



## NE SARE Project: *Advancing On-Farm Understanding and Application of Silvopasture Technologies in Pennsylvania*

**Project Goal:** Substantiate past research and deliver practical technical guidance, including lists of suitable tree and forage species as well as materials outlining important considerations during the process of establishing and maintaining silvopasture, ensuring both operator success and resource sustainability.

### **Project Overview:**

- Focuses on one of five categories of agroforestry practices, silvopasture systems;
- Project Team: PA Grazing Lands Conservation Initiative (GLCI), in partnership with PA DCNR, USDA ARS and NRCS, Dickinson College Farm in Cumberland County and Wyebrook Farms in Chester County;
- Conduct monitoring study and literature review, develop case studies and technical guidance;
- Project period: March 2013 – March 2016;
- Case study development on the two farm demonstration sites in Pennsylvania with an educational mission;
- Monitoring for soil and plant health, including compaction, erosion, excess nutrients, forage growth and tree impact;
- Explore various technical considerations when establishing and implementing silvopasture in both an open pasture situation and an existing forest ecosystem;
- Opportunity to integrate wooded areas within the overall farm operation, providing greater incentive for stewardship through more deliberate and efficient land use;
- Addresses knowledge gaps regarding management of trees and grazing lands together to achieve a level of farm diversification while sustaining the existing natural resource base.

### **Project Status- Year One**

1. Framework developed for case studies on the two demonstration sites (Wyebrook and Dickinson). The project teams for each farm (2 ARS staff, 2 NRCS staff, 2 DCNR staff, and 2 farm staff members) met in the spring to establish protocols to be used in observing and monitoring the two farms currently establishing silvopasture systems.
2. Each of the demonstration farms was visited monthly from April – November 2013. The following protocols are included in the monitoring program: Bulk density soil samples and soil penetrometer readings to measure compaction; Soil quality samples submitted for analysis; Ground cover/available forage evaluated at each visit; trees identified and assessed for diameter, basal area and dieback, as well as location recorded with GPS.
3. Each project team discussed any issues/questions that the farm operators had as the project process has moved along. Forage establishment has been of particular interest to the project teams, so much discussion of methodology and practical application is taking place regarding best practices for spring 2014 to establish quality forage growth.
4. In terms of creating networks and “communities of practice” between practitioners and technical advisors, we have met with and discussed the project several times with PA GLCI members and partners, who will assist in evaluating the practice effects, project results and technical guidance needed to support conservation field staff and producers in their efforts.
5. ARS has begun a literature review and the project team has begun planning for technical tours and field days set to take place in years two and three.