

University of KY, Maine Chance Equine Campus Stream Restoration Research and Water Quality Demonstration Site Lexington, KY May, 2012

EcoGro was hired to construct ecological enhancements along approximately 850 linear feet of an un-named tributary to Cane Run at the University of Kentucky's Agricultural Experiment Station. In the past, water flowing through Maine Chance equine research paddocks allowed horses direct access to the small tributary.

The Cane Run Watershed Based Plan, lead by UK, identified opportunities to implement water quality BMPs on the farm. In 2010 a drainage swale was dug and new fencing was built to exclude livestock from the water. As an agricultural education and outreach facility, they wanted to develop this site to be used for multi-disciplinary research, hands-on student experience and to demonstrate water quality BMPs. A natural stream channel design for the drainage swale was developed with a series of pools, bends and riffles to restore riparian habitat.

EcoGro's role was to provide construction services and EPSC materials. Limestone rock was harvested locally and installed in the riffle sections to control gradient. Logs and branches were incorporated within shallow pools for aquatic habitat. Wetland sod was harvested on-site and planted along the bottom of the swale to offer both sediment control and accelerated vegetative cover. Coconut fiber blankets and wood chip berms were installed by students, offering 100% biodegradable erosion and sediment controls.





Maine Chance equine research paddock, 2002.



Exclusion fencing and drainage swale, 2010.



EcoGro channel & riparian enhancement, 2012.

Project Partners: Ridgewater, LLC, University of Kentucky

Key Features:

- Natural channel design
- Water quality improvements
- 100% Biodegradable materials