm-partners/heritage-hills-equestrian-center/Picture%201.JPG/view)

[Pasture Before](http://extension.psu.edu/animals/equine/farm-partners/heritage-hills-equestrian-center/Picutre%202.JPG/view)

[Working the soil](http://extension.psu.edu/animals/equine/farm-partners/heritage-hills-equestrian-center/Picture%203.JPG/view)

[After Renovation](http://extension.psu.edu/animals/equine/farm-partners/heritage-hills-equestrian-center/Picture%205.JPG/view)