The Pioneer Grant Program

The 2016 Pioneer Grant Program aims to reduce nutrient and/or sediment contaminant loads to the Maryland portion of the Chesapeake Bay and Maryland Coastal Bays from any nonpoint source: agriculture, urban or suburban stormwater, air, and septic by seeking proposals that focus on new techniques, information, or programs that increase the rate at which load reductions can occur.

Maryland Department of Agriculture

Hay as an Alternative Cash Crop to Utilize and Redistribute Nutrients and Maintain Viable Farms and Open Space

2006-2010

**Project Track:** New program

**Research Question:** Can hay become a valuable cash crop and aid in curbing nutrient runoff from farms?

**Research Results:** Due to unforeseen weather conditions including periods of drought and periods of excessive rain, this project was not able to be fully implemented. Preliminary results indicate a definite interest in the application of hay as a cash crop, and concerns about quality and origin of the hay seem to be increasing.

**Notable Information:** This project was terminated prior to completion due to the unforeseen weather conditions, hence the significant lack of deliverables and conclusive answer to the research question.
Summary of Project

The initiation of the project coincided with a significant drought. The 2007 growing season was dry and hay was in short supply. Not only could Maryland hay growers readily sell the limited supply of hay that they produced in 2007, but larger quantities than normal had to be imported from out of state. Most hay growers did not have adequate supplies to meet their existing market demands. Prices were good and growers were not concerned about market alternatives. While growers were interested in the concept and a list of potential project participants was obtained in the winter of 2007-08, they did not have hay available to develop a pooled supply for the intended market of this project, that being the larger horse operations of the state.

2007 was the third year in a row in which demand exceeded supply and hay marketing was relatively easy. Even low quality hay could be readily sold to less discriminating customers reluctant to pay the higher prices of out-of-state hay. Hay growers relished the situation - marketing was a breeze, times were good. Weather conditions changed during the 2008 growing season and while there was lots of rain to grow hay crops, it was difficult to harvest in a timely manner without rain damage. While there was an ample total quantity of hay available, high quality hay desired by the more quality conscious breeding and training horse operations was again in short supply. With the increased cost of fuel and trucking to bring in hay for you-of-state, Maryland horse farm owners were more interested in obtaining hay locally but much of the hay available locally was of inferior quality due to the weather conditions and large quantities of hay continue to come in from out of state.

The market situation began to change during the late winter of 2009-09. Growers were now beginning to have difficulty moving lower quality hay. In some areas of the state there was a significant carryover of hay from the farmers, the first time in at least 5 years within Maryland. The 2009 growing season was even more difficult for putting up high quality than 2008 due to the frequency of rain. Again there is a shortage of higher quality hay but an even larger available supply of lower quality hay with market prices half or less than what they were 2-4 years ago. I anticipate that the interest in programs relative to developing hay marketing strategies will increase this winter (2009-2010). One meeting is already scheduled for December.

The lower quality hay in the marketplace is now providing new market opportunities for those growers who are superior managers. Whereas 2-4 years ago when growers could sell anything at a higher than normal price with little difficulty, buyers can now be much more selective. But for those growers who have high quality hay, demand still exceeds supply. Even though the project is being terminated, I play to accompany a hay grower making a delivery in early November to a potential new customer with 50 head of horses in northern New Jersey along with another farm in Florida. My purpose is to gather information on the type of hay this horse owner has been purchasing and where it has been coming from. This horse farm is located in the heart of New Jersey horse country and may provide eventual access to other farms in the area. The grower making the delivery can
only supply a small fraction of this particular horse farm’s needs this year so there may be opportunity for other hay growers to become involved.

With the coming more stringent limitations on the application of P on high P soils, I still believe that hay crops can play an increasingly important role in P removal from soils. With the decrease in grain prices, particularly corn prices as a result of the demise of the ethanol from grain market, hay may once again offer an alternative cash crop with environmental benefits. In my marketing efforts with individual hay growers over the last 2-3 years, I am convinced of the marketing opportunities for hay growers producing a higher quality product. The possible New Jersey opportunity came about through a referral from a Maryland horse farm owner who has been very satisfied with the consistent quality of hay received directly from a grower. The horse farm owner in New Jersey is not satisfied with the quality of hay he has been receiving, so this is an opportunity to try to become established in a new geographic market area.

**Project Evaluation**

Information on the hay marketing program in Kentucky was obtained by attending presentation given at the 2007 Pennsylvania Forage and Grazing Conference by Tom Keene, Hay Marketing and Production Specialist, University of Kentucky, and through private consultation during the conference. Further background information on the Kentucky program was obtained from Mr. Keene through private consultation at the 2007 American Forage and Grassland Conference held in State College, PA. It was determined from the information obtained from Mr. Keene along with information obtained from the Kentucky Department of Agriculture Web site that the Kentucky program was not directly relevant to the goals and objectives of this project and a trip to Kentucky would not be particularly beneficial.

At the 2007 American Forage and Grassland Council Conference, I also consulted with Dr. Real Michaud, Scientist, Forage Crops, Agriculture and Agri-Foods Canada, Quebec, about the program that they were trying to develop in Quebec similar to this project. They were in the early stages of organizational development at the time so he had limited experiences to share.

Information on the project was presented at a meeting in Caroline County to 40 farmers from throughout the Eastern Shore as well as Pennsylvania in February 2007. Another presentation was made at the Baltimore County Field Crops Day to 35 farmers in December 2007. From the two meetings 15 farmers provided contact information and expressed interest in participating in the project as it moved forward but could not supply hay at the time due to a short crop as a result of the drought.

Information on evaluating hay quality and developing hay marketing strategies was presented as a Hay Quality and Marketing Workshop held at the Southern Maryland Regional Farmers Market warehouse in Cheltenham in May 2009.

Plans were being developed for a tour of interested hay growers to 2 or 3 horse farms this winter to observe the type and quality of hay being fed and what horse farm owners/managers look for when buying hay. This would have provided an opportunity for hay growers to see first-hand what the larger horse operations prefer to buy. Growers would then be aware of the quality demands to meet those marketing opportunities so as to make management practice changes if necessary to meet the market criteria.

**Transferability and Sustainability**
The project was successful in enlisting 15 hay growers interested in participating in the project as a result of just two meetings conducted in 2007. This response was much better than anticipated given the market conditions at the time. If more normal weather conditions had occurred in 2008 and 2009 and other meetings held, more hay growers would have undoubtedly been enlisted. The horse breeders and trainers tend to be close-knit groups that are hard for outside suppliers to break into, but some new contracts have been made within the last month through referrals from established customer contacts. Efforts will be made to maintain these contacts as sources of information on any potential for conducting a similar project at some time in the future.

**Monitoring and Maintenance**

Regional hay market reports were constantly monitored to gauge supplies and more recently quality as reflected in auction reports. This information, along with feedback from hay growers, was used to guide the direction of the project.

**Partnerships**

Maryland Department of Agriculture, Maryland Horse Industry Board, Maryland-Delaware Forage Council, USDA Natural Resources Conservation Service, and Maryland Cooperative Extension.

**Accounting of Expenditures**

CBT Funds: $33,500  
**Total Funds: $33,500**